

ZOOTAXA

65

A catalog of the Nicrophorinae (Coleoptera: Silphidae) of the world

DEREK S. SIKES, RONALD B. MADGE & ALFRED F. NEWTON



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A catalog of the Nicrophorinae (Coleoptera: Silphidae) of the world

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Table of Contents

Abstract	4
Introduction	6
History	7
Type Specimens	7
Format	8
Terms	9
Acknowledgements	12
References [Introduction]	13
Available species group names of the Nicrophorinae	14
Eonecrophorus	20
Nicrophorus	20
Ptomascopus	222
Palaeosilpha	228
Nomina dubia	229
Lapsus calami	229
References	230
Index to genus- and species-group names	301

Abstract

All available species-group names of the subfamily Nicrophorinae (Coleoptera: Silphidae) are cataloged herein. There are currently 68 valid species, three of which are fossils; and 168 invalid species-group names, 2 of which are *nomina dubia* and 17 of which are junior homonyms and thus objectively invalid; for a total of 236 available species-group names. The type specimens of 38 valid names and 63 invalid names were found and studied. The original descriptions of 65 valid species-group names and 130 invalid species-group names were found and studied. An annotated bibliography of 1151 references that cite nicrophorine names covering the years 1752 – early 2002 is presented.

The following 18 nomenclatural acts are made:

Lectotype designations (16): Type depositories precede species names. HNHM: Budapest: *Nicrophorus antennatus* (Reitter) / BMNH: London: *Nicrophorus interruptus* Stephens; *Nicrophorus mexicanus* Matthews; *Nicrophorus montivagus* Lewis; *Nicrophorus tenuipes* Lewis / MNHN: Paris: *Nicrophorus didymus* Brullé; *Nicrophorus insularis* Grouvelle; *Nicrophorus interruptus* var. *algericus* Pasquet; *Nicrophorus podagricus* Portevin; *Nicrophorus quadraticollis* Portevin; *Nicrophorus scrutator* Blanchard / ZMAS: St. Petersburg: *Nicrophorus mongolicus* Shchegoleva-Barovskaya; *Nicrophorus przewalskii* Semenov-Tian-Shanskij; *Nicrophorus reichardti* Kieseritzky / ZMHB: Berlin: *Nicrophorus japonicus* Harold / MCZC: Cambridge: *Nicrophorus defodiens* Mannerheim;

New nomina protecta/oblita (2): *Silpha* (*Nicrophorus*) *orientalis* (Herbst, 1784) NEW NOMEN OBLITUM (article 23.9.2 ICZN ed. 4); *Nicrophorus americanus* Olivier, 1790 NEW NOMEN PROTECTUM (see *N. orientalis*);

The following 93 taxonomic changes are made:

New status as valid species (2): *Nicrophorus sepulchralis* Heer NEW STATUS as valid species; *Nicrophorus morio* Gebler NEW STATUS as valid species;

New combination (1): *Silpha* (*Nicrophorus*) *orientalis* Herbst NEW COMBINATION as *Nicrophorus orientalis* (Herbst);

New species-group revised synonyms (12): These are junior synonyms or names of subspecific rank that are being moved to new senior synonyms (as absolute synonyms, i.e. rankless): *N. tibetanus* Hlissnikovsky REVISED SYNONYM of *N. argutor* Jakovlev; *N. lateralis* Portevin REVISED SYNONYM of *N. defodiens* Mannerheim; *N. plagiatus* Motschulsky REVISED SYNONYM of *N. defodiens* Mannerheim; *N. humeralis* Pic REVISED SYNONYM of *N. insularis* Grouvelle; *N. gallicus* Jacquelin du Val REVISED SYNONYM of *N. interruptus* Stephens; *N. suturalis* Motschulsky REVISED SYNONYM of *N. interruptus* Stephens; *N. submaculatus* Reitter REVISED SYNONYM of *N. investigator* Zetterstedt; *N. funebris* Jakovlev REVISED SYNONYM of *N. morio* Gebler; *N. requiescator* Gistel REVISED SYNONYM of *N. tomentosus* Weber; *N. interruptiolus* Strand REVISED SYNONYM of *N. vestigator* Herschel; *N. interruptus* Brullé REVISED SYNONYM of *N. brullei* Jakobson, (syn. of *N. vestigator* Herschel); *P. weberi* Bodemeyer REVISED SYNONYM of *Ptomascopus plagiatus* (Ménétriés);

New species-group synonyms (25): These are species-group names of specific rank that have not been synonymized previously. *N. pseudobrutor* Reitter NEW SYNONYM of *N. argutor* Jakovlev; *N. cadaverinus* Gistel NEW SYNONYM of *N. germanicus* (L.); *N. ornatus* Hlissnikovsky NEW SYNONYM of *N. germanicus* (L.); *N. proserpinae* Gistel NEW SYNONYM of *N. germanicus* (L.); *N. basalis* Gistel NEW SYNONYM of *N. interruptus* Stephens; *N. fossor* Erichson NEW SYNONYM of *N. interruptus* Stephens; *N. grahami* Swan & Papp NEW SYNONYM of *N.*

investigator Zetterstedt; *N. maritimus* Gistel NEW SYNONYM of *N. investigator* Zetterstedt; *N. praedator* (Reitter) NEW SYNONYM of *N. investigator* Zetterstedt; *N. karafutonis* Kôno NEW SYNONYM of *N. maculifrons* Kraatz; *N. lunulatus* Gistel NEW SYNONYM of *N. marginatus* Fabricius; *N. lunatus* Gistel NEW SYNONYM of *N. marginatus* Fabricius; *N. mixtus* Hlisnikovsky NEW SYNONYM of *N. montivagus* Lewis; *N. rugulipennis* Jakovlev NEW SYNONYM of *N. morio* Gebler; *N. benguetensis* Arnett NEW SYNONYM of *N. nepalensis* Hope; *N. burmanicus* Hlisnikovsky NEW SYNONYM of *N. oberthuri* Portevin; *N. unifasciatus* Hlisnikovsky NEW SYNONYM of *N. oberthuri* Portevin; *N. pulsator* Gistel NEW SYNONYM of *N. sayi* Laporte; *N. temporalis* Shchegoleva-Barovskaya NEW SYNONYM of *N. semenowi* (Reitter); *N. fasciatus* Hlisnikovsky NEW SYNONYM of *N. tenuipes* Lewis; *N. marginatus* Gistel NEW SYNONYM of *N. tomentosus* Weber; *N. bifasciatus* Hausmann NEW SYNONYM of *N. vespillo* (L.); *N. hadenius* Gistel NEW SYNONYM of *N. vespillo* (L.); *N. oregonensis* Swann & Papp NEW SYNONYM of *N. vespilloides* Herbst; *N. olfactor* Gistel NEW SYNONYM of *N. vestigator* Herschel;

New status as absolute synonyms (53): These are species-group names of subspecific rank that we consider to be invalid synonyms without rank. *N. centralis* Portevin NEW STATUS as absolute syn. of *N. antennatus* (Reitter); *N. rotundicollis* Portevin NEW STATUS as absolute syn. of *N. concolor* Kraatz; *N. armeniacus* Portevin NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. bimaculatus* Haworth NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. bipunctatus* Kraatz NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. fascifer* (Reitter) NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. speciosus* (J.D. Schulze) NEW STATUS as absolute syn. of *N. germanicus* (L.); *N. quadriguttata* Angell NEW STATUS as absolute syn. of *N. guttula* Motschulsky; *N. vandykei* Angell NEW STATUS as absolute syn. of *N. guttula* Motschulsky; *N. atricornis* Meier NEW STATUS as absolute syn. of *N. humator* (Gleditsch); *N. maculosus* Meier NEW STATUS as absolute syn. of *N. humator* (Gleditsch); *N. minnesotianus* Hatch NEW STATUS as absolute syn. of *N. hybridus* Hatch & Angell; *N. brunripes* Gradl NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. centrimaculatus* Reitter NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. corsicus* Laporte NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. funereus* Gén  NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. infuscaticornis* Portevin, NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. laportei* Meier NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. nigricans* Pasquet NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. pasqueti* Pic NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. trimaculatus* Gradl NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. trinitatus* Reitter NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. vodozi* Meier NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. algiricus* Pasquet NEW STATUS as absolute syn. of *N. interruptus* Stephens; *N. funerator* Fauvel NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. funeror* (Reitter) NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. insularis* Lafer NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. intermedius* Reitter NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. latifasciatus* Lewis NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. maritimus* Mannerheim NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. variolosus* Portevin NEW STATUS as absolute syn. of *N. investigator* Zetterstedt; *N. parvulus* Hlisnikovsky NEW STATUS as absolute synonym of *N. maculifrons* Kraatz; *N. nigrifrons* Portevin NEW STATUS as absolute syn. of *N. podagricus* Portevin; *N. immaculatus* Portevin NEW STATUS as absolute syn. of *N. quadripunctatus* Kraatz; *N. bohemicus* Roubal NEW STATUS as absolute syn. of *N. vespillo* (L.); *N. bolsmanni* Westhoff NEW STATUS as absolute syn. of *N. vespillo* (L.); *N. fauveli* Fauconnet NEW STATUS as absolute syn. of *N. vespillo* (L.); *N.*

minor Westhoff NEW STATUS as absolute syn. of *N. vespillo* (L.); *N. varendorffi* Westhoff NEW STATUS as absolute syn. of *N. vespillo* (L.); *N. altumi* Westhoff NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. aurora* Motschulsky NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. subfasciatus* Portevin NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. subinterruptus* Pic NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. sylvivagus* Reitter NEW STATUS as absolute syn. of *N. vespilloides* Herbst; *N. brullei* Jacobson NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. bipunctatus* Portevin NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. carreti* Pic NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. degener* Carret NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. obscuripennis* Portevin NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. rautenbergi* Reitter NEW STATUS as absolute syn. of *N. vestigator* Herschel; *N. viturati* Pic NEW STATUS as absolute syn. of *N. vestigator* Herschel; *P. lewisi* Portevin NEW STATUS as absolute syn. of *P. morio* Kraatz; *P. villosus* Portevin NEW STATUS as absolute syn. of *P. morio* Kraatz.

Key words: Coleoptera, Silphidae, Nicrophorinae, *Nicrophorus*, *Ptomascopus*, *Palaeosilpha*, *Eonecrophorus*, burying beetle, taxonomy, bibliography, catalog, synonymy, nomenclature

Introduction

This product represents the bulk of the nomenclatural and taxonomic portion of an in-progress monographic revision of the Nicrophorinae (Coleoptera: Silphidae) by the senior author. Species descriptions, distribution maps and data, keys, and phylogenetic analyses will appear separately. This catalog and bibliography will also be available in searchable format, on-line, at 'Nicrophorus Central' (Sikes, Trumbo & Peck 1999).

What is a bibliographic taxonomic catalog? Because many species have been given multiple names it is essential that knowledge of these names and their relation to the single valid name be presented in revisionary taxonomic work. Often, this is accomplished by listing chronologically each synonym under each valid name included in a standard synonymy table. Such tables are essential for associating names with species, but unlike a bibliographic catalog, they do not include the history of each name presented. This history can sometimes be simple, such as a name being synonymized a few years after being made available and never again used as a valid species name. It can also be complex, in which numerous authors disagree on a names' validity and/or rank. This information on how the taxonomic community has treated a given name throughout its history is only available in a bibliographic catalog which attempts to list every appearance of a name in a given taxon in the literature. This catalog attempts to do just that. All available species-group names in the Nicrophorinae are listed with citations of each names' appearance in the literature. However, this catalog is not complete. Certainly references exist which were not found that cite nicrophorine names, and some references included herein cited by prior workers could not be located in libraries for verification. Nevertheless, this catalog is an approximation of a complete catalog and should provide most of the significant changes that have occurred during the history of each name in the Nicrophorinae.

History

Linnaeus named two species of *Nicrophorus* in 1758 (in the genus *Silpha*) and 14 more species were described by various authors before 1800. During the nineteenth century over 100 species-group names were published. In the first half of the twentieth century the first serious revisionary work on the subfamily was undertaken. Hatch, Portevin, Pic, Hlisnikovsky, and others added another 80 species group names and made numerous synonymies. The global revisions of Portevin and Hatch throughout the 1920s resolved some taxonomic problems in the group. However, during that era it was a standard practice to describe subspecific and infrasubspecific taxa, usually with few justificatory biological data. As a result of this practice, the revisions of Portevin and Hatch included hundreds of names of questionable validity. Hatch's bibliographic catalog (1928) included most of the relevant literature references known at the time. It wasn't until the 1980s that modern taxonomic concepts were applied to these taxa, primarily by Peck and Anderson, who revised the New World silphid fauna (Anderson & Peck 1985; Peck & Anderson 1985). This catalog builds on these prior works and includes the bibliography of the Silphidae by Young (1983).

This group of beetles, due to their conspicuous nature and unusual reproductive strategy, has been popular and has received considerable attention from biologists primarily in Europe, eastern North America, Japan, Korea, and Mexico. However, most species remain poorly known, while a few species, easily available in the regions just mentioned, have been extensively researched.

Type Specimens

The type specimens of 63 invalid names and 37 valid names were found and studied, leaving the types of 131 available species-group names unstudied. With the exception of one name, *Nicrophorus chryseus* Mazokhin-Porshnyakov, whose type(s) could not be located, the unstudied types did not belong to controversial or dubious names. The existence of the unstudied types, and their presence in the depositories indicated is based on various sources, including Horn *et al.* (1990) and the original descriptions, among others. Some type depositories could not be identified, and some type specimens could not be located in the depositories to which they were thought to belong. Few major museums have complete and verified catalogs of their type specimens – one of the many bottlenecks facing efficient taxonomic enterprise. The Museum of Comparative Zoology of Harvard University is a rare exception. The Department of Entomology there has not only put a fully searchable catalog of their type holdings on-line (over 28,000 primary types) but is rapidly adding high-quality digital images of each primary type to their on-line database. The modernization of taxonomy requires museums to follow or improve upon the MCZ example.

In the interest of establishing a single name-bearing type for each microphorine species lectotypes are designated herein for 15 valid species names and 1 junior synonym. This junior synonym, *Nicrophorus interruptus* var. *algiricus* Pasquet, represents a population of *Nicrophorus interruptus* Stephens isolated in northern Africa which may, upon further study, prove to be deserving of species rank. Data for paralectotypes are also listed. We estimate that a total of 44 of the 68 valid species of the Nicrophorinae have single primary type specimens (holotypes, neotypes, or lectotypes).

Format

There exist various layouts that have been used to present the data of a bibliographic catalog. We have compared some of the more common styles (e.g. Hatch 1928; Otte 1997; and Slater 1964) and used elements of multiple styles herein. In doing so we hope to avoid what we see as drawbacks of various presentation formats while incorporating advantages of each. Particular elements that we have used include: a linear arrangement of citations rather than a wrap-around arrangement; a complete literature cited section rather than abbreviated citations in the list itself; sorting of junior synonyms alphabetically beneath the complete listing of the senior name rather than intermixing their citations, chronologically sorted, with those of the senior name. A linear arrangement greatly improves ease of use at the cost of greater page length; a complete literature cited section both greatly facilitates future work by allowing new citations to be easily added to a database derived from the literature cited section and allows more room for notes following the citation in the species section of the catalog; sorting the junior synonyms with all their associated citations to the end of the list of valid species citations greatly simplifies future changes, such as desynonymization or movement to a new senior synonym that would be painful to accomplish if all junior synonym citations were intermixed under each senior name. All names are arranged alphabetically by their specific epithet rather than phylogenetically, as was done by Hatch (1928).

Although notes are associated with many citations, the emphasis in compiling this catalog has been on establishing the history of usage for each name rather than creating a compilation of all biological, distributional, and other miscellaneous information for each entry. Nevertheless, an effort has been made to include the more important works on biology, behavior, distribution, immature stages, etc. The information in parentheses following a citation refers to the reference itself and not necessarily the name being cited. Following some species we include a Comments section which includes text supporting any taxonomic changes or nomenclatural acts made to names herein.

Terms

The exclamation point [!] following a type depository for a name indicates that DSS has studied the type specimens; following an original description indicates that one or more of us (M=Madge, N=Newton, S=Sikes) has seen the original description. Within the references section this code indicates that one or more of us has studied the reference so indicated. Square brackets [] following label data enclose information or comments that have been added which were not on the original labels.

For the few names of controversial validity we have indicated for each citation whether the name was used as a 'valid species' or as a 'syn. of' another name. During the history of some names the correct author of the epithet has been confused in the literature. These have been flagged by use of the term 'auth. attrib. [incorrect author name]'.

The term 'CONFIRMED as SYNONYM of ...' indicates when the type specimens of names considered junior synonyms by previous authors have been studied and we agree with the synonymy. For names that are considered junior synonyms whose type specimens have not been studied, we base our opinion of their validity on the literature cited below each.

The flagging of synonyms as "confirmed" as done herein is rare in taxonomic literature. When a name is first made available its validity is based on the hypothesis of the author who described the name. Subsequent mention of valid species names in the literature requires citation of the author of the name. This is done for the obvious reason that homonyms could be confused if presented without their authors, but presumably also because the hypothesis that the species is valid belongs to the describing author and his or her work should be cited. However, declaring a name to be a junior synonym is also a hypothesis (hopefully supported by some published data, but rarely so). Unfortunately, the authors of these hypotheses of synonymy are rarely cited by those using these synonymy decisions. Publishing hypotheses of other authors without attributing their work is essentially plagiarism. This single failing is common in taxonomic literature. Often names are presented as junior synonyms with no indication as to whether the author has studied the types and agrees with the synonymy, or, if not (as is usually the case), on what source the author based that name's status as junior synonym. As a result it is not uncommon for a name to have been synonymized early in its history and all subsequent citations of that name as a synonym have been based on that first, and only, opinion, each without attribution to the author who first made the synonymy. Such a case would not represent a consensus opinion, or significant agreement, on the validity of a name, because only one, uncredited, opinion exists! If authors would cite the sources on which they based their usage of names, assuming they were not claiming authority on the status of each name, tracking the history of a name would become far more accurate and simplified.

We have cataloged only available names herein. An available zoological name is one that meets the criteria laid forth in the International Code of Zoological Nomenclature (ICZN 1999), chapter four. It is common for catalogers to list unavailable names such as

nomina nuda, misspellings, misidentifications, *etc.* This was done in prior synonymical tracking efforts of the Nicrophorinae, such as by Hatch (1928). We indicate the more important of these in the notes following each citation rather than listing them as 'names' *per se*. This approach prevents the confusion that can result if such unavailable names are mistakenly considered true names (for example as occurred in Poole & Gentili [1997]). In the Nicrophorinae many authors published descriptions of infrasubspecific variation and attached names to these descriptions, usually denoted by the rank 'aberration'. These are clearly of infrasubspecific rank because they fall below the rank of variety (=subspecific rank) in the literature of the Nicrophorinae. These names are not available as specified in ICZN (1999) article 10.2 and not listed as names herein. Many names remain in the literature at the subspecific rank, usually designated in the Nicrophorinae by the term 'variety,' in most cases these varieties refer to mere differences in coloration of the elytra. This proliferation of names in the Nicrophorinae has been discussed and argued against by Leech (1937) and Anderson & Peck (1986) among others. We tend to agree with the opinions of Wilson and Brown (1953) and prefer that within-species variation be discussed rather than named. We have changed the status of 52 of these names, making them absolute synonyms, i.e. without subspecific rank. These status changes are indicated but not commented upon in the catalog. The exception, for which we provide commentary, being cases in which there is evidence to suggest that a subspecific name might be warranted. The term 'absolute synonym' is used in the sense of Hatch (1940: 243) to differentiate junior synonyms considered to have valid subspecific rank from those that do not.

The International Code of Zoological Nomenclature (ICZN 1999), article 76, states that the type locality of a nominal species-group name is the place of origin of the primary type, or is composed of the data from a syntype series if no primary type exists. The data from the type labels is thus given priority over whatever locality data is published in the original description, if they disagree. Following this protocol, we have listed the type label data as the type locality for each name whose types we have studied and listed the published data for the remaining names, if available. The terms "label" and "descrip." indicate the source of the type locality data presented; the former indicating data from the primary type label(s), the latter indicating data from the original description.

Distributional data are provided in brief form for widespread species but complete data by country are provided for species with small ranges. Country records that appear to be previously unpublished are indicated with an asterisk '*'.

Museum Codens: With the exception of private collections and OLML and IBPV, these codens all refer to and are derived from the index prepared by Arnett *et al.* (1993).

ANSP Dept. of Entomology, Academy of Natural Sciences, Philadelphia, PA 19103 USA
 BMNH The Natural History Museum, Cromwell Rd, London SW7 5BD, UNITED KINGDOM
 CMNH Section of Insects and Spiders, Carnegie Museum of Natural History, 900 Forbes Ave.,
 Pittsburgh, PA 15213 USA
 DEIC Deutsches Entomologisches Institut, Eberswalde-Finow 1, D-1300, F. R. GERMANY

- ETHZ Entomologisches Institut, Eidgenossische Technische Hochschule-Zentrum, Universitätsstrasse 2, CH-8006, Zürich, SWITZERLAND
- FMNH Field Museum of Natural History, Roosevelt Rd at Lake Shore Drive, Chicago, Illinois 60605-2496, USA
- HNHM Hungarian Natural History Museum, Coleoptera Collection, Department of Zoology, H-1088, Baross u. 13, Budapest, HUNGARY
- IBPV Institute of Biology and Pedology, Vladivostok, RUSSIA
- JHC private collection of Jirí Háva, Branická 13, CZ-147 00 Praha 4, CZECH REPUBLIC
- JSC private collection of Jan Schneider, Lipová 15, CZ-120 00 Praha 5, CZECH REPUBLIC
- LACM Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007 USA
- LSUK Linnean Society, Burlington House, Piccadilly, London W1V 0LQ, UNITED KINGDOM
- MBBJ Museum Zoologicum Bogoriense, PO Box 110, Jalan, Juanda 3, Bogor, Java, INDONESIA
- MCZC Museum of Comparative Zoology, Harvard University, 26 Oxford St., Cambridge, Massachusetts 02138 USA
- MNHN Museum national d'Histoire naturelle, Laboratoire d'Entomologie, 45 rue Buffon, F-75005, Paris, FRANCE
- MNNC Museo Nacional de Historia Natural, Casilla 787, Santiago, CHILE
- MZHF Zoological Museum, PO Box 17, FIN-00014 University of Helsinki, Helsinki, FINLAND
- MZLU Museum of Zoology, Department of Zoology, Division of Systematics, Lund University, Helgonavagen 3, S-233 62 Lund, SWEDEN
- NMNH [=USNM] National Museum of Natural History, Smithsonian Institution, Dept. Entomology Collections Management Unit NHB MRC 165; 10th & Constitution Ave. N. W. Washington, D. C. 20560 USA
- NMPC Národní Muzeum, Entomologické oddělení, Golcova 1, CZ-148 00 Praha 4 - Kunratice, CZECH REPUBLIC
- NSMT National Science Museum, Hyakunin-cho 3-23-1 Shinjuku-ku, Tokyo, JAPAN
- OLML Oberösterreichisches Landesmuseum, Museumstraße 14, A-4010 Linz, AUSTRIA
- RMNH Nationaal Natuurhistorische Museum, Raamsteeg 2, Leiden 2311 Pl., NETHERLANDS
- SMFD Forschungsinstitut Senckenberg, Entomologie I, Senckenberganlage 25, D-60325 Frankfurt /M., F. R. GERMANY
- SMTD Staatliches Museum für Tierkunde, Augustusstraße 2, D-01067, Dresden, F. R. GERMANY
- ZMAS Russian Academy of Sciences, Zoological Institute, Universitetskaya nab. 1, 199034 St. Petersburg RUSSIA
- ZMHB Museum für Naturkunde der Humboldt-Universität zu Berlin, Invalidenstr. 43, D-10115, Berlin, F. R. GERMANY
- ZMPA Institut de Zoologie, Académie Polonaise des Sciences, ul. Wilcza 64, 00-679 Warszawa, POLAND
- ZMUC Zoologisk Museum, Universitetsparken 15, DK-2100 København O., DENMARK
- ZMUM Moscow State Spider Collection, Department of Invertebrate Zoology, Zoological Museum, University of Moscow, Herzen Str. 6, Moscow 103009 RUSSIA
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Available species group names of the Nicrophorinae

Each available species-group name (n=236) of all the nicrophorine genera (*Eonecrophorus*, *Nicrophorus*, *Palaeosilpha* and *Ptomascopus*) is listed alphabetically. Names first made available at the subspecific rank are annotated as such; names that are considered junior synonyms herein are listed with their senior synonyms (=). Homonyms (n =30) are underlined. Names of taxa we consider valid, as in the catalog list, are in bold.

Eonecrophorus

tenuicornis Kurosawa, 1985; Valid name

Nicrophorus

aleuticus Gistel, 1848; = *Nicrophorus investigator* Zetterstedt, 1824
 algericus Pasquet, 1916; as var. of *interruptus*; = *Nicrophorus interruptus* Stephens, 1830
 alpha Pierce, 1949; as subsp. of *investigator*; = *Nicrophorus nigrita* Mannerheim, 1843
 altumi Westhoff, 1881; as var. of *vespilloides*; = *Nicrophorus vespilloides* Herbst, 1783
americanus Olivier, 1790; Valid name
 anglicus Stephens, 1830; = *Nicrophorus vestigator* Herschel, 1807
antennatus (Reitter, 1884: 88) Valid name
 apicalis Kraatz, 1880; as var. of *germanicus*; = *Nicrophorus germanicus* (Linnaeus, 1758)
apo Arnett, 1950; Valid name
argutor Jakovlev, 1890; Valid name
 armeniacus Portevin, 1922; = *Nicrophorus germanicus* (Linnaeus, 1758)
 atricornis Meier, 1899; as var. of *humator*; = *Nicrophorus humator* (Gleditsch, 1767)
 aurigaster Portevin, 1925; as var. of *velutinus*; = *Nicrophorus tomentosus* Weber, 1801
 aurora Motschulsky, 1860; = *Nicrophorus vespilloides* Herbst, 1783
 baeckmanni Kieseritzky, 1930; = *Nicrophorus investigator* Zetterstedt, 1824
basalis Faldermann, 1835; Valid name
basalis Gistel, 1848; (junior primary homonym, not Faldermann); = *N. interruptus* Stephens, 1830
 benguetensis Arnett, 1946; = *Nicrophorus nepalensis* Hope, 1831
 bicolon Newman, 1838; = *Nicrophorus pustulatus* Herschel, 1807
 bifasciatus Hausmann, 1799; = *Nicrophorus vespillo* (Linnaeus, 1758)
 bimaculatus Haworth, 1807; = *Nicrophorus germanicus* (Linnaeus, 1758)
bipunctatus Kraatz, 1880; as var. of *germanicus*; = *Nicrophorus germanicus* (Linnaeus, 1758)
bipunctatus Portevin, 1914 (junior primary homonym, not Kraatz 1880) as var. of *vestigator*; = *Nicrophorus vestigator* Herschel, 1807
 bohemicus Roubal, 1939; as var. of *vespillo*; = *Nicrophorus vespillo* (Linnaeus, 1758)
 bolsmanni Westhoff, 1881; as var. of *vespillo*; *Nicrophorus vespillo* (Linnaeus, 1758)
 borealis Portevin, 1914a; as var. *vespilloides*; = *Nicrophorus vespilloides* Herbst, 1783
 brullei Jacobson, 1910; (nomen novum for *N. interruptus* Brullé); = *N. vestigator* Herschel, 1807

brunnipes	Gradl, 1882; as var. interruptus; = <i>Nicrophorus interruptus</i> Stephens, 1830
burmanicus	Hlisnikovsky, 1964; = <i>Nicrophorus oberthuri</i> Portevin, 1924
<u>cadaverinus</u>	Gravenhorst, 1807; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)
<u>cadaverinus</u>	Mareuse, 1840 (junior primary homonym, not Gravenhorst, 1807); as subsp. of sepultor; = <i>Nicrophorus vestigator</i> Herschel, 1807
<u>cadaverinus</u>	Gistel, 1857; (junior primary homonym, not Gravenhorst 1807); = <i>N. germanicus</i> (L., 1758)
carolinus	(Linnaeus, 1771) Valid name
carreti	Pic, 1933; as vari. of <i>vestigator</i> ; = <i>Nicrophorus vestigator</i> Herschel, 1807
centralis	Portevin, 1914; as var. of <i>antennatus</i> ; = <i>Nicrophorus antennatus</i> (Reitter, 1884)
centrimaculatus	Reitter, 1895; as var. of <i>interruptus</i> ; = <i>Nicrophorus interruptus</i> Stephens, 1830
chilensis	Philippi, 1871; Valid name
chryseus	Mazokhin-Porshnyakov, 1953; Nomen dubium
concolor	Kraatz, 1877; Valid name
confossor	LeConte, 1854; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
confusus	Portevin, 1924; Valid name
conversator	Walker, 1866; = <i>Nicrophorus defodiens</i> Mannerheim, 1846
corsicus	Laporte, 1832; = <i>Nicrophorus interruptus</i> Stephens, 1830
curvipes	Duftschnid, 1825; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)
dauricus	Motschulsky, 1860; Valid name
defodiens	Mannerheim, 1846; Valid name
degener	Carret, 1901; as var. <i>vestigator</i> ; = <i>Nicrophorus vestigator</i> Herschel, 1807
didymus	Brullé, 1836; Valid name
distinctus	Grouvelle, 1885; Valid name
dolosus	Portevin, 1923; as var. <i>carolinus</i> ; = <i>Nicrophorus carolinus</i> (Linnaeus, 1771)
encaustus	Fairmaire, 1896; Valid name
fasciatus	Hlisnikovsky, 1932; = <i>Nicrophorus tenuipes</i> Lewis, 1887
fascifer	(Reitter, 1884); as var. of <i>Silpha germanica</i> ; = <i>Nicrophorus germanicus</i> (Linnaeus, 1758)
fauveli	Fauconnet, 1893; as var. of <i>vespillo</i> ; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)
flexuosus	Portevin, 1924; = <i>Nicrophorus didymus</i> Brullé, 1836
fossor	Erichson, 1837; = <i>Nicrophorus interruptus</i> Stephens, 1830
fractus	Portevin, 1914; as var. of <i>vespilloides</i> ; = <i>Nicrophorus vespilloides</i> Herbst, 1783
frontalis	Fischer von Waldheim, 1844; = <i>Nicrophorus germanicus</i> (Linnaeus, 1758)
funebriis	Jakovlev, 1890; as var. <i>morio</i> ; = <i>Nicrophorus morio</i> Gebler, 1817
funerarius	(Weigel, 1806); Nomen dubium
funerator	Fauvel, 1890; [unjust. emendation of <i>N. funeror</i> Reitter]; = <i>N. investigator</i> Zetterstedt, 1824
funereus	Géné, 1839; = <i>Nicrophorus interruptus</i> Stephens, 1830
funeror	(Reitter, 1884); = <i>Nicrophorus investigator</i> Zetterstedt, 1824
gallicus	Jacquelin du Val, 1860; = <i>Nicrophorus interruptus</i> Stephens, 1830
germanicus	(Linnaeus, 1758); Valid name
grahami	Swan & Papp, 1972; as subsp. of <i>investigator</i> ; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
grandior	Angell, 1912; = <i>Nicrophorus germanicus</i> (Linnaeus, 1758)
grandis	Fabricius, 1792; = <i>Nicrophorus americanus</i> Olivier, 1790
guttula	Motschulsky, 1845; Valid name

hadenius	Gistel, 1857; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)
hallii	Kirby, 1837; = <i>Nicrophorus orbicollis</i> Say, 1825: 177
hauseri	Hlisenikovsky, 1932; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)
hebes	Kirby, 1837; = <i>Nicrophorus vespilloides</i> Herbst, 1783
hecate	Bland, 1865; = <i>Nicrophorus guttula</i> Motschulsky, 1845
heurni	Portevin, 1926; Valid name
hispaniola	Sikes & Peck, 2000; Valid name
humator	(Gleditsch, 1767); Valid name
humeralis	Pic, 1917; as var. of <i>insularis</i> ; = <i>Nicrophorus insularis</i> Grouvelle, 1893
hybridus	Hatch & Angell, 1925; Valid name
immaculatus	Portevin, 1923; as var. of <i>quadripunctatus</i> ; = <i>Nicrophorus quadripunctatus</i> Kraatz, 1877
immaculosis	Hatch, 1957; as subsp. of <i>guttulus</i> ; = <i>Nicrophorus guttula</i> Motschulsky, 1845
inclusus	Reitter, 1913; = <i>Nicrophorus quadraticollis</i> Portevin, 1903
infodiens	Mannerheim, 1853; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
infuscaticornis	Portevin, 1924; as var. of <i>fossor</i> ; = <i>Nicrophorus interruptus</i> Stephens, 1830
<u>insularis</u>	Grouvelle, 1893; Valid name
<u>insularis</u>	Lafer, 1989; (junior primary homonym, not Grouvelle); as subsp. of <i>praedator</i> ; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
intermedius	Reitter, 1895; as var. <i>investigator</i> ; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
interruptiolus	Strand, 1917; = <i>Nicrophorus vestigator</i> Herschel, 1807
<u>interruptus</u>	Stephens, 1830; Valid name
<u>interruptus</u>	Brullé, 1832; (junior primary homonym, not Stephens 1830); = <i>Nicrophorus vestigator</i> Herschel, 1807
<u>interruptus</u>	Gistel, 1857; (junior primary homonym, not Stephens 1830); = <i>Nicrophorus vestigator</i> Herschel, 1807
investigator	Zetterstedt, 1824; Valid name
japonicus	Harold, 1877; Valid name
karafutonis	Kôno, 1929; as form of <i>maculifrons</i> ; = <i>Nicrophorus maculifrons</i> Kraatz, 1877
kieticus	Mroczkowski, 1959; Valid name
labiatus	Motschulsky, 1860; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
labrae	Pierce, 1949; as subsp. of <i>guttulus</i> ; = <i>Nicrophorus marginatus</i> Fabricius, 1801
laportei	Meier, 1900; as var. of <i>corsicus</i> ; = <i>Nicrophorus interruptus</i> Stephens, 1830
lateralis	Portevin, 1903; as var. of <i>vespilloides</i> ; = <i>Nicrophorus defodiens</i> Mannerheim, 1846
latifasciatus	Lewis, 1887; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
latifrons	Pierce, 1949; as subsp. of <i>investigator</i> ; = <i>Nicrophorus marginatus</i> Fabricius, 1801
listerianus	(Geoffroy, 1785); = <i>Nicrophorus germanicus</i> (Linnaeus, 1758)
<u>lunatus</u>	Fischer von Waldheim, 1842; Valid name
<u>lunatus</u>	LeConte, 1853; (junior primary homonym, not Fischer 1842); = <i>N. sayi</i> Laporte, 1840
<u>lunatus</u>	Gistel, 1857; = <i>Nicrophorus marginatus</i> Fabricius, 1801
luniger	Harold, 1868; = <i>Nicrophorus sayi</i> Laporte, 1840
lunulatus	Gistel, 1848; = <i>Nicrophorus marginatus</i> Fabricius, 1801
maculiceps	(Jakovlev, 1887); = <i>Nicrophorus maculifrons</i> Kraatz, 1877
maculifrons	Kraatz, 1877; Valid name
maculosus	Meier, 1899; as var. of <i>humator</i> ; <i>Nicrophorus humator</i> (Gleditsch, 1767)

<u>marginatus</u>	Fabricius, 1801; Valid name
<u>marginatus</u>	Gistel, 1857; (junior primary homonym, not Fabricius); = <i>N. tomentosus</i> Weber, 1801
<u>maritimus</u>	Guérin-Méneville, 1835; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
<u>maritimus</u>	Mannerheim, 1843; (attrib. Eschscholtz; junior primary homonym, not Guérin-Méneville); = <i>Nicrophorus investigator</i> Zetterstedt, 1824
<u>maritimus</u>	Gistel, 1857; (junior primary homonym, not Guérin-Méneville 1835); = <i>N. investigator</i> Zetterstedt, 1824
mckittricki	Pierce, 1949; = <i>Nicrophorus marginatus</i> Fabricius, 1801
mediatus	Fabricius, 1801; = <i>Nicrophorus carolinus</i> (Linnaeus, 1771)
melsheimeri	Kirby, 1837; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
mexicanus	Matthews, 1888; Valid name
microcephalus	Thomson, 1862; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
minnesotianus	Hatch, 1927; as var. of <i>hybridus</i> ; = <i>Nicrophorus hybridus</i> Hatch & Angell, 1925
minor	Westhoff, 1881; as var. of <i>vespillo</i> ; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)
mixtus	Hlisnikovsky, 1964; = <i>Nicrophorus montivagus</i> Lewis, 1887
mongolicus	Shchegoleva-Barovskaya, 1933; Valid name
montezumae	Matthews, 1888; = <i>Nicrophorus marginatus</i> Fabricius, 1801
montivagus	Lewis, 1887; Valid name
morio	Gebler, 1817; Valid name
mortuorum	Fabricius, 1792; = <i>Nicrophorus vespilloides</i> Herbst, 1783
mysticallis	Angell, 1912; = <i>Nicrophorus carolinus</i> (Linnaeus, 1771)
nepalensis	Hope, 1831; Valid name
nigerrimus	Kraatz, 1884; = <i>Nicrophorus humator</i> (Gleditsch, 1767)
nigricans	Pasquet, 1916; as var. of <i>interruptus</i> ; = <i>Nicrophorus interruptus</i> Stephens, 1830
nigricornis	Faldermann, 1835; Valid name
nigrifrons	Portevin, 1922; as var. of <i>podagricus</i> ; = <i>Nicrophorus podagricus</i> Portevin, 1920
nigrita	Mannerheim, 1843; Valid name
oberthuri	Portevin, 1924; Valid name
obrutor	Erichson, 1837; = <i>Nicrophorus sepultor</i> Charpentier, 1825
obscuripennis	Portevin, 1914; as var. of <i>vestigator</i> ; = <i>Nicrophorus vestigator</i> Herschel, 1807
obscurus	Kirby, 1837; Valid name
obtusiscutellum	Pierce, 1949; = <i>Nicrophorus marginatus</i> Fabricius, 1801
ocellatus	Deyrolle & Fairmaire, 1878; = <i>Nicrophorus nepalensis</i> Hope, 1831
olfactor	Gistel, 1848; = <i>Nicrophorus vestigator</i> Herschel, 1807
olidus	Matthews, 1888; Valid name
orbicollis	Say, 1825; Valid name
oregonensis	Swann & Papp, 1972; as subsp. <i>vespilloides</i> ; = <i>Nicrophorus vespilloides</i> Herbst, 1783
<u>orientalis</u>	(Herbst, 1784); = <i>Nicrophorus americanus</i> Olivier, 1790
<u>orientalis</u>	Motschulsky, 1860; [junior secondary homonym, not Herbst 1784]; = <i>N. dauricus</i> Motschulsky, 1860
ornatus	Hlisnikovsky, 1964; = <i>Nicrophorus germanicus</i> (Linnaeus, 1758)
particeps	Fischer von Waldheim, 1844; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
parvulus	Hlisnikovsky, 1964; as subsp. of <i>maculifrons</i> ; = <i>Nicrophorus maculifrons</i> Kraatz, 1877
pasqueti	Pic, 1917; as var. of <i>interruptus</i> ; = <i>Nicrophorus interruptus</i> Stephens, 1830

- peruvianus Pic, 1917; as var. of *didymus*; = *Nicrophorus didymus* Brullé, 1836
- plagiatus Motschulsky, 1870; (junior primary homonym, not Ménériés); = *Nicrophorus defodiens* Mannerheim, 1846
- pliozaenicus** Gersdorf, 1969; Valid name (fossil)
- podagricus** Portevin, 1920; Valid name
- pollinctor LeConte, 1854; (junior primary homonym, not Mannerheim 1853); = *Nicrophorus defodiens* Mannerheim, 1846
- pollinctor Mannerheim, 1853; = *Nicrophorus investigator* Zetterstedt, 1824
- portevini Pic, 1933; as var. of *flexuosus*; = *Nicrophorus didymus* Brullé, 1836
- praedator (Reitter, 1887); = *Nicrophorus investigator* Zetterstedt, 1824
- proserpinae Gistel, 1857; = *Nicrophorus germanicus* (Linnaeus, 1758)
- przewalskii** Semenov-Tian-Shanskij, 1894; Valid name
- pseudobrutor Reitter, 1895; as var. of *sepultor*; = *Nicrophorus argutor* Jakovlev, 1890:
- pulsator Gistel, 1848; = *Nicrophorus sayi* Laporte, 1840
- punctostriatus Pierce, 1949; as subsp. of *guttula*; = *Nicrophorus guttula* Motschulsky, 1845
- pustulatus** Herschel, 1807; Valid name
- pygmaeus Kirby, 1837; = *Nicrophorus vespilloides* Herbst, 1783
- quadraticollis** Portevin, 1903; Valid name
- quadricollis Hatch, 1928; (unecc. nomen novum for *N. quadraticollis* Portevin & junior primary homonym, not Gistel); = *Nicrophorus quadraticollis* Portevin, 1903
- quadricollis Gistel, 1848; = *Nicrophorus olidus* Matthews, 1888
- quadriguttata Angell, 1920; as var. of *guttula*; *Nicrophorus guttula* Motschulsky, 1845
- quadrimaculatus** Matthews, 1888; Valid name
- quadripunctatus** Kraatz, 1877; Valid name
- quadrisignatus Laporte, 1840; = *Nicrophorus orbicollis* Say, 1825
- rautenbergi Reitter, 1900; [corrected spelling]; as var. of *vestigator*; = *N. vestigator* Herschel, 1807
- reichardti** Kieseritzky, 1930; Valid name
- requiescator Gistel, 1848; = *Nicrophorus tomentosus* Weber, 1801
- rotundicollis Portevin, 1923; = *Nicrophorus concolor* Kraatz, 1877
- ruficornis Motschulsky, 1870; = *Nicrophorus nigrita* Mannerheim, 1843
- rugulipennis Jakovlev, 1890; = *Nicrophorus morio* Gebler, 1817
- ruspator Erichson, 1837; (unecc. nomen novum for *N. investigator* Zetterstedt); = *N. investigator* Zetterstedt, 1824
- ruthenus Motschulsky, 1859; = *Nicrophorus germanicus* (Linnaeus, 1758)
- satanas** Reitter, 1893; Valid name
- sasai** Růžička, Háva & Schneider, 2000; Valid name
- sayi** Laporte, 1840; Valid name
- scrutator** Blanchard, 1842; Valid name
- semenowi** (Reitter, 1887); Valid name
- sepulchralis** Heer, 1841; Valid name
- sepultor** Charpentier, 1825; Valid name
- sepultor Gyllenhal, 1827; (junior primary homonym, not Charpentier, 1825); = *N. vestigator* Herschel, 1807
- sibiricus Motschulsky, 1860; = *Nicrophorus investigator* Zetterstedt, 1824
- smefarka** Háva, Schneider & Růžička, 1999; Valid name
- speciosus (J.D. Schulze, 1775); = *Nicrophorus germanicus* (Linnaeus, 1758)

<i>spinipes</i>	Leach, 1815; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)
<i>stenophthalmus</i>	(Jakovlev, 1887) = <i>Nicrophorus lunatus</i> Fischer von Waldheim, 1842
<i>subfasciatus</i>	Portevin, 1914; as var. of <i>vespilloides</i> ; = <i>Nicrophorus vespilloides</i> Herbst, 1783
<i>subinterruptus</i>	Pic, 1917; as var. of <i>vespilloides</i> ; = <i>Nicrophorus vespilloides</i> Herbst, 1783:
<i>submaculatus</i>	Reitter, 1895; as var. of <i>interruptus</i> ; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
<i>sulcatus</i>	Fischer von Waldheim, 1844; = <i>Nicrophorus humator</i> (Gleditsch, 1767)
<i>suturalis</i>	Motschulsky, 1860; = <i>Nicrophorus interruptus</i> Stephens, 1830
<i>sylvaticus</i>	Reitter, 1895; as var. of <i>vespilloides</i> ; = <i>Nicrophorus vespilloides</i> Herbst, 1783
<i>sylvivagus</i>	Reitter, 1897; as var. of <i>vespilloides</i> ; = <i>Nicrophorus vespilloides</i> Herbst, 1783:
<i>tardus</i>	Mannerheim, 1853; = <i>Nicrophorus pustulatus</i> Herschel, 1807
<i>temporalis</i>	Shchegoleva-Barovskaya, 1933; = <i>Nicrophorus semenowi</i> (Reitter, 1887)
tenuipes	Lewis, 1887; Valid name
<i>tibetanus</i>	Hlisnikovsky, 1964; = <i>Nicrophorus argutor</i> Jakovlev, 1890
tomentosus	Weber, 1801; Valid name
<i>trimaculatus</i>	Gradl, 1882; as var. of <i>interruptus</i> ; = <i>Nicrophorus interruptus</i> Stephens, 1830
<i>trinotatus</i>	Reitter, 1911; as var./ab. of <i>interruptus</i> ; = <i>Nicrophorus interruptus</i> Stephens, 1830
<i>unifasciatus</i>	Hlisnikovsky, 1964; = <i>Nicrophorus oberthuri</i> Portevin, 1924
ussuriensis	Portevin, 1923; Valid name
validus	Portevin, 1920; Valid name
<i>vandykei</i>	Angell, 1920; as var. of <i>guttula</i> ; = <i>Nicrophorus guttula</i> Motschulsky, 1845
<i>varendorffi</i>	Westhoff, 1881; as var. of <i>vespillo</i> ; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)
<i>variolosus</i>	Portevin, 1924; as var. of <i>investigator</i> ; = <i>Nicrophorus investigator</i> Zetterstedt, 1824
<i>velutinus</i>	Fabricius, 1801; = <i>Nicrophorus tomentosus</i> Weber, 1801
vespillo	(Linnaeus, 1758); Valid name
vespilloides	Herbst, 1783; Valid name
vestigator	Herschel, 1807; Valid name
<i>vicinus</i>	Shchegoleva-Barovskaya, 1933; = <i>Nicrophorus tenuipes</i> Lewis, 1887
<i>virginicus</i>	Frölich, 1792; = <i>Nicrophorus americanus</i> Olivier, 1790
<i>viturati</i>	Pic, 1917; as var. of <i>vestigator</i> ; = <i>Nicrophorus vestigator</i> Herschel, 1807
<i>vodozi</i>	Meier, 1900; as var. of <i>corsicus</i> ; = <i>Nicrophorus interruptus</i> Stephens, 1830
<i>vulgaris</i>	Fabricius, 1775; = <i>Nicrophorus vespillo</i> (Linnaeus, 1758)

Palaeosilpha

fraasii Flach, 1890; Valid name (fossil)

Ptomascopus

aveyronensis Flach, 1890; Valid name (fossil)

carbunculus Lewis, 1879; = *Ptomascopus morio* Kraatz, 1877

dauidis Deyrolle & Fairmaire, 1878; = *Ptomascopus plagiatus* (Ménétriés, 1854)

lewisi Portevin, 1914b; as var. of *morio*; = *Ptomascopus morio* Kraatz, 1877: 104

morio Kraatz, 1877; Valid name

- plagiatiipennis Lewis, 1879; = *Ptomascopus plagiatus* (Ménétriés, 1854)
plagiatus (Ménétriés, 1854) Valid name
 quadrimaculatus Kraatz, 1877; = *Ptomascopus plagiatus* (Ménétriés, 1854)
 villosus Portevin, 1923; as var. of *morio*; = *Ptomascopus morio* Kraatz, 1877
 weberi Bodemeyer, 1916; = *Ptomascopus plagiatus* (Ménétriés, 1854)
zhangla Háva, Schneider & Růžička, 1999; Valid name

EONECROPHORUS Kurosawa, 1985: 45

Type species: *Eonecrophorus tenuicornis* Kurosawa, 1985 (orig. des.)

Eonecrophorus tenuicornis Kurosawa, 1985

Type locality: “Nepal: Kalapokhri 3000m, Singalila Dara” [27°28'00"N 88°04'00"E; label]

Type depository: NSMT: Tokyo [!] holotype male

Distribution: Oriental: Himalayas: far eastern Nepal

- 1985b Kurosawa: 47 (descriptions) >> Orig. comb.: *Eonecrophorus tenuicornis* [!N, S]
 1986 Nishikawa: 99 (catalog in Japanese (English summary))
 2000 Sikes & Peck: 396 (descriptions, phylogenetics)
 2001 Peck: 269 (keys, descriptions and distributions)
 2001 Trumbo et al.: 558 (biology, ecology, behavior) >> suggests behavioral studies of this species to be a high priority
 2002 Nikolajev & Kozminykh: 93 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

NICROPHORUS Fabricius, 1775: (13), 71.

Type species: *Silpha vespillo* L. 1758 (des. Latreille, 1810: 427)

=*Necrophorus* Thunberg, 1789: 7 (unjust. emend. *Nicrophorus*)

=*Necrophagus*; Leach, 1815: 88 (subseq. missp. *Necrophorus*)

=*Cyrtoscelis* Hope, 1840: 149

Type species: *Silpha vespillo* Linnaeus, 1758 (orig. des.)

=*Necrophorus* (*Acanthopsilus*) Portevin, 1914c: 223

Type species: *Necrophorus concolor* Kraatz, 1877 (monotypy)

=*Necrocharis* Portevin, 1923b: 68

Type species: *Silpha carolina* Linnaeus, 1771 (monotypy)

=*Necrophorus* (*Eunecrophorus*) Semenov-Tian-Shanskij, 1933: 152

Type species: *Nicrophorus americanus* Olivier, 1790 (orig. des.)

=*Necrophorus* (*Necrophoricus*) Semenov-Tian-Shanskij, 1933: 152

Type species: *Necrophorus lunatus* Fischer, 1842 (orig. des.)

=*Necrophorus* (*Nesonecrophorus*) Semenov-Tian-Shanskij, 1933: 153

Type species: *Necrophorus podagricus* Portevin, 1920 (orig. des.)

- =Necrophorus (Necrophorindus) Semenov-Tian-Shanskij, 1933: 153
Type species: *Necrophorus validus* Portevin, 1920 (orig. des.)
- =Necrophorus (Necrocleptes) Semenov-Tian-Shanskij, 1933: 153
Type species: *Silpha humator* Gleditsch, 1767 (orig. des.)
- =Necrophorus (Nesonecropter) Semenov-Tian-Shanskij, 1933: 154
Type species: *Necrophorus distinctus* Grouvelle, 1885 (orig. des.)
- =Necrophorus (Necropter) Semenov-Tian-Shanskij, 1933: 154
Type species: *Necrophorus investigator* Zetterstedt, 1824 (orig. des.)
- =Necrophorus (Stictonecropter) Semenov-Tian-Shanskij, 1933: 154
Type species: *Necrophorus pustulatus* Herschel, 1807 (orig. des.)
- =Necrophorus (Neonicrophorus) Hatch, 1946: 99
Type species: *Silpha germanica* Linnaeus, 1758 (orig. des.)
- =Necroxenus Semenov-Tian-Shanskij, 1926: 46
Type species: *Necrophorus przewalskii* Semenov-Tian-Shanskij 1894: 528 (orig. des.)
- 1950 Neumann & Sellnick: 643 (*Nicrophorus* as mite host, species not mentioned, in German)
- 1957 Belozarov: 1802 (*Nicrophorus* as mite host, species not mentioned, in Russian)
- 1960 Duporte: 674 (morphology of head in *Nicrophorus*, species not mentioned)
- 1961 Balfour-Browne: 345 (morphology in *Nicrophorus*, species not mentioned)
- 1963 Arnett: 332 (*Nicrophorus* generic characters, biology; species not listed but 1 figured)
- 1965 Evans: 408 (morphology: gular size in *Nicrophorus*, species not mentioned)
- 1973 Hlavac: 155 (morphology: prothorax, procoxa in *Nicrophorus*, species not mentioned)
- 1974 Evans: 69 (morphology: prothorax, procoxa in *Nicrophorus*, species not mentioned)
- 1981 Pirone & Sullivan: 191 (ecology, as family only, no genera or species mentioned)
- 1982a Korn: 261 (*Nicrophorus* as mite host, species not mentioned, in German)
- 1984 Müller & Dressel: 377 (biology, brief abstract, genus *Nicrophorus* but no species mentioned)
- 1986 Caveney: 1798 (morphology: *Nicrophorus* ommatidium structure, species not mentioned)
- 1989 Elgueta & Arriagada: 13 (distribution, species not listed, in Spanish)
- 1998 Robertson et al.: 265-286 (biology, *Nicrophorus* but species not named in abstract)
- 2000 Peck: 270 (*Nicrophorus* generic characters, biology; species not listed but 1 figured)

Nicrophorus americanus Olivier, 1790 NEW NOMEN PROTECTUM (see *N. orientalis*)

Type locality: "Ame'rique, New Jersey" [label]

Type depository: MNHN: Paris [!] holotype male

Distribution: Nearctic: eastern North America [now extirpated over 95% of range]

1774 DeGeer: 168 (biology in French) >> misid as var. of *N. vespillo* after Olivier (1790)

- 1790 Olivier: no. 10, p. 6 (descriptions in French) >> Orig. comb.: *Nicrophorus americanus*; habitus figured [!N, S]
- 1792 Fabricius: 247 (descriptions) >> as syn. of *N. grandis*
- 1801 Fabricius: 334 (descriptions) >> as syn. of *N. grandis*
- 1806 Melsheimer: 16 (catalog) >> auth. attrib. "K."
- 1826 Sturm: 173 (catalog in German)
- 1840 Laporte: 2 (descriptions in French) >> as syn. of *N. grandis*
- 1853 LeConte: 276 (descriptions) >> as valid species & senior syn. of *N. grandis*
- 1853 Melsheimer: 39 (catalog)
- 1854 Emmons: 57 (descriptions)
- 1862 Osten-Sacken: 408 (biology, behavior in German)
- 1868 Gemminger & Harold: 717 (catalog)
- 1869 Glover (biology, behavior)
- 1871 LeBaron
- 1873 Crotch: 37 (checklist) >> as *Silpha americana*
- 1877 Harold: 345 (descriptions in German) >> as *N. americanus*; compared with *N. japonicus*
- 1878b Hubbard & Schwarz: 650 (checklist)
- 1880 Horn: 229 (revision: key, descriptions & catalog)
- 1885 Henshaw: 26 (checklist)
- 1895 Clark: 61 (biology, behavior) >> feeding on maggots
- 1895 Hamilton: 324 (checklist)
- 1902 Dury: 12 (checklist)
- 1903 Portevin: 330 (descriptions in French)
- 1904 Davis: 18 (checklist)
- 1904 Needham: 295 (biology, ecology)
- 1908 Heyne & Taschenberg: 38 (descriptions in German) >> brief description
- 1910 Barkowski: 79 (key, descriptions, regional in German)
- 1910 Blatchley: 274 (key, descriptions, regional)
- 1910 Smith: 229 (checklist)
- 1911 Wickham: 10 (checklist)
- 1915 Frost: 209 (biology, ecology)
- 1915 Jaques: 526 (biology, ecology)
- 1920 Britton: 224 (checklist)
- 1920 Leng: 86 (catalog)
- 1921 Lutz (biology, ecology, behavior)
- 1922 Sherborn: 261 (catalog - index)
- 1923 Portevin: 305 (key, descriptions in French)
- 1926a Portevin: 204 (revision: key, descriptions & catalog in French)
- 1927b Abbott: 208-216 (biology, behavior) >> "Physiology, smell" - Hatch 1928
- 1927a Hatch: 5, 7, 19 (key, descriptions, description of variation)
- 1927b Hatch: 354 (revision: key, descriptions & catalog)
- 1928 Hatch: 132 (catalog)
- 1928 Leonard: 270 (checklist)
- 1930 Johnson: 44 (checklist)
- 1932 Jones: 352 (biology, ecology) >> not accepted as prey by birds in tests

- 1933 Semenov-Tian-Shanskij: 150 (catalog in Russian & Latin) >> as type sp. of new subgenus *Eunecrophorus*
- 1933a Shchegoleva-Barovskaya: 164 (revision: key, descriptions & catalog in Russian)
- 1935 Balduf: 69 (biology, ecology, behavior)
- 1936 Meserve: 132 (checklist, distribution)
- 1938 Bimley: 135 (checklist)
- 1944 Arnett: 5, 22 (morphology: female genitalia) >> female genitalia figured, pl. 3, fig. 1
- 1944 Blackwelder: 99 (catalog)
- 1945 Löding: 32 (checklist)
- 1949 Bliss: 200 (morphology: sexual dimorphism)
- 1949 Horion: 78 (biology, ecology, distribution in German)
- 1951 Jaques: 83 (key, descriptions)
- 1957 Walker: 273 (biology, ecology)
- 1958 Madge: 29 (revision: key, descriptions, ecology, distributions)
- 1961 Dillon & Dillon: 175 (key, descriptions)
- 1969 Gersdorf: 305 (fossils, descriptions in German) >> auth. attrib. Say
- 1969 Kirk: 28 (checklist)
- 1970 Gersdorf: 366 (morphology: female genitalia in German) >> auth. attrib. Say
- 1971 Lumpkin (biology, ecology) >> 19 specimens recorded from different elevations in Tennessee
- 1972 Swan & Papp: 356 (description) >> brief description
- 1973 Blackwelder: 4 (checklist, synonymy)
- 1975 Baldwin: 22 (key, description, distribution, ecology)
- 1975 Kirk & Balsbaugh: 52 (checklist)
- 1976 Shubeck: 265 (biology, ecology) >> cites Smith (1910)
- 1977 Headstrom: 105 (description) >> brief description
- 1980 Arnett et al.: 128 (key, descriptions)
- 1980 Davis: 247 (biology, conservation) >> with discussion of this sp. decline
- 1980 Milne & Milne: 550 (field guide, brief descriptions, ecology) >> "may be extinct"
- 1981 Kozol: 1-164 (biology, conservation, genetics) >> focal species
- 1982b Anderson: 362-365 (biology, conservation) >> focal species
- 1982 Milne & Milne (biology)
- 1983 IUCN: 379 (biology, conservation)
- 1983 Lago & Miller: 84 (checklist)
- 1983 White: 121 (field guide) >> descriptive note
- 1984 Papp: 69 (descriptions) >> brief description
- 1985 Anderson & Peck: 54 (revision: key, descriptions & catalog)
- 1985 Opler (biology, conservation)
- 1985 Peck & Anderson: 276 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 99 (catalog in Japanese (English summary))
- 1987 Peck & Kaulbars: 54 (checklist)
- 1987 Schweitzer & Master: 1-13 (biology, conservation) >> focal species
- 1987 Staines: 16 (key, descriptions) >> Maryland records
- 1988 Recce (biology, conservation)
- 1989 Anonymous (biology, conservation)

- 1989 Kozol: 1-10 (biology, conservation) >> focal species
 1989 Kozol et al.: 167-176 (biology, conservation) >> focal species
 1989 Lamson: 29652 (biology, conservation)
 1990 Amaral & Morse: 3-10 (biology, conservation) >> focal species
 1990 Kozol: 1-17 (biology, conservation) >> focal species
 1990 Moore (biology, conservation) >> focal species
 1990 Peck: 1121 (key)
 1990 Schweitzer (biology, conservation) >> focal species
 1991 Anonymous (biology, conservation) >> focal species
 1991 Campbell: 85 (catalog, distribution)
 1991 Jameson & Ratcliffe (biology, conservation)
 1991 Kozol: 1-15 (biology, conservation) >> focal species
 1991 Laplante et al.: 29 (checklist in French)
 1991 Marshall: 110 (biology, conservation) >> records from 1972 in S. Ontario
 1991 Raithel: 1-80 (biology, conservation) >> focal species
 1992a Amaral: 1-8 (biology, conservation) >> focal species
 1992b Amaral: 509 (biology, conservation) >> focal species
 1992 Ashton (biology, conservation) >> focal species
 1992a Creamer: 288-293 (biology, conservation) >> focal species
 1992 Jameson: 18-20 (biology, conservation) >> focal species
 1992 Ratcliffe & Jameson: 421-425 (biology, conservation) >> focal species
 1992 Will: 10-11 (biology, conservation) >> focal species
 1993 Ashton (biology, conservation) >> focal species
 1993 Creamer: 136-141 (biology, conservation) >> focal species
 1993 Creighton et al.: 275-277 (biology, conservation) >> focal species
 1993 Creighton et al. (biology, conservation) >> focal species
 1993 Marrone (biology, conservation) >> focal species
 1993 Peck & Miller: 7 (species-group catalog)
 1993 Quisenberry & Purcell: 77 (biology, conservation) >> focal species
 1994 Backlund (biology, conservation) >> focal species
 1994 Kozol et al.: 928-935 (biology, conservation, genetics) >> focal species
 1994 Kozol et al.: 112 (biology, conservation) >> focal species
 1994a Marrone (biology, conservation) >> focal species
 1994b Marrone (biology, conservation) >> focal species
 1994 Neal et al.: 127-129 (checklist) >> focal species
 1994 Peyton: 1-12 (biology, conservation) >> focal species
 1994 Sharps (biology, conservation) >> focal species
 1995 Ashton (biology, conservation)
 1995 Backlund & Marrone: 1-11 (biology, conservation) >> focal species
 1995 Lingafelter: 219 (biology, ecology) >> not found
 1995 Lomolino et al.: 605-614 (biology, conservation in English (Spanish summary))
 >> focal species
 1995 Matthews (biology, conservation) >> focal species
 1995a Ratcliffe (biology, conservation) >> focal species
 1995b Ratcliffe (biology, conservation) >> focal species
 1995 Wetzel: 562-566 (biology, conservation) >> focal species

- 1996 Downie & Arnett: 356 (key, descriptions, regional) >> misspelled as *N. americanum*
- 1996 Dunn: 169 (catalog)
- 1996 Lomolino & Creighton: 235-241 (biology, conservation) >> focal species
- 1996 Peyton: 1-16 (biology, conservation) >> focal species
- 1996 Ratcliffe: 60 (revision: key, descriptions & catalog) >> focal species
- 1996 Wetzel: 12 (biology, conservation)
- 1997 Amaral et al.: 121-132 (biology, conservation) >> focal species
- 1997 Backlund & Marrone: 53-58 (biology, conservation) >> focal species
- 1997 Bedick: 1-94 (biology, conservation) >> focal species
- 1997 Guarisco: 116-122 (biology, conservation) >> focal species
- 1997 Holloway & Schnell: 145-152 (biology, conservation) >> focal species
- 1997 King & Cummings: 1088-1095 (biology, genetics)
- 1997 Miller & McDonald: 22 (biology, conservation) >> focal species
- 1998 Carlton & Rothwein: 179-185 (biology, conservation) >> focal species
- 1998 Creighton & Schnell: 281-287 (biology, conservation) >> focal species
- 1998 Peck & Thomas: 37 (checklist, distribution)
- 1998 Schnell & Hiott (biology, conservation) >> focal species
- 1998b Scott: 599+ (biology, review of: ecology, behavior)
- 1999 Amaral & Prospero: 10 (biology) >> focal species
- 1999 Backlund & Marrone (biology, conservation) >> focal species
- 1999 Bedick et al.: 171-181 (biology, conservation) >> focal species
- 1999a Schnell & Hiott (biology, conservation) >> focal species
- 1999b Schnell & Hiott (biology, conservation) >> focal species
- 1999c Schnell & Hiott: 1-18 (biology, conservation) >> focal species
- 2000 Horn: 20-23 (biology, conservation) >> focal species
- 2000 Sikes & Peck: 394 (descriptions, phylogenetics) >> in key only
- 2000 Szalanski et al.: 589-594 (biology, conservation, phylogenetics, genetics) >> focal species

= *grandis* Fabricius, 1792

Type locality: "in America" [descrip.]

Type depository: ZMUC: Kiel, 2 syntypes

- 1792 Fabricius: 247 (descriptions) >> Orig. comb.: *Nicrophorus grandis* [!N, S]
- 1793 Herbst: 152 (catalog in German) >> as valid species
- 1801 Fabricius: 334 (descriptions) >> as valid species; senior syn to *N. americanus*
- 1807 Herschel: 268 (descriptions in German) >> as valid species
- 1821 Dejean: 42 (catalog) >> as valid species
- 1833 Dejean: 117 (catalog in French) >> as valid species
- 1836 Dejean: 131 (catalog in French) >> as valid species
- 1840 Laporte: 2 (descriptions in French) >> as valid species; senior syn to *N. americanus*
- 1853 LeConte: 276 (descriptions) >> as syn. of *N. americanus*
- 1853 Melsheimer: 39 (catalog) >> as syn. of *N. americanus*
- 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species

- 1868 Gemminger & Harold: 717 (catalog) >> as syn. of *N. americanus*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. americanus*
 1890 Flach: 106 (descriptions in German) >> as valid species
 1920 Leng: 86 (catalog) >> as syn. of *N. americanus*
 1926a Portevin: 252 (revision: key, descriptions & catalog in French) >> as syn. of *N. americanus*
 1928 Hatch: 132 (catalog) >> as syn. of *N. americanus*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. americanus*
 1985 Anderson & Peck: 54 (revision: key, descriptions & catalog) >> as syn. of *N. americanus*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. americanus*
 1996 Ratcliffe: 60 (revision: key, descriptions & catalog) >> as syn. of *N. americanus*

= *orientalis* (Herbst, 1784) NEW NOMEN OBLITUM (article 23.9.2 ICZN ed. 4);
 NEW COMBINATION as *Nicrophorus orientalis* (Herbst); NEW SYNONYM of *N. americanus* Oliv.

Type locality: unknown

Type depository: ZMHB: Berlin?

- 1784 Herbst: 77 (descriptions in German) >> Orig. comb.: *Silpha* (*Nicrophorus*) *orientalis* [!M]

= *virginicus* Frölich, 1792

Type locality: "Virginien" [USA: Virginia; descrip.]

Type depository: ZSMC: München?

- 1792 Frölich: 123 (descriptions in German) >> Orig. comb.: *Nicrophorus virginicus* [!N, S]
 1853 Melsheimer: 39 (catalog) >> as syn. of *N. americanus*
 1868 Gemminger & Harold: 717 (catalog) >> as syn. of *N. americanus*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. americanus*
 1920 Leng: 86 (catalog) >> as syn. of *N. americanus*
 1926a Portevin: 252 (revision: key, descriptions & catalog in French) >> as syn. of *N. americanus*
 1928 Hatch: 132 (catalog) >> as syn. of *N. americanus*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. americanus*
 1985 Anderson & Peck: 54 (revision: key, descriptions & catalog) >> as syn. of *N. americanus*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. americanus*
 1996 Ratcliffe: 60 (revision: key, descriptions & catalog) >> as syn. of *N. americanus*

Comments: Article 23.9 of the ICZN ed. 4 provides means by which stability can be maintained when a commonly used but younger name is threatened by synonymy with a forgotten older name. In this case the name *Nicrophorus orientalis* Herbst, 1784 threatens stability by being older than its presumed synonym *Nicrophorus americanus* Olivier, 1790 (synonymy based on interpretation of the original description). The older name has not been used in any publication found other than the original description, thereby satisfying

the condition of article 23.9.1.1. The younger name has been used in over 80 works by over 20 authors in the immediate preceding 50 years over the time span 1957 - 2000 (as can be seen above), and thus satisfies the condition of article 23.9.1.2. Therefore the older name has been placed in synonymy herein as a *nomen oblitum* under the younger name.

Nicrophorus antennatus (Reitter, 1884) desig. lectotype

Type locality: "Tiflis, Kaukas" [Caucasus; label]

Type depository: HNHM: Budapest (!) lectotype male, 1 paralectotype male

Distribution: Palearctic: cEurope; India: Kashmir; Iran; Israel; Turkey; China:

Heilongjiang; Turkmenistan; Kazakhstan; Uzbekistan; Tajikistan; Russian plain

1884 Reitter: 88 (descriptions in German) >> Orig. comb.: *Silpha antennata* [!N, S]

1885 Reitter: 324 (in German)

1891 Heyden et al.: 139 (checklist) >> as *N. vestigator* var. *antennatus*

1893 Heyden: 51 (checklist in German) >> as *N. vestigator* var. *antennatus*

1895b Reitter: 330 (description of variation in German) >> as valid species

1896 Heyden: 38 (checklist in German) >> as valid species

1899 Ganglbauer: 167 (key, descriptions, in German) >> as valid species

1899 Meier: 99 (description of variation in German) >> as valid species

1906 Heyden et al.: 247 (checklist)

1909 Reitter: 241 (in German) >> description of variation: 1 unavailable name

1910 Jakobson: 612 (checklist in Russian)

1911 Reitter: 106 (description of variation in German) >> description of variation: 1 unavailable name

1913 Kuhnt: 336 (in German)

1916 Pasquet: 172 (description of variation in French)

1916 Schaufuss: 274 (checklist in German)

1925 Portevin: 169 (description of variation in French)

1925 Winkler: 265 (catalog)

1926 Porta: 333 (key, checklist in Italian)

1926a Portevin: 248 (revision: key, descriptions & catalog in French)

1927b Hatch: 362 (revision: key, descriptions & catalog)

1928 Hatch: 149 (catalog)

1929 Hlisnikovsky (in German)

1930 Roubal: 241 (catalog in Czech)

1932 Hlisnikovsky: 30 (key, descriptions in German)

1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)

1933a Shchegoleva-Barovskaya: 181 (revision: key, descriptions & catalog in Russian)

1935 Kanabé: 64 (in German)

1939 Roubal: 85 (description of variation in Czech (French summary))

1942 Hlisnikovsky: 579 (nomenclature in German) >> synonymy of unavailable names

1942 Roubal: 17 (description of variation in Czech) >> description of variation: 1 unavailable name

1949 Horion: 78 (biology, ecology, distribution in German)

1953 Akopyan (biology, ecology in Russian)

1955 Mroczkowski: 23 (key, descriptions in Polish)

- 1970 Franz: 213 (checklist, distribution in German)
 1970 Gersdorf: 368 (morphology: female genitalia in German)
 1971 Freude: 194 (key in German)
 1973 Audisio (checklist) >> 1972 record of this sp. in Friuli, Italy
 1975b Emetz: 103 (checklist in Russian)
 1978 Burakowski et al.: 199 (catalog, distribution, synonymy in Polish)
 1981 Šustek: 40 (key, descriptions, regional in Czech)
 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary))
 1985 Zahradník: 122 (catalog, annotated & figured in German)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1987 Lucht: 67 (catalog in German)
 1989 Koch: 165 (biology, ecology in German)
 1990 Zahradník: 122 (key in Spanish)
 1992 Kozminykh: 64 (checklist in Russian)
 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
 1993b Kozminykh: 65 (key, descriptions, regional in Russian)
 1993 Růžička: 34 (checklist, distribution in English & Czech)
 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
 1995 Angelini et al.: 10 (checklist, distribution in Italian)
 1995 Kozminykh: 110 (key in Russian)
 1995 Kozminykh & Nemkov: 112 (catalog in Russian)
 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English)
 1996 Bertin & Lebboroni: 155 (checklist in Italian (English summary))
 1997 Kozminykh: 66 (checklist in Russian)
 1998 Háva et al.: 178 (distribution note in English (Czech summary))
 1998 Pushkin & Sigida: 84 (biology, ecology in Russian)
 2000b Parkhomenko: 160-164 (morphology, larval stages in Ukrainian (English summary)) >> description of larva; misspelled as *N. antennatus* throughout
 2002 Nikolajev & Kozminykh: 113 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *centralis* Portevin, 1914 NEW STATUS as absolute syn. of *N. antennatus* (Reitter)

Type locality: "Roumélie" [descrip.]

Type depository: DEIC: Eberswalde, holotype?

- 1914a Portevin: 196 (description of variation in French) >> Orig. comb.: *Necrophorus antennatus* var. *centralis* [!N, S]
 1925 Portevin: 169 (description of variation in French) >> as *N. antennatus* ab. *centralis*
 1925 Winkler: 265 (catalog) >> as *N. antennatus* ab. *centralis*
 1926a Portevin: 248 (revision: key, descriptions & catalog in French) >> as *N. antennatus* ab. *centralis*
 1928 Hatch: 149 (catalog) >> as *N. antennatus* ab. *centralis*
 1933a Shchegoleva-Barovskaya: 181 (revision: key, descriptions & catalog in Russian) >> as *N. antennatus* ab. *centralis*

Comments: Lectotype data for *Nicrophorus antennatus* (Reitter, 1884: 88) "Holotypus 1884 *Nicrophorus antennatus* Reitter" [red-bordered]/ "coll. Reitter"; [this is not the holotype as Reitter did not designate holo/paratypes- this is a syntype that we designated as the lectotype]/ Tiflis, Kaukas., red rectangular label with double black border "LECTOTYPE *Nicrophorus antennatus* (Reitter 1884) det. Sikes 1997"- male (Budapest [HNHM]); pronotal width: 6.10 mm.

Paralectotype data "Paratypus 1884 *Nicrophorus antennatus* Reitter [red-bordered] / "coll. Reitter"; [this is not the paratype as Reitter did not designate holo/paratypes- this is a syntype that we designated as the paralectotype.]/[AUSTRIA]: Umgebung Wiens, (coll. Reitter) red rectangular label with double black border "PARALECTOTYPE *Nicrophorus antennatus* (Reitter 1884) det. Sikes 1997"- male (Budapest [HNHM]).

***Nicrophorus apo* Arnett, 1950**

Type locality: "Mt. Apo, Mindanao" [Philippines; label]

Type depository: NMNH: Washington, D. C. [!] holotype female, allotype male, 50 paratypes [BMNH, FMNH, USNM]

Distribution: Oriental: Philippines: Mindanao

- 1950 Arnett: 67 (description) >> Orig. comb.: *Nicrophorus apo*; female genitalia figured [!N, S]
- 1969 Hinton: 186 (morphology: diffraction gratings) >> notes iridescent morphology
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1990 Hanski & Niemelä: 149 (biology: ecology)
- 1991 Hanski & Krikken: 195 (biology: ecology)
- 2001 Peck: 94 (keys, descriptions and distributions)

***Nicrophorus argutor* Jakovlev, 1890**

Type locality: "in Mongolia septentrionali propr Naryn-gol" [near Naryn river, flowing west into east Ubsa Nor (lake), nw Mongolia (Urgam); descrip.]

Type depository: ZMAS: St. Petersburg? [not found]

Distribution: Palearctic: Russia: Siberia; Mongolia; China: Gansu*, Tibet, Beijing; Kazakhstan

- 1890 Jakovlev: 127 (descriptions in Russian) >> Orig. comb.: *Nicrophorus argutor* [!N, S]
- 1893 Heyden: 51 (checklist in German)
- 1895b Reitter: 328 (description of variation in German)
- 1896 Heyden: 38 (checklist in German)
- 1910 Jakobson: 612 (checklist in Russian)
- 1916 Pasquet (description of variation in French)
- 1924 Portevin: 292 (key, descriptions in French)
- 1925 Winkler: 264 (catalog)
- 1926a Portevin: 232 (revision: key, descriptions & catalog in French)
- 1928 Hatch: 136 (catalog)
- 1930 Kieseritzky: 62 (descriptions in Russian (German summary))
- 1932 Hlisnikovsky: 29 (key, descriptions in German)

- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 188 (revision: key, descriptions & catalog in Russian)
 1933b Shchegoleva-Barovskaya: 252 (descriptions in Russian)
 1975a Emetz: 58 (checklist in German)
 1975b Emetz: 103 (checklist in Russian)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1992 Kozminykh: 64 (checklist in Russian) >> as valid species
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as *Necrophorus sepul-*
tor subsp. *argutor*
 1996 Růžička & Schneider: 81 (checklist in English (Czech summary)) >> as valid
 species
 2002 Nikolajev & Kozminykh: 122 (catalog, distribution, descriptions, keys, figures in
 Russian (English summary))

= pseudobrutor Reitter, 1895 NEW SYNONYM of *N. argutor* Jakovlev

Type locality: "Nordl. Mongolei Changai" [label]

Type depository: HNHM: Budapest [!] 2 syntypes [HNHM, MNHN]

- 1895b Reitter: 327 (description of variation in German) >> Orig. comb.: *Necrophorus*
*sepul*tor var. *pseudobrutor* [!N, S]
 1896 Heyden: 38 (checklist in German) >> as *N. sepul*tor var. *pseudobrutor*
 1899 Ganglbauer: 165 (key, descriptions, in German) >> as *N. sepul*tor var. *pseudo-*
brutor
 1906 Heyden et al.: 247 (checklist) >> as *N. sepul*tor var. *pseudobrutor*
 1913 Kniephof: 187 (in German) >> as *N. sepul*tor var. *pseudobrutor*
 1916 Pasquet: 156 (description of variation in French)
 1916 Schaufuss: 273 (checklist in German)
 1924 Portevin: 147 (key, descriptions in French) >> as valid species
 1925 Winkler: 264 (catalog) >> as questionable syn. of *N. argutor*
 1926a Portevin: 219 (revision: key, descriptions & catalog in French) >> as valid spe-
 cies
 1927b Hatch: 359 (revision: key, descriptions & catalog) >> as valid species
 1928 Hatch: 145 (catalog) >> as valid species
 1930 Kieseritzky: 62 (descriptions in Russian (German summary)) >> as syn. of *N.*
argutor
 1932 Hlisnikovsky: 28 (key, descriptions in German) >> as valid species
 1933a Shchegoleva-Barovskaya: 188 (revision: key, descriptions & catalog in Russian)
 >> as syn. of *N. argutor*
 1964a Hlisnikovsky: 223 (key, descriptions in German) >> as valid species
 1975b Emetz: 103 (checklist in Russian) >> as syn. of *N. argutor*
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
 2002 Nikolajev & Kozminykh: 122 (catalog, distribution, descriptions, keys, figures in
 Russian (English summary)) >> as syn. of *N. argutor*

= tibetanus Hlisnikovsky, 1964 REVISED SYNONYM of *N. argutor* Jakovlev

Type locality: "Asien, Khamba Jong. Sikkim" [Kamba Dzong, s Tibet; just north of
 Sikkim; label]

Type depository: BMNH: London [!] holotype female, allotype male [BMNH], paratype male [NMPC]

- 1964b Hlisnikovsky: 241 (descriptions in German) >> Orig. comb.: *Necrophorus* (*Necropter*) *tibetanus* [!N, S]
 1982 Schawaller: 255 (checklist in German (English summary)) >> as syn. of *N. semenowi*
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> as syn. of *N. semenowi*

Comments: Schawaller (1981) placed *N. tibetanus* Hlisnikovsky into synonymy under *N. semenowi*. We have studied the type specimens of both *N. tibetanus* and *N. semenowi* and these types are not conspecific. Among numerous differing characters, the former species displays a glabrous area immediately posterior to the mesocoxae, a state apparently synapomorphic for *N. hybridus*, *N. confusus*, *N. sepultor*, and *N. argutor*, that the latter species does not have. The metasternal pubescence of *N. tibetanus* and *N. argutor* is golden while that of *N. semenowi* is brown. The type locality of *N. tibetanus* and the lack of characters differing it from *N. argutor* indicate that it is conspecific, and thus we make it a junior synonym.

Necrophorus sepultor var. *pseudobrutor* Reitter has been synonymized under *N. argutor* previously, most recently by Emetz (1975b), but was listed as a valid name by Nishikawa (1986) and Hlisnikovsky (1964a). We have studied the type specimens in both the HNHM and the MNHN and agree with Emetz (1975b), Kieseritzky (1930), and Shchegoleva-Barovskaya (1933a) who considered this name a synonym of *N. argutor*. It shares with *N. argutor* the following key traits: epipleura orange with the basal black band of the elytra extending into the epipleura; posterior fascia of elytra reaching epipleura broadly; and few to no setae behind the mesocoxae.

***Necrophorus basalis* Faldermann, 1835**

Type locality: "Mongolia"[descrip.]

Type depository: ZMAS: St. Petersburg [as stated in orig. desc. but types not found, (Gusarov in litt.)]

Distribution: Palearctic: Russia: eSiberia; nChina: Heilongjiang*, Jiangsu*; Korea; Mongolia

- 1835b Faldermann: 364 (descriptions) >> Orig. comb.: *Necrophorus basalis* [!M, S]
 1833 Dejean: 117 (catalog in French) >> nomen nudum; auth. attrib. Dejean
 1849 Gaubil: 55 (catalog in French) >> attrib. "Dej. Cat."; as valid species
 1868 Gemminger & Harold: 717 (catalog)
 1877 Harold: 346 (descriptions in German) >> compared with *N. japonicus*
 1877 Kraatz: 102 (descriptions in German)
 1880 Heyden: 87 (checklist in German)
 1884 Marseul: 189 (key, descriptions in French)
 1885 Marseul: 169 (catalog in French)

- 1895b Reitter: 326 (description of variation in German) >> as valid species; but unseen by author (in footnote)
- 1896 Heyden: 38 (checklist in German)
- 1905a Portevin: 51 (nomenclature in French) >> distinguishing traits from *N. japonicus*
- 1910 Jakobson: 612 (checklist in Russian)
- 1917 Strand: 83 (descriptions in German)
- 1922 Portevin: 57 (descriptions in French) >> description of variation: 1 unavailable name
- 1922 Sherborn: 666 (catalog - index)
- 1924 Portevin: 287 (key, descriptions in French)
- 1925 Winkler: 264 (catalog)
- 1926a Portevin: 227 (revision: key, descriptions & catalog in French)
- 1927b Hatch: 360 (revision: key, descriptions & catalog)
- 1928 Hatch: 146 (catalog)
- 1930 Kieseritzky: 64 (descriptions in Russian (German summary))
- 1932 Hlisnikovsky: 29 (key, descriptions in German)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1933a Shchegoleva-Barovskaya: 184 (revision: key, descriptions & catalog in Russian)
- 1937 Wu (catalog)
- 1943 Portevin: 48 (description of variation in French) >> description of variation: 1 unavailable name
- 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian)
- 1966c Mroczkowski: 436 (checklist)
- 1975b Emetz: 104 (checklist in Russian)
- 1980 Schawaller: 153 (checklist in German (English summary))
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1988 Cho et al.: 9 (phylogenetics)
- 1989 Lafer: 339 (key, descriptions, description of variation in Russian)
- 1992 Cho & Lee: 25 (revision: key, descriptions & catalog)
- 1992 Kozminykh: 64 (checklist in Russian)
- 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> ungrouped; incertae sedis
- 2002 Nikolajev & Kozminykh: 127 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

***Nicrophorus carolinus* (Linnaeus, 1771)**

Type locality: "in Carolina" [USA; descrip.]

Type depository: LSUK: London

Distribution: Nearctic: southeastern and central North America

- 1771 Linnaeus: 530 (descriptions) >> Orig. comb.: *Silpha carolina* [!N, S]
- 1807 Herschel: 269 (descriptions in German) >> as *N. carolinus*; compared to *N. mediatius*
- 1853 LeConte: 278 (descriptions)
- 1853 Melsheimer: 39 (catalog) >> as questionable syn. of *N. mediatius*
- 1868 Gemminger & Harold: 717 (catalog)
- 1873 Crotch: 37 (checklist) >> as *Silpha carolina*

- 1877 Harold: 345 (descriptions in German) >> as *N. carolinus*; compared with *N. japonicus*
- 1878 Schwarz: 443 (checklist)
- 1880 Horn: 229 (revision: key, descriptions & catalog)
- 1885 Henshaw: 26 (checklist)
- 1903 Portevin: 330 (descriptions in French)
- 1907 Fall & Cockerell: 164 (checklist)
- 1908 Heyne & Taschenberg: 38 (descriptions in German) >> brief description
- 1910 Barkowski: 79 (key, descriptions, regional in German)
- 1912 Angell: 307 (descriptions) >> compared to *N. mysticallis*
- 1920 Leng: 86 (catalog)
- 1923 Portevin: 142 (key, descriptions in French) >> as *Necrocharis carolinus*, description of variation: 1 unavailable name
- 1923 Stickney: 23-41 (morphology: head capsule) >> Morphology: Head capsule
- 1926a Portevin: 187 (revision: key, descriptions & catalog in French) >> as *Necrocharis carolinus*
- 1927b Hatch: 364 (revision: key, descriptions & catalog) >> as *Nicrophorus (Necrocharis) carolinus*
- 1928 Hatch: 153 (catalog) >> as *Nicrophorus (Necrocharis) carolinus*
- 1933 Semenov-Tian-Shanskij: 149 (catalog in Russian & Latin) >> as type sp. of genus *Necrocharis* Port.
- 1933a Shchegoleva-Barovskaya: 162 (revision: key, descriptions & catalog in Russian) >> as *Necrocharis carolinus*, in key
- 1934 Hatch & Rueter: 159 (key, distribution, variation, descriptions) >> as *Nicrophorus carolinus*
- 1936 Meserve: 132 (checklist, distribution)
- 1938 Brimley: 135 (checklist) >> also as *ab. floridae*
- 1944 Arnett: 3, 20 (morphology: female genitalia) >> female genitalia figured, pl. 2, fig. 8
- 1944 Blackwelder: 100 (catalog)
- 1945 Löding: 32 (checklist)
- 1946a Arnett: 132 (biology) >> first? observation of burying behavior in *N. carolinus*
- 1949 Bliss: 200 (morphology: sexual dimorphism)
- 1958 Madge: 58 (revision: key, descriptions, ecology, distributions)
- 1966 Payne & Crossley: 56 (biology, ecology)
- 1969 Gersdorf: 304 (fossils, descriptions in German)
- 1969 Kirk: 28 (checklist)
- 1970 Kirk: 25 (checklist)
- 1970 Payne & King: 230 (biology, ecology)
- 1973 Blackwelder: 3 (checklist, synonymy) >> misspelled as *N. carolinensis*
- 1975 Baldwin: 20 (key, description, distribution, ecology)
- 1975 Kirk & Balsbaugh: 52 (checklist)
- 1980 Madge: 356 (catalog)
- 1982 Conley: 11-15 (biology, ecology) >> focal species
- 1983 Lago & Miller: 84 (checklist)
- 1985 Anderson & Peck: 55 (revision: key, descriptions & catalog)
- 1985 Peck & Anderson: 276 (key, descriptions, phylogenetics)

- 1986 Anderson & Peck: 283 (morphology: color variation)
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as *Necrocharis carolinus*
 1987 Peck & Kaulbars: 54 (checklist) >> as *Nicrophorus carolinus*
 1987 Staines: 16 (key, descriptions) >> brief descriptions
 1988 Scott et al.: 325-331 (biology, ecology) >> focal species
 1990 Peck: 1121 (key)
 1991 Campbell: 85 (catalog, distribution)
 1993 Peck & Miller: 7 (species-group catalog)
 1995 Lingafelter: 219 (biology, ecology)
 1996 Downie & Arnett: 356 (key, descriptions, regional)
 1996 Lomolino & Creighton: 238 (biology, conservation)
 1996 Ratcliffe: 65 (revision: key, descriptions & catalog)
 1997 Backlund & Marrone: 56 (biology, conservation)
 1998 Peck & Thomas: 37 (checklist, distribution)
 1999 Bedick et al.: 177 (biology, conservation)
 2000 Sikes & Peck: 394 (descriptions, phylogenetics)

= *dolosus* Portevin, 1923

Type locality: unknown

Type depository: MNHN: Paris [not found]

- 1923 Portevin: 142 (key, descriptions in French) >> Orig. comb.: *Necrocharis carolinus* var. *dolosus* [!N, S]
 1926a Portevin: 249 (revision: key, descriptions & catalog in French) >> as *N. carolinus* var. *dolosus*
 1927b Hatch: 364 (revision: key, descriptions & catalog) >> as *N. carolinus* ab. *dolosus*; specimens not seen by Hatch
 1928 Hatch: 153 (catalog) >> as *N. carolinus* ab. *dolosus*
 1944 Arnett: 3 (morphology: female genitalia) >> as *N. carolinus* ab. *dolosus*
 1985 Anderson & Peck: 55 (revision: key, descriptions & catalog) >> as syn. of *N. carolinus*
 1996 Ratcliffe: 65 (revision: key, descriptions & catalog) >> as syn. of *N. carolinus*

= *mediatus* Fabricius, 1801 CONFIRMED as SYNONYM of *N. carolinus* (L.)

Type locality: "Carolina" [USA; label]

Type depository: ZMUC: Kiel; syntype: MNHN: Paris [!] 2 (or more) syntypes

- 1801 Fabricius: 334 (descriptions) >> Orig. comb.: *Nicrophorus mediatus* [!N, S]
 1807 Herschel: 269 (descriptions in German) >> as valid species; compared to *N. carolinus*
 1807 Latreille: 5 (catalog) >> as valid species
 1815 Leach: 86 (descriptions) >> as valid species; misspelled as *N. medianus*
 1821 Dejean: 42 (catalog) >> as valid species
 1833 Dejean: 117 (catalog in French) >> as valid species
 1836 Dejean: 131 (catalog in French) >> as valid species
 1839 Matzek: 23 (morphology: internal & external anatomy in Latin) >> as valid species; as *N. mediatum*

- 1840 Laporte: 2 (descriptions in French) >> as valid species
 1853 LeConte: 275 (descriptions) >> as valid species
 1853 Melsheimer: 39 (catalog) >> as valid species
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1859c LeConte: 37 (checklist) >> as valid species
 1860 Motschulsky: 126 (descriptions in French) >> as valid species; compared with *N. dauricus*; misspelled as *N. medius*
 1868 Gemminger & Harold: 717 (catalog) >> as syn. of *N. carolinus*
 1873 Crotch: 37 (checklist) >> as *Silpha mediata*, syn of *Silpha carolina*
 1903 Portevin: 330 (descriptions in French) >> as *Necrophorus mediatus*, syn. of *N. carolinus*
 1908 Heyne & Taschenberg: 38 (descriptions in German) >> as valid species
 1920 Leng: 86 (catalog) >> as syn. of *N. carolinus*
 1926a Portevin: 249 (revision: key, descriptions & catalog in French) >> as syn. of *N. carolinus*
 1928 Hatch: 153 (catalog) >> as syn. of *N. carolinus*
 1944 Arnett: 3 (morphology: female genitalia) >> as syn. of *N. carolinus*
 1985 Anderson & Peck: 55 (revision: key, descriptions & catalog) >> as syn. of *N. carolinus*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. carolinus*
 1996 Ratcliffe: 65 (revision: key, descriptions & catalog) >> as syn. of *N. carolinus*

= *mysticallis* Angell, 1912 CONFIRMED as SYNONYM of *N. carolinus* (L.)

Type locality: "Tuba, Arizona" [USA; label]

Type depository: NMNH: Washington, D. C. [!] holotype male

- 1912 Angell: 307 (descriptions) >> Orig. comb.: *Necrophorus mysticallis* [!M, N, S]
 1920 Leng: 86 (catalog) >> as valid species
 1923 Portevin: 142 (key, descriptions in French) >> as syn./status as *N. carolinus* ab. *mysticallis*
 1926a Portevin: 249 (revision: key, descriptions & catalog in French) >> as *N. carolinus* ab. *mysticallis*
 1927b Hatch: 364 (revision: key, descriptions & catalog) >> as *N. carolinus* ab. *mysticallis*
 1928 Hatch: 153 (catalog) >> as *N. carolinus* ab. *mysticallis*
 1944 Arnett: 3 (morphology: female genitalia) >> as *N. carolinus* ab. *mysticallis*
 1985 Anderson & Peck: 55 (revision: key, descriptions & catalog) >> as absolute syn. of *N. carolinus*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. carolinus*
 1996 Ratcliffe: 65 (revision: key, descriptions & catalog) >> as syn. of *N. carolinus*; misspelled as *N. mystacallis*

Comments: The name *N. mysticallis* Angell was given to a population of *N. carolinus* that shows considerable melanism and is disjunct from the main range of *N. carolinus* (Anderson & Peck 1985; Peck & Kaulbars 1987). DSS was able to sample, extract, and sequence mtDNA (the COII gene) from both the melanic population and the nominal population in

Florida. The melanic population was 3.3% different (uncorrected "p" distance) from the Florida population which represents the greatest within-species distance observed for COII in the Nicrophorinae (unpub. data). The next greatest within-species distance is a full 1% smaller (2.3%) between samples of *N. nepalensis* from Nepal (Mustang Dist.) and from Malaysia (Cameron). All remaining within-species distances fall continuously, i.e. without large gaps, from 2.3% to 0%. However, with the exception of three cases, all among-species distances are above 5.5% and range to 18%, thus the *N. mysticallis* population appears, based on COII distances alone, to be not clearly differentiated from the nominal *N. carolinus* at the species rank. Taxonomists so inclined could make a case for this population to deserve subspecific rank, however.

Nicrophorus chilensis Philippi, 1871

Type locality: "Santa Cruz, Prov. Curicó" [Chile: Maule: 35°S, 71.25°W; descrip.]

Type depository: MNNC (MNSC): Santiago holotype [no. 171.]

Distribution: Neotropical: southern Chile, Argentina

- 1871 Philippi: 293 (descriptions in German) >> Orig. comb.: *Nicrophorus chilensis* [!S]
 1876 Reed: 274 (catalog in Spanish)
 1881 Berg: 54 (checklist in German)
 1887 Philippi: 667 (catalog in Spanish)
 1901 Berg: 325 (key, catalog, in Spanish)
 1911 Germain: 62 (catalog, distribution in Spanish)
 1915 Bruch: 307 (catalog, distribution in Spanish)
 1924 Portevin: 292 (key, descriptions in French)
 1926a Portevin: 233 (revision: key, descriptions & catalog in French)
 1928 Hatch: 139 (catalog)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1944 Blackwelder: 100 (catalog)
 1981 Peña: 10 (distribution note in Spanish)
 1985 Peck & Anderson: 269 (key, descriptions, phylogenetics)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1996 Peña: 130 (biology, ecology in Spanish)
 1999 Háva et al.: 78 (key, descriptions)
 2000 Sikes & Peck: 395 (descriptions, phylogenetics)

Nicrophorus concolor Kraatz, 1877

Type locality: "Japan" [descrip.]

Type depository: DEIC: Eberswalde 1 syntype (=holotype?)

Distribution: Palearctic: Japan; Korea; China: Hunan, Sichuan, Yunnan*, Guizhou, Zhejiang, Heilongjiang; Taiwan; nIndia; Nepal; Bhutan; Russia: Ussuri reg.

- 1877 Kraatz: 100 (descriptions in German) >> Orig. comb.: *Nicrophorus concolor* [!N, S]
 1887 Lewis: 339 (description)
 1891 Fairmaire: 191 (checklist in French)

- 1893 Heyden: 51 (checklist in German)
- 1895b Reitter: 324 (description of variation in German)
- 1896 Heyden: 38 (checklist in German)
- 1908 Heyne & Taschenberg: 38 (descriptions in German) >> brief description
- 1910 Jakobson: 611 (checklist in Russian)
- 1914b Portevin: 223 (description of variation in French) >> as *Acanthopsilus concolor*
- 1920 Portevin: 399 (descriptions in French) >> as *N. (Acanthopsilus) concolor*
- 1923 Portevin: 324 (key, descriptions in French) >> as *Acanthopsilus concolor*
- 1925 Winkler: 265 (catalog) >> as *Acanthopsilus concolor*
- 1926a Portevin: 194 (revision: key, descriptions & catalog in French) >> as *Acanthopsilus concolor*
- 1927b Hatch: 355 (revision: key, descriptions & catalog) >> as *Nicrophorus concolor*
- 1928 Hatch: 136 (catalog) >> as *Nicrophorus concolor*
- 1929 Kôno: 164 (checklist, annotated)
- 1930 Yokoyama: 120 (descriptions in Japanese)
- 1931 Miwa: 47 (catalog)
- 1933 Semenov-Tian-Shanskij: 154 (catalog in Russian & Latin) >> as type sp. of genus *Acanthopsilus* Port.
- 1933a Shchegoleva-Barovskaya: 191 (revision: key, descriptions & catalog in Russian) >> as *Acanthopsilus concolor*
- 1936 Cho: 155 (checklist in Korean) >> as *Nicrophorus concolor*
- 1937 Mochizuki & Tsunekawa (checklist)
- 1937 Wu (catalog)
- 1938 Mori & Cho (checklist)
- 1953 Mazokhin-Porshnyakov: 237 (descriptions, catalog in Russian) >> as *Acanthopsilus concolor*
- 1955a Nakane: 48 (checklist, brief descriptions) >> as *N. concolor*
- 1955b Nakane: 53 (key, descriptions in Japanese)
- 1956 Esaki et al.: 1028 (checklist, descriptions in Japanese)
- 1957 Cho (catalog in Korean)
- 1963 Cho (catalog in Korean)
- 1963 Nakane: 75 (checklist, brief descriptions in Japanese)
- 1964 Kamimura et al.: A19 (biology, ecology)
- 1966c Mroczkowski: 436 (checklist) >> as *Nicrophorus concolor*
- 1969 Gersdorf: 305 (fossils, descriptions in German)
- 1969 Shibata: 53 (catalog)
- 1970 Gersdorf: 365 (morphology: female genitalia in German) >> as *Nicrophorus (Acanthopsilus) concolor*; female genitalia figured
- 1977 Schawaller: 259 (checklist in German) >> as *Acanthopsilus concolor* subsp. *rotundicollis*
- 1978 Kim: 61 (catalog, distribution) >> misspelled as *N. concolor*
- 1979 Nakane & Baba: 10 (checklist, distribution in Japanese) >> as *N. concolor*
- 1980 Schawaller: 152 (checklist in German (English summary)) >> as *N. concolor*
- 1982 Schawaller: 253 (checklist in German (English summary))
- 1985a Kurosawa: 247 (checklist) >> color habitus figure pl. 44
- 1985 Lee et al. (checklist in Korean)
- 1985 Paik: 2-12

- 1986 Cho & Lee: 20 (phylogenetics)
 1986 Hayashi: Pl. 15 (morphology, larval stages in Japanese) >> larva
 1986 Katakura et al.: 43-55 (biology, ecology)
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as *Acanthopsilus concolor*
 1988 Cho et al.: 9 (phylogenetics) >> as *Necrophorus concolor*
 1989 Lafer: 340 (key, descriptions, description of variation in Russian) >> as *Acanthopsilus concolor*
 1989 Martin: 876-879 (biology, ecology) >> as *N. concolor*
 1992 Cho & Lee: 21 (revision: key, descriptions & catalog) >> misspelled as *N. concolor*
 1992 Morimoto: 27 (descriptions in Japanese) >> photo
 1992 Nomura & Lee: 81 (catalog) >> as *Nicrophorus concolor*
 1992 Zhang (checklist in Chinese (English summary))
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as *N. concolor*
 1993 Zhang (in Chinese (English summary))
 1995 Kon (biology, behavior in Japanese)
 1995 Lomolino et al.: 604 (biology, conservation in English (Spanish summary))
 1996 Lomolino & Creighton: 236 (biology, conservation)
 1996 Růžička & Schneider: 80 (checklist in English (Czech summary))
 1997 Eggert & Müller: 222 (biology, review of: ecology, behavior)
 1998 Harusawa: 34 (key in Japanese)
 1999 Kurosa: 41 (biology, symbionts: mites in English (Japanese summary))
 2000 Sikes & Peck: 396 (descriptions, phylogenetics)
 2001 Trumbo et al.: 543-560 (biology, ecology, behavior) >> focal species
 2002 Nikolajev & Kozminykh: 105 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *rotundicollis* Portevin, 1923 NEW STATUS as absolute syn. of *N. concolor* Kraatz

Type locality: "Thibet"; "Himalaya:Kulu" [n India]; "Kiang-Si" [Jiangxi Province China]; and "Tchang-Yang" [Changyang, Hebei Province, China; descrip]

Type depository: MNHN: Paris [!] 1 (or more) syntype female

- 1923 Portevin: 227 (key, descriptions in French) >> Orig. comb.: *Necrophorus (Acanthopsilus) rotundicollis* [!N, S]
 1925 Winkler: 265 (catalog) >> as valid species; as *Acanthopsilus rotundicollis*
 1926a Portevin: 195 (revision: key, descriptions & catalog in French) >> as valid species
 1927b Hatch: 355 (revision: key, descriptions & catalog) >> as valid species as *Nicrophorus rotundicollis*
 1928 Hatch: 136 (catalog) >> as *N. concolor* subsp. *rotundicollis*
 1933 Semenov-Tian-Shanskij: 149 (catalog in Russian & Latin) >> as *N. concolor* subsp. *rotundicollis*
 1933a Shchegoleva-Barovskaya: 191 (revision: key, descriptions & catalog in Russian) >> as *N. concolor* form *rotundicollis*
 1944 Arnett: 7 (morphology: female genitalia) >> as valid species
 1964b Hlisnikovskiy: 245 (descriptions in German) >> as *Acanthopsilus rotundicollis*

- 1975 Emetz & Schawaller: 231 (checklist in German (English summary)) >> as *N. (Acanthopsilus) concolor* subsp. *rotundicollis*
- 1977 Schawaller: 259 (checklist in German) >> as *N. concolor* subsp. *rotundicollis*
- 1982 Schawaller: 253 (checklist in German (English summary)) >> as *N. concolor* subsp. *rotundicollis*
- 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as *N. concolor* subsp. *rotundicollis*
- 2002 Nikolajev & Kozminykh: 105 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as *N. concolor* subsp. *rotundicollis*

***Nicrophorus confusus* Portevin, 1924**

Type locality: “Tchian-Chan: Karagai-Tau, Kouldscha” [Tian Shan Mts., Karagai Tau, Yining, Xinjiang Uygur autonomous region, China; Kazakhstan; descrip.]

Type depository: MNHN: Paris [!] holotype male

Distribution: Palearctic: China: Tian Shan Mts; Russian Georgia; Caucasus; Turkey; Ukraine

- 1924 Portevin: 147 (key, descriptions in French) >> Orig. comb.: *Nicrophorus confusus* [!N, S]
- 1925 Winkler: 264 (catalog) >> as valid species
- 1926a Portevin: 256 (revision: key, descriptions & catalog in French) >> as valid species
- 1927b Hatch: 359 (revision: key, descriptions & catalog) >> as valid species; specimens not seen by Hatch
- 1928 Hatch: 145 (catalog) >> as valid species
- 1930 Kieseritzky: 62 (descriptions in Russian (German summary)) >> as valid species
- 1932 Hlisnikovsky: 28 (key, descriptions in German) >> as valid species
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
- 1933a Shchegoleva-Barovskaya: 184 (revision: key, descriptions & catalog in Russian) >> as valid species
- 1964a Hlisnikovsky: 223 (key, descriptions in German) >> as valid species
- 1975b Emetz: 104 (checklist in Russian) >> as valid species
- 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
- 1992 Kozminykh: 64 (checklist in Russian) >> as valid species
- 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as *N. sepultor* subsp. *confusus*
- 1998 Háva et al.: 179 (distribution note in English (Czech summary)) >> as valid species
- 2002 Nikolajev & Kozminykh: 123 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as valid species

Comments: This species was made a junior synonym of *N. sepultor* by Kozminykh (1993) but treated most recently as valid by Háva et al. (1998) and otherwise considered valid throughout its history. It is clearly closely related to *N. sepultor* and these two taxa are probably sister species, if not conspecific. The only diagnosable difference found between

N. confusus and *N. sepultor* is the metasternal pubescence of the posterior margin of the metasternum which is brown in the former and golden in the latter (medially and anteriorly both “species” share brown setae). Although the majority of the *N. sepultor* records are from Europe, we have seen specimens that match *N. sepultor* from much further east, in the Tian Shan mountain range in western China. These specimens show the diagnosable golden metasternal pubescence and overlap the known records of *N. confusus*, thus demonstrating sympatry without intermediates – if this color difference correlates with species-boundaries, or indicating that *N. sepultor* is polymorphic with respect to metasternal setae color. Another possibility is that the specimens with golden setae in western China are not *N. sepultor*, but represent polymorphism in metasternal setae color in *N. confusus*. RM argues that *N. sepultor* is polymorphic and that the differences in metasternal setae color form a cline from golden in Europe to brown/ golden-brown mixed in China. Few species of *Nicrophorus* show polymorphism in the color of the metasternal setae. Also, this character is difficult to score consistently due to problems of specimen cleanliness (dirty specimens often have darker setae). Kozminykh (*in litt.* 1998) who has collected extensively in the Republic of Georgia, reports having collected over 2000 specimens of *N. confusus*. Despite his treatment of *N. confusus* as a subspecies (Kozminykh 1993) of *N. sepultor*, he is now convinced (*in litt.* 1998) that *N. confusus* is not conspecific with *N. sepultor* based on morphological characters (primarily setal color), distribution, and ecological distinctions such as seasonality. This case remains equivocal and additional data, such as DNA sequences or breeding trials, are required to confidently refute or corroborate species rank for this name.

***Nicrophorus dauricus* Motschulsky, 1860**

Type locality: “dans les parties orientales de la Daourie” [descrip.]

Type depository: ZMUM: Moscow

Distribution: Palearctic: Russia: eSiberia, Amur, Ussuri reg.; Korea; China: Heilongjiang, Gansu, Sichuan, Qinghai, Beijing; Mongolia

1860 Motschulsky: 125 (descriptions in French) >> Orig. comb.: *Nicrophorus dauricus* [!N, S]

1859c Motschulsky: 491 (catalog in French) >> as valid species but nomen nudum

1868 Gemminger & Harold: 718 (catalog)

1877 Kraatz: 102 (descriptions in German)

1880 Heyden: 86 (checklist in German) >> as syn. of *N. investigator*

1884 Marseul: 190 (key, descriptions in French) >> as syn. of *N. ruspator* var. *microcephalus*

1884 Reitter: 88 (descriptions in German) >> as valid and new comb. as *Silpha daurica*

1885 Marseul: 169 (catalog in French) >> as *N. ruspator* var. *dauricus*

1885 Reitter: 323 (in German)

1893 Heyden: 51 (checklist in German) >> as valid species

1895b Reitter: 329 (description of variation in German) >> as valid species

1896 Heyden: 38 (checklist in German) >> as valid species

1910 Jakobson: 612 (checklist in Russian) >> as valid species

- 1914b Portevin: 224 (description of variation in French)
 1916 Pasquet: 173 (description of variation in French)
 1925 Portevin: 167 (description of variation in French)
 1925 Winkler: 265 (catalog)
 1926a Portevin: 246 (revision: key, descriptions & catalog in French)
 1927b Hatch: 362 (revision: key, descriptions & catalog)
 1928 Hatch: 149 (catalog)
 1929 Kôno: 164 (checklist, annotated)
 1932 Hlisnikovsky: 30 (key, descriptions in German)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 179 (revision: key, descriptions & catalog in Russian)
 1936 Cho: 155 (checklist in Korean)
 1937 Wu (catalog)
 1939 Masui (checklist)
 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian)
 1955b Nakane: 54 (key, descriptions in Japanese)
 1957 Cho (catalog in Korean)
 1966c Mroczkowski: 436 (checklist)
 1975a Emetz: 59 (checklist in German)
 1975b Emetz: 104 (checklist in Russian)
 1980 Schawaller: 153 (checklist in German (English summary))
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1987 Ryabukhin & Matis: 8 (key, descriptions, distributions in Russian)
 1988 Cho et al.: 9 (phylogenetics)
 1989 Lafer: 338 (key, descriptions, description of variation in Russian)
 1992 Cho & Lee: 28 (revision: key, descriptions & catalog)
 1992 Kozminykh: 64 (checklist in Russian)
 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
 1993b Kozminykh: 65 (key, descriptions, regional in Russian)
 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
 1995 Kozminykh: 110 (key in Russian)
 1995 Kozminykh & Nemkov: 112 (catalog in Russian)
 1996 Růžička & Schneider: 81 (checklist in English (Czech summary))
 1999 Háva et al.: 76 (key, descriptions) >> compared to *N. smefarka*
 2002 Nikolajev & Kozminykh: 115 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *orientalis* Motschulsky, 1860 [junior secondary homonym, not Herbst 1784]

Type locality: "Sibérie orientale" [descrip.]

Type depository: ZMUM: Moscow

- 1860 Motschulsky: 126 (descriptions in French) >> Orig. comb.: *Necrophorus orientalis* [!N, S]
 1859c Motschulsky: 491 (catalog in French) >> as valid species but nomen nudum
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1877 Kraatz: 102 (descriptions in German) >> as valid species
 1880 Heyden: 86 (checklist in German) >> as valid species

- 1884 Marseul: 185 (key, descriptions in French) >> as valid species
 1884 Reitter: 87 (descriptions in German) >> as *Silpha orientalis*; as valid species (in footnote)
 1885 Marseul: 169 (catalog in French) >> as *Necrophorus orientalis*
 1887 Reitter: 217 (descriptions in German) >> as *Silpha orientalis*
 1888 Fairmaire: 115 (checklist, annotated in French) >> as *Necrophorus orientalis*; as valid species
 1893 Heyden: 51 (checklist in German) >> as valid species
 1895b Reitter: 329 (description of variation in German) >> as doubtfully valid, prob. syn. of *N. dauricus*
 1896 Heyden: 38 (checklist in German) >> as syn. of *N. dauricus*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. dauricus*
 1925 Winkler: 265 (catalog) >> as syn. of *N. dauricus*
 1926a Portevin: 261 (revision: key, descriptions & catalog in French) >> as syn. of *N. dauricus*
 1928 Hatch: 149 (catalog) >> as syn. of *N. dauricus*
 1933a Shchegoleva-Barovskaya: 179 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. dauricus*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. dauricus*
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. dauricus*
 2002 Nikolajev & Kozminykh: 115 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. dauricus*

***Nicrophorus defodiens* Mannerheim, 1846** desig. lectotype

Type locality: “Kodiak” [USA: Alaska: 57.78° N 152.4°W; label]

Type depository: MCZC: Cambridge [!] lectotype male, 3 paralectotypes [MZHF]

Distribution: Nearctic: northern and west coast North America

- 1846 Mannerheim: 513 (descriptions in German) >> Orig. comb.: *Necrophorus defodiens* [!N, S]
 1853 LeConte: 278 (descriptions) >> as valid species
 1853 Mannerheim: 172 (descriptions in German) >> as valid species
 1853 Melsheimer: 39 (catalog) >> as valid species
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1866a LeConte: 367 (nomenclature) >> “..seems to be a larger form of *N. pygmaeus*,”
 1868 Gemminger & Harold: 719 (catalog) >> as syn. of *N. pygmaeus*
 1870 LeConte: 398 (nomenclature) >> as syn. of *N. pygmaeus*
 1873 Crotch: 37 (checklist) >> as *Silpha vespilloides* var. *defodiens*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. vespilloides*
 1885 Henshaw: 26 (checklist) >> as syn. of *N. vespilloides*
 1891 Heyden et al.: 139 (checklist) >> as syn. of *N. vespilloides*; misspelled as *N. defoliens*
 1895b Reitter: 328 (description of variation in German) >> as syn. of *N. vespilloides*; misspelled as *N. defoliens*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. vespilloides*
 1910 Barkowski: 80 (key, descriptions, regional in German) >> as syn. of *N. vespilloides*

- 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. vespilloides*
- 1920 Leng: 86 (catalog) >> as syn. of *N. vespilloides*
- 1922 Sherborn: 1817 (catalog - index)
- 1924 Portevin: 293 (key, descriptions in French) >> as valid species
- 1926a Portevin: 236 (revision: key, descriptions & catalog in French) >> as valid species
- 1927a Hatch: 5, 7, 19 (key, descriptions, description of variation) >> as valid species
- 1927b Hatch: 356 (revision: key, descriptions & catalog) >> as valid species; suggests *N. defodiens* may be subsp. of *N. vespilloides*
- 1928 Hatch: 138 (catalog) >> as valid species
- 1928 Milne: 43 (biology, behavior) >> as valid species
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
- 1934 Hatch & Rueter: 158 (key, distribution, variation, descriptions) >> as valid species
- 1934 Leech: 36 (biology, ecology, behavior) >> as possible syn. of *N. vespilloides*
- 1937 Leech: 156 (nomenclature) >> as syn. of *N. vespilloides*
- 1940 Hatch: 234 (description of variation) >> as *N. vespilloides* subsp. *defodiens*
- 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespilloides*; listed twice- also as *N. vespilloides* subsp. *defodiens*
- 1947 Arnett: 111 (catalog) >> as syn. of *N. vespilloides*
- 1949 Hoffmann et al.: 10 (comment: ecology) >> as valid species; eliminated from area sprayed with DDT, 1 year later
- 1958 Madge: 19 (revision: key, descriptions, ecology, distributions) >> as *N. vespilloides* subsp. *defodiens*
- 1972 Swan & Papp: 356 (description) >> as *N. vespilloides* subsp. *defodiens*
- 1979 Miller & Peck: 95 (fossils) >> as valid species; notes Leech (1934) misid *N. defodiens* as *N. conversator*
- 1982a Anderson: 260 (key, descriptions, morphology, larval stages) >> as valid species
- 1982c Anderson: 1316 (biology, ecology) >> as valid species
- 1982 Peck: 107 (biology, behavior) >> as valid species
- 1982 Peck & Miller: 152 (nomenclature) >> as valid species
- 1982 Wilson: 293 (biology, symbionts: mites) >> as valid species
- 1983 Wilson: 858-870 (biology, symbionts: mites) >> focal species; as valid species
- 1984 Papp: 71 (descriptions) >> figure of elytron
- 1984 Wilson & Fudge: 195-203 (biology, ecology) >> focal species
- 1984 Wilson & Knollenberg: 165-170 (biology, behavior, physiology) >> focal species
- 1984 Wilson et al.: 205-216 (biology, ecology) >> focal species
- 1985 Anderson & Peck: 56 (revision: key, descriptions & catalog)
- 1985 Peck & Anderson: 274 (key, descriptions, phylogenetics)
- 1986 Anderson & Peck: 283-297 (morphology: color variation) >> focal species
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1987 Peck & Kaulbars: 52 (checklist)
- 1987 Silfverberg: 49 (nomenclature) >> 3 syntypes in the MZHF (paralectotypes)
- 1987 Wilson & Knollenberg: 139-159 (biology, symbionts: mites) >> focal species
- 1988 Scott et al.: 325-331 (biology, ecology) >> focal species
- 1989 Scott & Traniello: 32-36 (popular review) >> focal species
- 1989 Staines: 69 (key, descriptions, distributions) >> Maryland records

- 1990 Peck: 1123 (key)
- 1990 Scott & Traniello: 274-283 (biology, ecology, behavior) >> focal species
- 1990a Trumbo: 347-355 (biology, ecology) >> focal species
- 1991 Campbell: 85 (catalog, distribution)
- 1991 Laplante et al.: 29 (checklist in French)
- 1992 Beninger & Peck: 79-86 (biology, ecology)
- 1992 Brown & Wilson: 463-478 (biology, symbionts: mites) >> focal species
- 1992 Robertson: 191 (biology, ecology)
- 1992 Trumbo: 289-298 (biology, behavior) >> focal species
- 1993 Peck & Miller: 7 (species-group catalog)
- 1993 Trumbo & Wilson: 332-339 (biology, behavior) >> focal species
- 1994 Beninger: 135-143 (biology, ecology in English (French summary))
- 1994 Brown & Wilson: 3 (biology, symbionts: mites) >> focal species
- 1994 Runtz et al.: 168 (biology, ecology)
- 1994b Scott: 537-543 (biology, behavior) >> focal species
- 1994 Trumbo: 241-249 (biology, behavior) >> focal species
- 1994 Trumbo & Fiore: 169-174 (biology, behavior) >> focal species
- 1994 Trumbo & Eggert: 1043-1047 (biology, ecology, behavior) >> focal species
- 1995 Eggert & Sakaluk: 147-153 (biology, behavior) >> focal species
- 1995 Trumbo: 125-130 (biology, behavior) >> focal species
- 1996 Downie & Arnett: 356 (key, descriptions, regional)
- 1997 Eggert & Müller: 225 (biology, review of: ecology, behavior)
- 1998b Scott: 598+ (biology, review of: ecology, behavior)
- 1998 Trumbo & Thomas: 85-95 (biology, ecology) >> focal species
- 1999 Háva et al.: 78 (key, descriptions)
- 2000 Dobler & Müller: 392 (phylogenetics) >> CO1 based phylogeny
- 2000 Eggert & Sakaluk: 262-266 (biology, behavior) >> focal species
- 2000 Sikes & Peck: 395 (descriptions, phylogenetics)
- 2000 Smith et al.: 292 (biology, ecology) >> elytron length and pronotal width compared to *N. investigator*
- 2000 Trumbo & Bloch: 247 (biology, ecology, conservation)
- 2000 Werner & Raffa: 144 (comment: ecology)
- 2001 Nishikawa: 81 (larval descriptions, phylogenetics in English (Japanese summary)) >> larva compared to *N. maculifrons*
- 2001 Smith et al.: 151 (biology, ecology, behavior) >> use of pre-existing burrows for burial
- 2001 Wilhelm et al.: 435-442 (biology, ecology) >> focal species

= *conversator* Walker, 1866

Type locality: "British Columbia, Slecy Station" [Canada; label]

Type depository: BMNH: London [!] holotype? male

- 1866 Walker: 320 (descriptions) >> Orig. comb.: *Necrophorus conversator* [!N]
- 1868 Gemminger & Harold: 718 (catalog) >> as valid species
- 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. vespilloides*
- 1910 Barkowski: 80 (key, descriptions, regional in German) >> as syn. of *N. defodiens*
- 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. vespilloides*

- 1920 Leng: 86 (catalog) >> as *N. vespilloides* subsp. *conversator*
 1924 Portevin: 293 (key, descriptions in French) >> as *N. defodiens* ab. *conversator*
 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as *N. defodiens* ab. *conversator*
 1927b Hatch: 356 (revision: key, descriptions & catalog) >> as *N. defodiens* ab. *conversator*
 1928 Hatch: 138 (catalog) >> as *N. defodiens* ab. *conversator*
 1934 Leech: 36-40 (biology, ecology, behavior) >> as valid species
 1937 Leech: 157 (nomenclature) >> as syn. of *N. defodiens*
 1940 Hatch: 234 (description of variation) >> as syn. of *N. vespilloides* subsp. *defodiens*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespilloides* subsp. *defodiens* ab. *conversator*
 1947 Arnett: 111 (catalog) >> as syn. of *N. vespilloides*, as *N. defodiens* ab. *conversator*
 1979 Miller & Peck: 95 (fossils) >> as syn. of *N. defodiens*
 1982 Peck: 107 (biology, behavior) >> as syn. of *N. defodiens*
 1985 Anderson & Peck: 56 (revision: key, descriptions & catalog) >> as syn. of *N. defodiens*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespilloides*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. defodiens*

= *lateralis* Portevin, 1903 REVISSED SYNONYM of *N. defodiens* Mannerheim

Type locality: "Californie" [USA: California; label]

Type depository: MNHN: Paris [!] holotype male

- 1903 Portevin: 330 (descriptions in French) >> Orig. comb.: *Necrophorus vespilloides* var. *lateralis* [!N, S]
 1910 Jakobson: 612 (checklist in Russian) >> as *N. vespilloides* var. *lateralis*
 1924 Portevin: 293 (key, descriptions in French) >> as *N. defodiens* ab. *lateralis*
 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as *N. defodiens* ab. *lateralis*
 1927b Hatch: 356 (revision: key, descriptions & catalog) >> as *N. defodiens* ab. *lateralis*
 1928 Hatch: 139 (catalog) >> as *N. defodiens* ab. *lateralis*
 1937 Leech: 157 (nomenclature) >> as syn. of *N. vespilloides*
 1940 Hatch: 235 (description of variation) >> as *N. vespilloides* ab. *lateralis*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespilloides* subsp. *defodiens*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespilloides*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. defodiens*
 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. vespilloides*

= *plagiatus* Motschulsky, 1870 (junior primary homonym, not Ménétriés, 1854)

REVISSED SYNONYM of *N. defodiens* Mannerheim

Type locality: "Californie"[USA: California; descrip.]

Type depository: ZMUM: Moscow

- 1870 Motschulsky: 352 (descriptions in French) >> Orig. comb.: *Necrophorus plagiat*
tus; New junior primary homonym, not Ménétrés, 1854 [!N, S]
- 1877 Kraatz: 102 (descriptions in German) >> as valid species
- 1895b Reitter: 325 (description of variation in German) >> as doubtfully valid species;
prob. syn. of *N. lunatus*
- 1896 Heyden: 38 (checklist in German) >> as valid species
- 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as syn. of *N.*
defodiens ab. *binotatus* Port.
- 1928 Hatch: 139 (catalog) >> as syn. of *N. defodiens* ab. *binotatus*
- 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespilloides* subsp.
defodiens
- 1985 Anderson & Peck: 56 (revision: key, descriptions & catalog) >> as syn. of *N.*
defodiens
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespil-*
loides
- 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. defodiens*
- 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. vespilloides*

= pollinator LeConte, 1854 (junior primary homonym, not Mannerheim 1853)

Type locality: "Fort Vancouver to Yokolt Plain" [USA: sw Washington; descrip., no
data on label]

Type depository: MCZC: Cambridge [!] lectotype male, 2 paralectotypes

- 1854 LeConte: 19 (descriptions) >> Orig. comb.: *Necrophorus pollinator*; New junior
primary homonym, not *N. pollinator* Mannerheim 1853 [!S]
- 1868 Gemminger & Harold: 719 (catalog) >> as valid species
- 1873 Crotch: 37 (checklist) >> as syn of *Silpha vespilloides*
- 1880 Horn: 314 (revision: key, descriptions & catalog) >> as *N. vespilloides* var. *pol-*
linctor
- 1885 Henshaw: 26 (checklist) >> as valid species
- 1910 Barkowski: 80 (key, descriptions, regional in German) >> as syn. of *N. defodiens*
- 1910 Jakobson: 612 (checklist in Russian) >> as *N. vespilloides* var. *pollinator*
- 1920 Leng: 86 (catalog) >> as syn. of *N. vespilloides* subsp. *conversator*
- 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as syn. of *N.*
defodiens ab. *conversator*
- 1928 Hatch: 139 (catalog) >> as syn. of *N. defodiens* ab. *conversator*
- 1928 Milne: 43 (biology, behavior)
- 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespilloides* subsp.
defodiens
- 1944 Milne & Milne: 312 (biology, behavior) >> notes misid of *N. orbicollis* as *N. pol-*
linctor LeC. in Milne (1928)
- 1982 Peck & Miller: 152 (nomenclature) >> as syn. of *N. defodiens*; desig. lectotype;
as junior homonym of *N. pollinator* Mannerheim
- 1985 Anderson & Peck: 56 (revision: key, descriptions & catalog) >> as syn. of *N.*
defodiens
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespil-*
loides
- 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. defodiens*

Comments: Lectotype data for *Nicrophorus defodiens* Mannerheim, 1846: 513 "defodiensNicrophorus defodiens Mannerheim"/ "Type 7940"/ [USA]: [Alaska], Kodiak, [57.78°N, 152.4°W,] red rectangular label with double black border "LECTOTYPE Nicrophorus defodiens (Mann. 1846) det. Sikes 1997 2000"- male (Cambridge [MCZC]). Silfverberg (1987) lists 3 specimens of Mannerheim's syntype series for *N. defodiens* housed in the University of Helsinki, Zoological Museum with the following data (taken from Silfverberg [1987]): "USA (Alaska): Sitkha, Cygnaeus (in coll. Mannerheim)." These 3 specimens are herein designated PARALECTOTYPES.

Kozminykh (1993) and Kozminykh & Nemkov (1995) treated all names commonly considered synonyms of *N. defodiens* (i.e. *N. vespilloides* var. *lateralis*, *N. pollinctor*, *N. plagiatus*, and *N. conversator*) as synonyms of *N. vespilloides*. We have studied the type specimens of all but one of these synonyms and agree with the consensus of prior workers who have treated these names as synonyms of *N. defodiens*.

***Nicrophorus didymus* Brullé, 1836** desig. lectotype

Type locality: "Bord de la riviere altamachi" [Bolivia: Cochabamba: Altamachi River, eastern mountain slopes; label]

Type depository: MNHN: Paris [!] lectotype male, 1 paralectotype

Distribution: Neotropical: Venezuela, Colombia, Bolivia, Ecuador, Peru

- 1836 Brullé: 73 (descriptions in French) >> Orig. comb.: *Nicrophorus didymus*; as figure (later description by Blanchard: 1842: 73). [!N]
- 1854 Lacordaire: 200 (biology, catalog in French)
- 1868 Gemminger & Harold: 718 (catalog)
- 1901 Berg: 326 (key, catalog, in Spanish)
- 1903 Portevin: 331 (descriptions in French)
- 1908 Heyne & Taschenberg: 38 (descriptions in German) >> brief description
- 1915 Bruch: 307 (catalog, distribution in Spanish)
- 1922 Portevin: 57 (descriptions in French)
- 1922 Sherborn: 1912 (catalog - index)
- 1924 Portevin: 191 (key, descriptions in French) >> as *N. flexuosus* ab. *didymus*
- 1926a Portevin: 238 (revision: key, descriptions & catalog in French) >> as *N. flexuosus* ab. *didymus*
- 1927b Hatch: 353 (revision: key, descriptions & catalog) >> as valid species
- 1928 Hatch: 128 (catalog) >> as *N. didymus*; year for Brullé 1836 incorrectly listed as 1840
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1944 Arnett: 7 (morphology: female genitalia)
- 1944 Blackwelder: 100 (catalog)
- 1973 Blackwelder: 6 (checklist, synonymy)
- 1985 Peck & Anderson: 268 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 2000 Sikes & Peck: 395 (descriptions, phylogenetics)

= *flexuosus* Portevin, 1924

Type locality: "Amérique centrale et méridionale, du Mexique au Pérou" [descrip.]

Type depository: MNHN: Paris [not found]

1924 Portevin: 191 (key, descriptions in French) >> Orig. comb.: *Necrophorus flexuosus* [!N, S]

1926a Portevin: 238 (revision: key, descriptions & catalog in French) >> as valid species

1928 Hatch: 128 (catalog) >> as syn. of *N. didymus*

1985 Peck & Anderson: 268 (key, descriptions, phylogenetics) >> as syn. of *N. didymus*

= *peruvianus* Pic, 1917 CONFIRMED as SYNONYM of *N. didymus* Blanchard

Type locality: "Pérou" [Peru; descrip., no data on type]

Type depository: MNHN: Paris [!] holotype female

1917a Pic: 2 (description of variation in French) >> Orig. comb.: *Necrophorus didymus* var. *peruvianus* [!N, S]

1924 Portevin: 191 (key, descriptions in French) >> as *N. flexuosus* ab. *peruvianus*

1926a Portevin: 238 (revision: key, descriptions & catalog in French) >> as *N. didymus* ab. *peruvianus*

1928 Hatch: 128 (catalog) >> as *N. didymus* ab. *peruvianus*

1985 Peck & Anderson: 268 (key, descriptions, phylogenetics) >> as syn. of *N. didymus*

= *portevini* Pic, 1933 CONFIRMED as SYNONYM of *N. didymus* Blanchard

Type locality: unknown

Type depository: MNHN: Paris [!] holotype female

1933b Pic: 6 (description of variation in French) >> Orig. comb.: *Necrophorus flexuosus* var. *Portevini*

1985 Peck & Anderson: 268 (key, descriptions, phylogenetics) >> as syn. of *N. didymus* (*N. flexuosus* first synonymized by Hatch 1928)

Comments: Lectotype data for *Necrophorus didymus* Brullé, 1836: pl. 5: 3 "N. didymus Brullé Type" / "MUSEUM PARIS CORDEILIERES D'ORBIGNY 1834"; /label with red ink letters: "TYPE"; /"7450 34" / [BOLIVIA]: Bard de la riviere altamachi, red rectangular label with double black border "LECTOTYPE *Necrophorus didymus* (Brullé 1846) det. Sikes 1997" - male (Paris [MNHN]); pronotal width: 7.43 mm.

Paralectotype data "N. didymus Brullé Type" / "MUSEUM PARIS CORDEILIERES D'ORBIGNY 1834"; label with red ink letters: "TYPE"; "7450 34" / [BOLIVIA]: Bard de la riviere altamachi, red rectangular label with double black border "PARALECTOTYPE *Necrophorus didymus* (Brullé 1846) det. Sikes 1997" - female (Paris [MNHN]).

Regarding *N. flexuosus* Portevin: DSS could not locate the type in the MNHN but did find a series of *N. didymus flexuosus*, one with a label "flexuosus Port" in Pic's handwriting. In lieu of the type he examined this series and concluded it is *N. didymus*, with joined elytral maculae.

Nicrophorus distinctus Grouvelle, 1885

Type locality: “Célèbes” [Indonesia: Sulawesi; descrip.]

Type depository: RMNH: Leiden? 2 syntypes?

Distribution: Australian: Sulawesi

- 1885 Grouvelle: 262 (descriptions in French) >> Orig. comb.: *Nicrophorus distinctus* [!M, S]
- 1920 Portevin: 400 (descriptions in French)
- 1924 Portevin: 377 (key, descriptions in French)
- 1926a Portevin: 241 (revision: key, descriptions & catalog in French)
- 1927b Hatch: 353 (revision: key, descriptions & catalog)
- 1928 Hatch: 129 (catalog) >> year of descrip. incorrectly as 1884
- 1933 Semenov-Tian-Shanskij: 154 (catalog in Russian & Latin) >> as type sp. of new subgenus *Nesonecropter*
- 1933a Shchegoleva-Barovskaya: 166 (revision: key, descriptions & catalog in Russian)
- 1980 Madge: 357 (catalog)
- 1985 Peck & Anderson: 274 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1990 Hanski & Niemelä: 149 (biology: ecology)
- 1991 Hanski & Krikken: 185, 195 (biology: ecology)
- 2001 Peck: 94 (keys, descriptions and distributions)

Nicrophorus encaustus Fairmaire, 1896

Type locality: “Himalaya, Simla” [northern India; label]

Type depository: ZMHB: Berlin [!] holotype male

Distribution: Oriental: Himalayas: Nepal, nIndia

- 1896 Fairmaire: 82 (descriptions in French) >> Orig. comb.: *Nicrophorus encaustus* [!M, S]
- 1910 Jakobson: 612 (checklist in Russian)
- 1920 Portevin: 401 (descriptions in French)
- 1924 Portevin: 293 (key, descriptions in French)
- 1925 Winkler: 264 (catalog)
- 1926a Portevin: 233 (revision: key, descriptions & catalog in French)
- 1928 Hatch: 139 (catalog)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1975 Emetz & Schawaller: 230 (checklist in German (English summary))
- 1982 Schawaller: 255 (checklist in German (English summary))
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1993b Kozminykh: 67 (key, descriptions, regional in Russian)

Nicrophorus germanicus (Linnaeus, 1758)

Type locality: “in Germania” [Germany; descrip.]

Type depository: LSUK: London

Distribution: Palearctic: Europe, Syria, Turkey, Caucasus, Russia- Russian plain, Belarus, Ukraine; Iran

- 1758 Linnaeus: 359 (descriptions in Latin) >> Orig. comb.: *Silpha germanica* [!N, S]

- 1761 Sulzer: pl. 2, fig. 10 (in German)
 1765 Pontoppidan: 200 (in German)
 1767 Gleditsch: 225 (descriptions in German) >> as *S. germanica*; illustrated, tab. 1
 1767 Linnaeus: 569 (catalog in Latin)
 1775 Fabricius: 71 (descriptions) >> as *Nicrophorus germanicus*
 1776 Müller: 96 (catalog)
 1778 Bergsträsser: 62 (catalog in German)
 1781 Fabricius: 83 (catalog in Latin)
 1783 Herbst: 32 (descriptions in German)
 1787 Fabricius: 48 (catalog)
 1789 Schrank: 63 (in German)
 1789 Villers: 73 (catalog)
 1790 Brahm: 173
 1790 Linnaeus: 1615 (catalog in Latin)
 1790 Olivier: no. 10, p. 7 (descriptions in French) >> habitus figured
 1790 Rossi: 53
 1790 Scriba: 6 (in German)
 1792 Fabricius: 246 (descriptions)
 1792 Frölich: 122 (descriptions in German)
 1793 Herbst: 154 (catalog in German)
 1794 Panzer: 117 (catalog in German)
 1797 Panzer: 1 (catalog in German)
 1798 Illiger: 353 (catalog in German)
 1798 Paykull: 322
 1801 Fabricius: 333 (descriptions)
 1802 Marsham: 113 >> as *Silpha germanica*
 1807 Herschel: 274 (descriptions in German)
 1808 Gyllenhal: 257 (descriptions, catalog)
 1808 Schönherr: 117 (in German)
 1817 Gebler: 320 (descriptions in Latin) >> compared to *N. morio*
 1821 Dejean: 42 (catalog)
 1825 Curtis: pl. 71 & 2 pp. text (checklist)
 1825 Duftschmid: 111 (descriptions in German)
 1827 Gyllenhal: 307 (descriptions)
 1829b Stephens: 74 (catalog)
 1830 Stephens: 16 (biology, descriptions)
 1831 Chapman: 187-188 (biology) >> “Biology” - Hatch 1928
 1833 Dejean: 117 (catalog in French) >> auth. incorrectly attrib. Fabricius
 1836 Dejean: 131 (catalog in French)
 1837 Erichson: 223 (species-group catalog in German)
 1838 Sturm: 57 (in German)
 1839 Westwood: 137 (biology)
 1839 Matzek: 23 (morphology: internal & external anatomy in Latin) >> as *N. germanicum*; 60 different drawings of external & internal anatomy
 1839 Stephens: 113 (descriptions)
 1840 Laporte: 2 (descriptions in French)
 1841a Heer: 386 (descriptions in German)

- 1841b Heer: 9 (checklist in German)
 1842 Fischer von Waldheim: 9 (checklist)
 1843 Contarini (catalog) >> dist. record from Padova and Venezia provinces, Italy
 1843 Klingelhöffer & Schmidt: 88 (biology in German) >> "Biology" - Hatch 1928
 1844 Fischer von Waldheim: 138 (descriptions) >> compared to *N. frontalis*
 1846 Kolenati: 49 (catalog) >> compared to *N. frontalis*
 1846a Küster: nr. 50 (catalog in German)
 1849 Bach: 153 (checklist, brief descriptions in German)
 1849 Gaubil: 55 (catalog in French)
 1849 Redtenbacher: 140 (catalog in German)
 1851 Chenu & Desmarest: 258-59 (in French) >> "Biology" - Hatch 1928
 1853 Hoffmann: 105 (description of variation in German)
 1854 Lacordaire: 199 (biology, catalog in French)
 1855 Fairmaire & : 291
 1858 Redtenbacher: 289 (catalog in German)
 1859 Gutfleisch & Bose: 202 (key, descriptions in German)
 1859 Schaum: 36 (catalog in German)
 1862 Schaum: 38 (catalog in German)
 1862 Thomson: 8 (descriptions)
 1863 Grenier: 13 (checklist in French)
 1863 Marseul: 88 (catalog in French)
 1865 Power: 198 (revision: key, descriptions & catalog)
 1866 Marseul: 38 (catalog in French)
 1868 Gemminger & Harold: 718 (catalog)
 1868 Stein: 42 (catalog in Latin)
 1869 Stierlin & Gautard: 116 (checklist in German)
 1870 Vollenhoven et al.: 54 (checklist in Dutch)
 1873 Klika: 127 (checklist in Czech)
 1873 Michow: 16, 20 (in German)
 1874 Cox: 406 (key, descriptions (brief))
 1874 Seidlitz: 216 (key in German)
 1876b Kraatz: 395 (morphology: clypeus in German)
 1876c Kraatz: 396 (in German)
 1877 Hickel & Dragicsevics: 27 (checklist in French)
 1877 Kraatz: 100 (descriptions in German) >> compared to *N. concolor*
 1877 Stein & Weise: 61 (catalog in Latin)
 1880 Heyden: 86 (checklist in German)
 1880 Kraatz: 117 (description of variation in German)
 1883 Heyden et al.: 73 (checklist)
 1884 Kraatz: 230 (descriptions in German) >> compared to *N. nigerrimus*
 1884 Marseul: 184 (key, descriptions in French)
 1884 Reitter: 86 (descriptions in German) >> as *Silpha germanicus*
 1884 Schmidt: 89-90 (biology in French) >> "Biology" - Hatch 1928
 1885 Marseul: 169 (catalog in French) >> as *N. germanicus*
 1885 Reitter: 317 (in German)
 1885 Thomson: 66 (key, checklist in Swedish)
 1888 Seidlitz: 312 (key in German) >> misspelled as *Necrophagus germanicus*

- 1889 Fowler: 43 (descriptions, catalog)
 1889 Seidlitz: 328 (key in German) >> misspelled as *Necrophagus germanicus*
 1891 Heyden et al.: 138 (checklist)
 1893 Fauconnet: 255 (description of variation)
 1893 Reitter: 147 (key, descriptions in German)
 1894 Semenov-Tian-Shanskij: 530 (description in Latin) >> compared with *N. przewalskii*
 1895b Reitter: 323 (description of variation in German)
 1896 Acloque: 241 (key in French)
 1898 Everts: 412
 1899 Ganglbauer: 162 (key, descriptions, morphology, in German)
 1901 Carret: 329 (description of variation in French)
 1905 Weber: 31 (biology, ecology, behavior in German) >> "Biology" - Hatch 1928
 1906 Heyden et al.: 247 (checklist)
 1909 Bickhardt: 74 (description of variation in German)
 1909 Reitter: 239 (in German)
 1910 Jakobson: 611 (checklist in Russian)
 1913 Fowler & Donisthorpe: 247
 1913 Kniephof: 187 (in German)
 1913 Kuhnt: 335 (in German)
 1914 Gorka: 235, 337, fig. 3 (morphology: malpighian tubules in German) >> figured
 1916 Pasquet: 134 (description of variation in French)
 1916 Schaufuss: 272 (checklist in German)
 1920 Portevin: 401 (descriptions in French) >> compared to *N. validus*
 1922 Everts: 182
 1922 Hansen: 114 (key, descriptions, morphology, larval stages in Danish)
 1923 Portevin: 228 (key, descriptions in French)
 1922 Sherborn: 2671 (catalog - index)
 1925 Weber: 124 >> "Biology" - Hatch 1928
 1925 Winkler: 263 (catalog)
 1926 Porta: 332 (key, checklist in Italian) >> record from Provinces Veneto and Venezia, Italy.
 1926a Portevin: 196 (revision: key, descriptions & catalog in French)
 1927b Hatch: 355 (revision: key, descriptions & catalog)
 1928 Hatch: 133 (catalog)
 1929 Portevin: 538 (key, intraspecific variation in French)
 1930 Roubal: 240 (catalog in Czech)
 1930 Vitzthum: 392 (biology, symbionts: mites in German) >> as mite host
 1931 Corset: 102 (morphology: elytral locking in French)
 1932 Hlisnikovsky: 24 (key, descriptions in German)
 1933 Pukowski: 518-586 (biology, ecology in German)
 1933 Rapp: 535 (biology, ecology, distribution in German)
 1933 Semenov-Tian-Shanskij: 149 (catalog in Russian & Latin) >> as type sp. of genus *Necrophorus* F.
 1933a Shchegoleva-Barovskaya: 174 (revision: key, descriptions & catalog in Russian)
 1934b Pukowski: 53-60 (morphology, larval stages in German) >> description of larva
 1935 Balduf: 70 (biology, ecology, behavior)

- 1936 Mosebach: 223 (morphology, larval stages in German)
- 1939 Lengerken: 263 (biology in German)
- 1940 Šulc: 164 (morphology in Czech (German summary))
- 1944 Arnett: 5, 22 (morphology: female genitalia) >> female genitalia figured, pl. 3, fig. 6
- 1944 Milne & Milne: 323 (biology, behavior) >> cites Pukowski's (1933) observ. of *Geotrupes* as prey
- 1945 Kloet & Hincks: 155 (checklist)
- 1946 Hatch: 99 (descriptions) >> as *Neonicrophorus germanicus* L.
- 1946 Paulian: 95 (biology, ecology in French)
- 1947 Arnett: 110 (catalog) >> as *Nicrophorus germanicus*
- 1949 Horion: 75 (biology, ecology, distribution in German)
- 1949 Mroczkowski: 196 (biology, ecology in Polish (English summary)) >> as *Neonicrophorus germanicus*
- 1950b Théodoridès: 5 (biology, ecology, morphology in French) >> as *Nicrophorus germanicus*
- 1953 Akopyan (biology, ecology in Russian)
- 1955 Mroczkowski: 21 (key, descriptions in Polish)
- 1958 Madge: 33 (revision: key, descriptions, ecology, distributions) >> dist. doubtful in North America; as *N. germanicus* subsp. *germanicus*
- 1959 Linssen: 162 (catalog)
- 1960 Hansen et al.: 72 (checklist in Danish)
- 1964 Herman: 5 (nomenclature) >> as *Nicrophorus germanicus*; cites Fabricius 1775
- 1964 Petruška: 162 (biology, ecology in Czech (German summary))
- 1968 Hansen: 17 (key, descriptions in Danish)
- 1968 Petruška: 168 (biology, ecology in Czech (English summary))
- 1969 Gersdorf: 305 (fossils, descriptions in German)
- 1970 Franz: 213 (checklist, distribution in German)
- 1970 Gersdorf: 366 (morphology: female genitalia in German)
- 1971 Freude: 194 (key in German)
- 1971 Wilson: 130 (comment)
- 1973 Blackwelder: 6 (checklist, synonymy)
- 1973 Spicarová: 297-321 (biology, behavior in Czech (English summary))
- 1974 Spicarová (biology, behavior)
- 1975b Emetz: 104 (checklist in Russian) >> as *N. germanicus* subsp. *morio*
- 1975 Pardo-Alcaide & Yus: 96 (morphology, larval stages in Spanish)
- 1976 Petruška: 168 (biology, ecology in Czech (English summary))
- 1977 Pope: 20 (checklist)
- 1978 Burakowski et al.: 197 (catalog, distribution, synonymy in Polish)
- 1979 Miller & Peck: 98 (fossils) >> does not occur in California
- 1979 Silfverberg: 12 (checklist, distribution)
- 1980 Franssen: 46 (morphology: female genitalia in French) >> female genitalia figured
- 1980 Madge: 356 (catalog)
- 1981 Šustek: 40 (key, descriptions, regional in Czech)
- 1982 Peck & Miller: 154 (nomenclature)
- 1982 Wisiniewski (biology, symbionts: mites in German)

- 1983 Putman: 38-42 (biology, ecology)
 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary))
 1986 Nishikawa: 99 (catalog in Japanese (English summary))
 1987 Lucht: 66 (catalog in German)
 1989 Koch: 164 (biology, ecology in German)
 1989 Stresemann et al. (key in German)
 1990 Erbeling: 116 (biology, ecology in German (English summary))
 1990 Zahradník: 123 (key in Spanish)
 1991 Raithel: 2 (biology, conservation)
 1992 Kozminykh: 64 (checklist in Russian)
 1992 Silfverberg: 14 (checklist, distribution in English (Finnish & Swedish summaries))
 1993b Kozminykh: 63 (key, descriptions, regional in Russian)
 1993 Růžička: 34 (checklist, distribution in English & Czech)
 1994 Bertin & Fallaci: 218 (checklist in Italian (English summary))
 1995 Angelini et al.: 10 (checklist, distribution in Italian)
 1995 Hodge & Jones: 27 (checklist) >> “probably extinct”
 1995 Kozminykh: 108 (key in Russian)
 1995 Kozminykh & Nemkov: 111 (catalog in Russian)
 1995 Lisa (in Italian) >> New record for Sicily
 1995 Lomolino et al.: 604 (biology, conservation in English (Spanish summary))
 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English)
 1996 Bertin & Lebboroni: 150 (checklist in Italian (English summary))
 1996 Hansen: 93 (checklist, distribution in Danish & English)
 1996 Hava: 167 (description of variation in English (Czech summary))
 1996 Knorre: 157-158 (distribution note in German)
 1996 Lomolino & Creighton: 235 (biology, conservation) >> erroneously stated as “presumed extinct”
 1996 Pushkin: 33 (biology, ecology in Russian)
 1997 Eggert & Müller: 218 (biology, review of: ecology, behavior)
 1997 Hansen: 214 (phylogenetics) >> antenna figured
 1997 Klausnitzer: 40 (morphology, larval stages in German)
 1997 Pushkin: 24 (biology, ecology in Russian)
 1997 Pushkin & Charthenko: 62 (biology, ecology in Russian)
 1997 Telnov et al. (checklist) >> “very rare”
 1998 Háva et al.: 179 (distribution note in English (Czech summary))
 1998 Pushkin & Sigida: 84 (biology, ecology in Russian)
 1998b Scott: 599+ (biology, review of: ecology, behavior)
 1999 Bertin & Lebboroni: 55 (checklist in Italian)
 1999 Háva et al.: 77 (key, descriptions)
 2000b Parkhomenko: 164 (morphology, larval stages in Ukrainian (English summary))
 2002 Nikolajev & Kozminykh: 106 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as *N. germanicus* subsp. *germanicus*

= *apicalis* Kraatz, 1880

Type locality: unknown

Type depository: DEIC: Eberswalde, holotype

- 1880 Kraatz: 117 (description of variation in German) >> Orig. comb.: *Necrophorus germanicus* var. *apicalis* [!S]
 1883 Heyden et al.: 73 (checklist) >> as *N. germanicus* var. *apicalis*
 1884 Reitter: 86 (descriptions in German) >> as *Silpha germanicus* var. *apicalis*
 1885 Marseul: 169 (catalog in French) >> as *N. germanicus* var. *apicalis*
 1885 Reitter: 318 (in German)
 1891 Heyden et al.: 138 (checklist) >> as *N. germanicus* var. *apicalis*
 1895b Reitter: 323 (description of variation in German) >> as syn. of *N. germanicus* var. *frontalis*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. germanicus* var. *frontalis*
 1909 Bickhardt: 74 (description of variation in German) >> as syn. of *N. germanicus* var. *frontalis*
 1909 Reitter: 239 (in German)
 1910 Jakobson: 611 (checklist in Russian) >> as *N. germanicus* var. *apicalis*
 1925 Winkler: 263 (catalog) >> as *N. germanicus* ab. *apicalis*
 1926a Portevin: 250 (revision: key, descriptions & catalog in French) >> as syn. of *N. germanicus* ab. *bimaculatus*
 1928 Hatch: 134 (catalog) >> as syn. of *N. germanicus* ab. *bimaculatus*
 1930 Roubal: 240 (catalog in Czech) >> as *N. germanicus* f. *apicalis*
 1933a Shchegoleva-Barovskaya: 174 (revision: key, descriptions & catalog in Russian) >> as *N. germanicus* ab. *apicalis*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. germanicus* ab. *apicalis*
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. germanicus*
 1995 Kozminykh & Nemkov: 111 (catalog in Russian) >> as syn. of *N. germanicus*

= *armeniacus* Portevin, 1922 NEW STATUS as absolute syn. of *N. germanicus* (L.)

Type locality: "Kagysman" [ne Turkey: Kagisman; label]

Type depository: MNHN: Paris [!] holotype male

- 1922 Portevin: 54 (descriptions in French) >> Orig. comb.: *Necrophorus armeniacus* [!N, S]
 1923 Portevin: 231 (key, descriptions in French) >> as valid species
 1925 Winkler: 263 (catalog) >> as valid species
 1926a Portevin: 199 (revision: key, descriptions & catalog in French) >> as valid species
 1927b Hatch: 355 (revision: key, descriptions & catalog) >> as valid species; specimens not seen by Hatch
 1928 Hatch: 133 (catalog) >> as valid species
 1932 Hlisnikovsky: 25 (key, descriptions in German) >> as valid species
 1933 Semenov-Tian-Shanskij: 155 (catalog in Russian & Latin) >> as syn. of *N. fascifer*
 1933a Shchegoleva-Barovskaya: 175 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. germanicus fascifer*
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as valid species
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. germanicus* subsp. *fascifer*

2002 Nikolajev & Kozminykh: 106 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. germanicus* subsp. *fascifer*

= *bimaculatus* Haworth, 1807 NEW STATUS as absolute syn. of *N. germanicus* (L.)

Type locality: "prope Londinum" [England: London; descrip.]

Type depository: BMNH: London [not found]

- 1807 Haworth: 82 (descriptions) >> Orig. comb.: *Necrophorus bimaculatus* [!S]
 1825 Curtis: pl. 71 (checklist) >> text accompanying Plate 71; as "only a variety of *N. humator*"
 1829b Stephens: 75 (catalog) >> auth. correctly attrib. Haworth 1807
 1868 Gemminger & Harold: 718 (catalog) >> auth. incorrectly attrib. Stephens
 1877 Stein & Weise: 61 (catalog in Latin) >> as *N. humator* var. *bimaculatus*
 1883 Heyden et al.: 73 (checklist) >> as *N. humator* var. *bimaculatus*; auth. attr. Steph.
 1884 Marseul: 185 (key, descriptions in French) >> as *N. humator* var. *bimaculatus*; auth. incorrectly attrib. Steph.
 1885 Marseul: 169 (catalog in French) >> as *N. humator* var. *bimaculatus*
 1885 Reitter: 317 (in German)
 1891 Heyden et al.: 138 (checklist) >> as *N. humator* var. *bimaculatus* Steph.
 1895b Reitter: 324 (description of variation in German) >> as *N. humator* var. *bimaculatus* Steph.
 1899 Ganglbauer: 162 (descriptions, in German) >> as *N. germanicus* var. *bimaculatus*
 1906 Heyden et al.: 247 (checklist) >> as *N. germanicus* var. *bimaculatus*; auth. attr. Steph.
 1909 Bickhardt: 74 (description of variation in German) >> as *N. humator* var. *bimaculatus*
 1910 Jakobson: 611 (checklist in Russian) >> as syn. of *N. germanicus*; auth. incorrectly attrib. Ganglb. 1899; also as syn. of *N. humator*; incorrectly attrib. Steph.
 1916 Pasquet: 137 (description of variation in French)
 1916 Schaufuss: 137 (checklist in German)
 1923 Portevin: 229 (key, descriptions in French) >> as *N. germanicus* ab. *bimaculatus* auth. attrib. Stephens
 1925 Winkler: 263 (catalog) >> as syn. of *N. humator* ab. *frontalis*; auth. attrib. Stephens
 1926a Portevin: 197 (revision: key, descriptions & catalog in French) >> as *N. germanicus* ab. *bimaculatus*; auth. incorrectly attrib. to Stephens 1830
 1928 Hatch: 134 (catalog) >> as *N. germanicus* ab. *bimaculatus*
 1933a Shchegoleva-Barovskaya: 174 (revision: key, descriptions & catalog in Russian) >> auth. incorrectly attrib. Ganglb. 1899.
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. germanicus* ab. *bimaculatus*; auth. incorrectly attrib. Steph.

= *bipunctatus* Kraatz, 1880 NEW STATUS as absolute syn. of *N. germanicus* (L.)

Type locality: unknown

Type depository: unknown; not DEIC: Eberswalde[L. Zerche, in litt.]

- 1880 Kraatz: 117 (description of variation in German) >> Orig. comb.: *Necrophorus germanicus* var. *bipunctatus* [!S]

- 1883 Heyden et al.: 73 (checklist) >> as *N. germanicus* var. *bipunctatus*; misspelled as *hipunctatus*
- 1884 Reitter: 86 (descriptions in German) >> as *Silpha germanicus* var. *bipunctata*
- 1885 Marseul: 169 (catalog in French) >> as *N. germanicus* var. *bipunctatus*
- 1885 Reitter: 318 (in German)
- 1891 Heyden et al.: 138 (checklist) >> as *N. germanicus* var. *bipunctatus*
- 1895b Reitter: 323 (description of variation in German) >> as *N. germanicus* var. *bipunctatus*
- 1898 Everts: 412
- 1899 Ganglbauer: 162 (descriptions, in German) >> as *N. germanicus* var. *bipunctatus*
- 1906 Heyden et al.: 247 (checklist) >> as *N. germanicus* var. *bipunctatus*
- 1909 Bickhardt: 74 (description of variation in German) >> as *N. germanicus* var. *bipunctatus*
- 1909 Reitter: 239 (in German)
- 1910 Jakobson: 611 (checklist in Russian) >> as *N. germanicus* var. *bipunctatus*
- 1913 Kniephof: 187 (in German) >> as *N. germanicus* ab. *bipunctatus*
- 1913 Kuhnt: 335 (in German)
- 1916 Pasquet: 137 (description of variation in French)
- 1916 Schaufuss: 272 (checklist in German)
- 1923 Portevin: 229 (key, descriptions in French) >> as *N. germanicus* ab. *bipunctatus*
- 1925 Winkler: 263 (catalog) >> as *N. germanicus* ab. *bipunctatus*
- 1926a Portevin: 197, 251 (revision: key, descriptions & catalog in French) >> as *N. germanicus* ab. *bipunctatus*
- 1928 Hatch: 135 (catalog) >> as *N. germanicus* ab. *bipunctatus*
- 1930 Roubal: 240 (catalog in Czech) >> as *N. germanicus* f. *bipunctata*
- 1933a Shchegoleva-Barovskaya: 174 (revision: key, descriptions & catalog in Russian) >> as *N. germanicus* ab. *bipunctatus*
- = *cadaverinus* Gistel, 1857 (junior primary homonym, not Gravenhorst 1807) NEW
SYNONYM of *N. germanicus* (L.)
Type locality: "Monacensis regio" [descrip.]; "Munich"[Hatch 1928]
Type depository: ZSMC: München?
1857b Gistel: 565 (in German) >> Orig. comb.: *Necrophorus cadaverinus*; (attr. to Dejean); New junior primary homonym, not *N. cadaverinus* Gravenhorst 1807 or *N. cadaverinus* Mareuse 1840] [!N]
1917 Strand: 83 (descriptions in German) >> as doubtful but valid species
1928 Hatch: 153 (catalog) >> as doubtful but valid species, ungrouped, incertae sedis
- = *fascifer* (Reitter, 1884) NEW STATUS as absolute syn. of *N. germanicus* (L.)
Type locality: "Caucasus, Armenien" [descrip.]
Type depository: HNHM: Budapest? [not found]
1884 Reitter: 86 (descriptions in German) >> Orig. comb.: *Silpha germanica* var. *fascifera* [!N, S]
1885 Reitter: 317 (in German)
1891 Heyden et al.: 138 (checklist) >> as *N. germanicus* var. *fascifer*
1894 Semenov-Tian-Shanskij: 530 (description in Latin) >> as *N. germanicus* var. *fascifer*; compared with *N. przewalskii*

- 1895b Reitter: 324 (description of variation in German) >> as *N. germanicus* var. *fascifer*
- 1899 Ganglbauer: 162 (descriptions, in German) >> as *N. germanicus* var. *fascifer*
- 1906 Heyden et al.: 247 (checklist) >> misspelled as *N. germanicus* var. *fasciifer*
- 1909 Bickhardt: 74 (description of variation in German) >> as *N. germanicus* var. *fascifer*
- 1909 Reitter: 239 (in German) >> as *N. germanicus* var. *fascifer*
- 1910 Jakobson: 611 (checklist in Russian) >> misspelled as *N. germanicus* var. *fasciifer* Rt.
- 1916 Pasquet: 137 (description of variation in French)
- 1922 Everts: 182
- 1923 Portevin: 229 (key, descriptions in French) >> as *N. germanicus* ab. *fascifera*
- 1925 Winkler: 263 (catalog) >> as *N. germanicus* ab. *fascifer*
- 1926a Portevin: 197 (revision: key, descriptions & catalog in French) >> as *N. germanicus* ab. *fascifera*
- 1928 Hatch: 135 (catalog) >> as *N. germanicus* var. *fascifera*
- 1933 Semenov-Tian-Shanskij: 155 (catalog in Russian & Latin) >> as senior syn. of *N. armeniacus*
- 1933a Shchegoleva-Barovskaya: 175 (revision: key, descriptions & catalog in Russian) >> as *N. germanicus* subsp. *fascifera*; as senior syn. of *N. armeniacus*
- 1944 Arnett: 5 (morphology: female genitalia) >> misspelled as *N. germanicus* ab. *fascifer*
- 1992 Kozminykh: 64 (checklist in Russian) >> as *N. germanicus* subsp. *fascifer*
- 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as *N. germanicus* subsp. *fascifera*
- 2002 Nikolajev & Kozminykh: 106 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as *N. germanicus* subsp. *fascifer*

= *frontalis* Fischer von Waldheim, 1844

Type locality: "Bucharía" [Buchará, Uzbekistan; locality doubtful; descrip.]

Type depository: Moscow, Leningrad, or Dresden ?

- 1844 Fischer von Waldheim: 138 (descriptions) >> Orig. comb.: *Necrophorus frontalis* [!M, N, S]
- 1846 Kolenati: 49 (catalog) >> as valid species; spec. 201 in list
- 1846b Küster: nr. 50 (catalog in German (English summary)) >> as syn. of *N. germanicus*
- 1854 Lacordaire: 200 (biology, catalog in French) >> as *N. germanicus* var. *frontalis*
- 1863 Marseul: 88 (catalog in French) >> as *N. germanicus* var. *frontalis*
- 1868 Gemminger & Harold: 718 (catalog) >> as *N. germanicus* var. *frontalis*
- 1877 Stein & Weise: 61 (catalog in Latin) >> as *N. germanicus* var. *frontalis*
- 1880 Heyden: 86 (checklist in German) >> as *N. germanicus* var. *frontalis*
- 1884 Marseul: 184 (key, descriptions in French) >> as *N. germanicus* var. *frontalis*
- 1885 Marseul: 169 (catalog in French) >> as *N. germanicus* var. *frontalis*
- 1891 Heyden et al.: 138 (checklist) >> as *N. germanicus* var. *frontalis*
- 1895b Reitter: 323 (description of variation in German) >> as *N. germanicus* var. *frontalis*

- 1898 Everts: 412
 1906 Heyden et al.: 247 (checklist) >> as *N. germanicus* var. *frontalis*
 1909 Bickhardt: 73 (description of variation in German) >> as *N. germanicus* var. *frontalis*
 1910 Jakobson: 612 (checklist in Russian) >> as *N. humator* var. *frontalis* Fisch.
 1913 Kniephof: 187 (in German) >> as *N. germanicus* ab. *frontalis*
 1913 Kuhnt: 335 (in German)
 1925 Winkler: 263 (catalog) >> as *N. humator* ab. *frontalis*
 1926a Portevin: 250 (revision: key, descriptions & catalog in French) >> as syn. of *N. germanicus* ab. *bimaculatus*
 1928 Hatch: 134 (catalog) >> as syn. of *N. germanicus* ab. *bimaculatus*
 1933a Shchegoleva-Barovskaya: 174 (revision: key, descriptions & catalog in Russian) >> as *N. germanicus* ab. *frontalis*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. germanicus* ab. *frontalis*
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. germanicus*
 1995 Kozminykh & Nemkov: 111 (catalog in Russian) >> as syn. of *N. germanicus*

= *grandior* Angell, 1912 CONFIRMED as SYNONYM of *N. germanicus* (L.)

Type locality: "California" [USA; label]

Type depository: NMNH: Washington, D. C. [!] lectotype male

- 1912 Angell: 307 (descriptions) >> Orig. comb.: *Necrophorus grandior* [!M, N, S]
 1920 Leng: 86 (catalog) >> as valid species
 1926a Portevin: 236 (revision: key, descriptions & catalog in French) >> as *N. defodiens* ab. *grandior*
 1927b Hatch: 354 (revision: key, descriptions & catalog) >> as syn. of *N. germanicus* ab. *bipunctatus*; paratype is *N. humator*; holotype is *N. germanicus*
 1928 Hatch: 135 (catalog) >> as syn. of *N. germanicus* ab. *bipunctatus*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. humator*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. germanicus*
 1947 Arnett: 110 (catalog) >> as syn. of *N. germanicus*; also listed as a syn. of *N. humator*
 1965 Báguena: 52 (checklist in Spanish) >> as syn. of *N. humator*
 1970 Gersdorf: 368 (morphology: female genitalia in German) >> as possible syn. of *N. humator* or *N. defodiens*
 1979 Miller & Peck: 98 (fossils) >> as syn. of *N. germanicus*
 1982 Peck & Miller: 153 (nomenclature) >> as syn. of *N. germanicus* in part and *N. humator* in part; desig. lectotype

= *listerianus* (Geoffroy, 1785)

Type locality: unknown

Type depository: MNHN: Paris? [not found]

- 1785 Fourcroy: 17 (descriptions) >> Orig. comb: *Dermestes Listerianus* Geoffroy; description by Geoffroy (see Hagen [1862 p.246]) [!S]
 1829b Stephens: 74 (catalog) >> as syn. of *N. germanicus*
 1868 Gemminger & Harold: 718 (catalog) >> as syn. of *N. germanicus*

- 1884 Marseul: 184 (key, descriptions in French) >> as syn. of *N. germanicus*
 1885 Marseul: 169 (catalog in French) >> as syn. of *N. germanicus*
 1910 Jakobson: 611 (checklist in Russian) >> as syn. of *N. germanicus* (as *N. listerianus* Geoffr.)
 1926a Portevin: 250 (revision: key, descriptions & catalog in French) >> as syn. of *N. germanicus*
 1928 Hatch: 134 (catalog) >> as syn. of *N. germanicus*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. germanicus*
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. germanicus*
 1995 Kozminykh & Nemkov: 111 (catalog in Russian) >> as syn. of *N. germanicus*

= *ornatus* Hlisnikovsky, 1964 NEW SYNONYM of *N. germanicus* (L.)

Type locality: "Asien, Thailand, Kon-khen" [Huang Khon Kaen (alt. lower than 550 ft.), central Thailand; erroneous locality; label]

Type depository: NMPC: Praha [!] holotype male

- 1964c Hlisnikovsky: 131 (descriptions in German) >> Orig. comb.: *Necrophorus* (*Necrophorindus*) *ornatus* [!N, S]
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as valid species

= *proserpinae* Gistel, 1857 NEW SYNONYM of *N. germanicus* (L.)

Type locality: "Switzerland" [Hatch 1928]

Type depository: ZSMC: München?

- 1857b Gistel: 571 (in German) >> Orig. comb.: *Necrophorus proserpinae* [!N]
 1917 Strand: 84 (descriptions in German) >> as doubtful but valid species
 1928 Hatch: 153 (catalog) >> as doubtful but valid species, ungrouped, incertae sedis

= *ruthenus* Motschulsky, 1859

Type locality: unknown

Type depository: ZMUM: Moscow

- 1859b Motschulsky: 304 (descriptions in French) >> Orig. comb.: *Necrophorus ruthenus* [!M]
 1863 Marseul: 88 (catalog in French) >> as valid species
 1866 Marseul: 38 (catalog in French) >> as valid species
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1877 Stein & Weise: 61 (catalog in Latin) >> as valid species
 1883 Heyden et al.: 73 (checklist) >> as valid species
 1884 Marseul: 184 (key, descriptions in French) >> as *N. germanicus* var. *ruthenus*
 1884 Reitter: 86 (descriptions in German) >> as *Silpha ruthenus*; as valid species
 1885 Marseul: 169 (catalog in French) >> as *N. germanicus* var. *ruthenus*
 1885 Reitter: 317 (in German)
 1891 Heyden et al.: 138 (checklist) >> as syn. of *N. germanicus*
 1895b Reitter: 323 (description of variation in German) >> as syn. of *N. germanicus*
 1899 Ganglbauer: 162 (in German) >> as syn. of *N. germanicus*
 1906 Heyden et al.: 247 (checklist) >> as *N. germanicus* var. *ruthenus*

- 1909 Bickhardt: 73 (description of variation in German) >> as *N. germanicus* var. *ruthenus*
 1910 Jakobson: 612 (checklist in Russian) >> as *N. germanicus* var. *ruthenus*
 1916 Pasquet: 137 (description of variation in French)
 1923 Portevin: 228 (key, descriptions in French) >> as *N. germanicus* var. *ruthenus*
 1925 Winkler: 263 (catalog) >> as *N. germanicus* ab. *ruthenus*
 1926a Portevin: 197 (revision: key, descriptions & catalog in French) >> as *N. germanicus* var. *ruthenus*
 1928 Hatch: 135 (catalog) >> as *N. germanicus* var. *ruthenus*; year of orig. comb. incorrectly as 1860
 1933a Shchegoleva-Barovskaya: 174 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. germanicus*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. germanicus* var. *ruthenus*
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. germanicus*
 1995 Kozminykh & Nemkov: 111 (catalog in Russian) >> as syn. of *N. germanicus*

= *speciosus* (J.D. Schulze, 1775) NEW STATUS as absolute syn. of *N. germanicus* (L.)

Type locality: "in Germania" [Germany; descrip.]

Type depository: unknown

- 1775 Schulze: 95 (descriptions in German) >> Orig. comb.: *Silpha speciosa* [!N, S]
 1777 Goeze: 190 (in German) >> as *N. germanicus* ab. *speciosus*
 1862 Schaum: 38 (catalog in German) >> as *N. germanicus* var. *speciosus*
 1868 Gemminger & Harold: 718 (catalog) >> as *N. germanicus* var. *speciosus*
 1868 Stein: 42 (catalog in Latin) >> as *N. germanicus* var. *speciosus*
 1877 Stein & Weise: 61 (catalog in Latin) >> as *N. germanicus* var. *speciosus*
 1880 Kraatz: 117 (description of variation in German) >> as *N. germanicus* var. *speciosus*
 1883 Heyden et al.: 73 (checklist) >> as *N. germanicus* var. *speciosus*
 1884 Marseul: 184 (key, descriptions in French) >> as syn. of *N. germanicus* var. *frontalis*
 1884 Reitter: 86 (descriptions in German) >> as *Silpha germanica* var. *speciosa*
 1885 Marseul: 169 (catalog in French) >> as syn. of *N. germanicus* var. *frontalis*
 1891 Heyden et al.: 138 (checklist) >> as *N. germanicus* var. *speciosus*
 1895b Reitter: 324 (description of variation in German) >> as *N. germanicus* var. *speciosus*
 1906 Heyden et al.: 247 (checklist) >> as *N. germanicus* var. *speciosus*
 1909 Bickhardt: 74 (description of variation in German) >> as *N. germanicus* ab. *speciosus*
 1910 Jakobson: 611 (checklist in Russian) >> as *N. germanicus* var. *speciosus*
 1925 Winkler: 263 (catalog) >> as *N. germanicus* ab. *speciosus*
 1926 Porta: 332 (key, checklist in Italian) >> as *N. germanicus* var. *speciosus*
 1926a Portevin: 250 (revision: key, descriptions & catalog in French) >> as *N. germanicus* ab. *speciosus*
 1928 Hatch: 134 (catalog) >> as *N. germanicus* ab. *speciosus*

1930 Roubal: 240 (catalog in Czech) >> as *N. germanicus* f. *speciosa*

1944 Arnett: 5 (morphology: female genitalia) >> as *N. germanicus* ab. *speciosus*

Comments: The names proposed by Gistel (1848, 1857), all presumably lacking types, have long been a source of confusion in the taxonomy of *Nicrophorus* – an issue that was commented on by Strand (1917). Hatch (1928) and others treated them as *nomina dubia*. RM has studied translations of the original descriptions and proposed most probable synonyms for all of Gistel's names. Herein we synonymize two of them (*N. proserpinae* Gistel, 1857 and *N. cadaverinus* Gistel, 1857) under *N. germanicus*.

DSS has studied the holotype of Hlisenkovsky's *N. ornatus* in Praha, which has a type locality of lowland Thailand, and it is clearly a specimen of *N. germanicus* with erroneous locality data. The type has swollen metatibiae, black antennal clubs and red epipleura – states which diagnose *N. germanicus*, a European species that does not occur east of 50 ° E longitude. No additional specimens to corroborate such an Asian population have been found.

***Nicrophorus guttula* Motschulsky, 1845**

Type locality: “Sitka” [USA: Alaska; erroneous locality; descrip.]

Type depository: ZMUM: Moscow

Distribution: Nearctic: western North America (incl. south-western Canada)

1845a Motschulsky: 53 (descriptions in French) >> Orig. comb.: *Nicrophorus guttula* [!N, S]

1845b Motschulsky: 363 (descriptions in French) >> suggests poss. syn. of unavailable Dejean/Esch. name *N. lateralis*

1852 Mannerheim: 331 (checklist, descriptions in German) >> with *N. “auripilosus?”* Eschscholtz, Dejean Cat. 3-ème édit, p. 131” as synonym

1853 LeConte: 276 (descriptions)

1853 Melsheimer: 39 (catalog)

1854 Lacordaire: 200 (biology, catalog in French)

1868 Gemminger & Harold: 718 (catalog)

1873 Crotch: 37 (checklist) >> as *Silpha guttula*

1880 Horn: 314 (revision: key, descriptions & catalog)

1885 Henshaw: 26 (checklist)

1894 Hamilton: 15 (checklist)

1901 Fall: 13, 58 (checklist)

1907 Fall & Cockerell: 164 (checklist)

1910 Barkowski: 80 (key, descriptions, regional in German)

1920 Angell: 89 (description of variation)

1920 Leng: 86 (catalog)

1922 Sherborn: 2870 (catalog - index)

1924 Portevin: 87 (key, descriptions in French)

1925 Hatch & Angell: 216 (descriptions) >> compared with *N. hybridus*

1926a Portevin: 217 (revision: key, descriptions & catalog in French)

1927b Hatch: 360, 362 (revision: key, descriptions & catalog) >> description of variation: 1 unavailable name: *N. guttulus hecate* ab. *immaculosis*

- 1928 Hatch: 146 (catalog) >> Misidentification of *N. nigrita* (ab. *ruficornis*) as *N. guttulus* (ab. *ruficornis*)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1936 Meserve: 133 (checklist, distribution)
- 1937 Moore: 21 (checklist)
- 1940 Hatch: 235 (description of variation)
- 1944 Arnett: 5, 24 (morphology: female genitalia) >> female genitalia figured, pl. 4, fig. 4
- 1949 Bliss: 202 (morphology: sexual dimorphism)
- 1949 Pierce: 63 (fossils, descriptions)
- 1951 Jaques: 83 (key, descriptions) >> as *N. guttulus*
- 1957 Hatch: 14 (description of variation) >> as *N. guttulus*
- 1958 Madge: 70 (revision: key, descriptions, ecology, distributions) >> as *N. guttula* subsp. *guttula*
- 1973 Blackwelder: 6 (checklist, synonymy)
- 1979 Miller & Peck: 97 (fossils)
- 1980 Arnett et al.: 129 (key, descriptions) >> as *N. guttulus*
- 1982a Anderson: 260 (key, descriptions, morphology, larval stages)
- 1982 Peck & Miller: 152 (nomenclature)
- 1985 Anderson & Peck: 58 (revision: key, descriptions & catalog)
- 1985 Peck & Anderson: 267 (key, descriptions, phylogenetics)
- 1986 Anderson & Peck: 283-297 (morphology: color variation) >> focal species
- 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as *N. guttulus*
- 1987 Peck & Kaulbars: 54 (checklist)
- 1990 Peck: 1122 (key) >> misspelled as *N. gutula*
- 1991 Campbell: 85 (catalog, distribution)
- 1993 Peck & Miller: 7 (species-group catalog)
- 1993 Sikes: 231 (description of variation)
- 1995 Navarrete-Heredia: 14 (biology, ecology, key in Spanish)
- 1996 Ratcliffe: 67 (revision: key, descriptions & catalog)
- 1996 Sikes: 75 (biology, ecology)
- 1999 Bedick et al.: 177 (biology, conservation)
- 2000 Navarrete-Heredia & Fierros-López: 407 (checklist, distribution in Spanish (English summary))
- 2000 Sikes & Peck: 395 (descriptions, phylogenetics)
- 2001 Navarrete-Heredia: 170 (checklist, distribution in Spanish)

= *hecate* Bland, 1865

Type locality: "Colorado Territory" [Peck & Miller 1993]

Type depository: ANSP: Philadelphia

- 1865 Bland: 382 (descriptions) >> Orig. comb.: *Necrophorus Hecate* [!M, S]
- 1866a LeConte: 367 (nomenclature) >> as valid species
- 1868 Gemminger & Harold: 718 (catalog) >> as valid species
- 1873 Crotch: 37 (checklist) >> as *Silpha guttula* var. *hecate*
- 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. guttula*
- 1885 Henshaw: 26 (checklist) >> as syn. of *N. guttula*
- 1907 Fall & Cockerell: 164 (checklist) >> as *N. guttula* var. *hecate*

- 1910 Barkowski: 80 (key, descriptions, regional in German) >> as *N. guttula* var. *hecate*
 1920 Leng: 86 (catalog) >> as *N. guttulus* subsp. *hecate*
 1924 Portevin: 85 (key, descriptions in French) >> as valid species; description of variation: 2 unavailable names
 1926a Portevin: 254 (revision: key, descriptions & catalog in French) >> as valid species: *N. Hecate* Blandford
 1927b Hatch: 360 (revision: key, descriptions & catalog) >> as *N. guttulus* subsp. *hecate*
 1928 Hatch: 146 (catalog) >> as *N. guttulus* subsp. *Hecate*
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
 1934 Hatch & Rueter: 160 (key, distribution, variation, descriptions) >> as *N. guttulus* subsp. *hecate*
 1936 Meserve: 133 (checklist, distribution) >> as *N. guttula* subsp. *hecate*
 1944 Arnett: 6, 15, 24 (morphology: female genitalia) >> as valid species; female genitalia figured, pl. 4, fig. 7
 1946 Hatch: 99 (descriptions) >> as valid species (following Arnett 1944)
 1949 Bliss: 202 (morphology: sexual dimorphism) >> as valid species
 1958 Madge: 71 (revision: key, descriptions, ecology, distributions) >> as *N. guttula* subsp. *hecate*
 1973 Blackwelder: 6 (checklist, synonymy) >> as valid species
 1979 Miller & Peck: 97 (fossils) >> as doubtfully valid species; desig. lectotype
 1982 Peck & Miller: 153 (nomenclature) >> as syn. of *N. guttula*
 1985 Anderson & Peck: 58 (revision: key, descriptions & catalog) >> as syn. of *N. guttula*
 1986 Anderson & Peck: 283,293 (morphology: color variation) >> reconfirmation of *N. hecate* as syn. of *N. guttula*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. guttula*
 1996 Ratcliffe: 67 (revision: key, descriptions & catalog) >> as syn. of *N. guttula*

= *immaculosis* Hatch, 1957

Type locality: unknown

Type depository: DEIC: Eberswalde, holotype

- 1927b Hatch: 362 (revision: key, descriptions & catalog) >> description of variation: 1 unavailable name
 1957 Hatch: 15 (description of variation) >> as available, subspecific name: *N. hecate* subsp. *immaculosis* [!N]
 1982 Peck & Miller: 153 (nomenclature) >> as syn. of *N. hecate* (and *N. hecate* as syn. of *N. guttula*)
 1985 Anderson & Peck: 58 (revision: key, descriptions & catalog) >> as syn. of *N. guttula*, as *N. hecate immaculosis*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. guttula*
 1996 Ratcliffe: 67 (revision: key, descriptions & catalog) >> as syn. of *N. guttula*

= *punctostriatus* Pierce, 1949 [fossil]

Type locality: "Pit A" [USA: California: Rancho La Brea; descrip.]

Type depository: LACM: Los Angeles [holotype#: LACMIP 3947]

- 1949 Pierce: 66 (fossils, descriptions) >> Orig. comb.: *Nicrophorus guttulus punctostriatus* [fossil] [!N, S]
 1979 Miller & Peck: 97 (fossils) >> as syn. of *N. guttula*
 1985 Anderson & Peck: 58 (revision: key, descriptions & catalog) >> as syn. of *N. guttula*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. guttula*
 1996 Ratcliffe: 67 (revision: key, descriptions & catalog) >> as syn. of *N. guttula*

= *quadriguttata* Angell, 1920 NEW STATUS as absolute syn. of *N. guttula* Motschulsky

Type locality: "San Francisco, California" [USA; label]

Type depository: NMNH: Washington, D. C. [!] holotype male

- 1920 Angell: 90 (description of variation) >> Orig. comb.: *Nicrophorus guttula* var. *quadriguttata* (sic) [!M, N, S]
 1926a Portevin: 254 (revision: key, descriptions & catalog in French) >> as *N. Hecate* ab. 4 *guttata*
 1927b Hatch: 360 (revision: key, descriptions & catalog) >> Revised syn. as *N. guttulus* ab. *quadriguttatus*
 1928 Hatch: 146 (catalog) >> as *N. guttulus* ab. *quadriguttatus*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. guttula* subsp. *guttula* ab. *quadriguttatus*

= *vandykei* Angell, 1920 NEW STATUS as absolute syn. of *N. guttula* Motschulsky

Type locality: "Shasta Co. Calif." [USA; label]

Type depository: NMNH: Washington, D. C. [!] holotype female

- 1920 Angell: 90 (description of variation) >> Orig. comb.: *Nicrophorus guttula* var. *Van Dykei* [!M, N, S]
 1926a Portevin: 254 (revision: key, descriptions & catalog in French) >> as *N. Hecate* ab. *Vandykei*
 1927b Hatch: 361 (revision: key, descriptions & catalog) >> as *N. guttula* ab. *vandykei*
 1928 Hatch: 146 (catalog) >> as *N. guttulus* ab. *Vandykei*
 1940 Hatch: 235 (description of variation) >> as *N. guttulus* ab. *vandykei*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. guttula* subsp. *guttula* ab. *vandykei*

Nicrophorus heurni Portevin, 1926

Type locality: "Nouvelle-Guinée: campement de Doormanpad, 1410 m" [Mamberamo R., nw New Guinea (prob. w Irian, Indonesia); descrip.]

Type depository: MBBJ: (Mus. Boitenzorg) Bogor / Bandung, Java, holotype, 5 paratypes [MNHN [!], DEIC]

Distribution: Australian: New Guinea, (Irian Jaya)

- 1926a Portevin: 209 (revision: key, descriptions & catalog in French) >> Orig. comb.: *Nicrophorus Heurni* [!N, S]
 1926b Portevin: 211 (descriptions in French) >> detailed redescription
 1927b Hatch: 354 (revision: key, descriptions & catalog) >> specimens not seen by Hatch

- 1928 Hatch: 130 (catalog)
 1933 Semenov-Tian-Shanskij: 155 (catalog in Russian & Latin)
 1959 Mroczkowski: 66 (description) >> compared to *N. kieticus*
 1969 Hinton: 186 (morphology: diffraction gratings) >> has iridescent morphology
 1985 Peck & Anderson: 274 (key, descriptions, phylogenetics)
 1986 Nishikawa: 99 (catalog in Japanese (English summary))
 1990 Hanski & Niemelä: 149 (biology: ecology)
 1991 Hanski & Krikken: 195 (biology: ecology)
 2000 Růžička et al.: 381 (descriptions)
 2000 Sikes & Peck: 393 (descriptions, phylogenetics) >> tibia figured; nomen nudum: *N. heurni* subsp. *portevin*
 2001 Peck: 94 (keys, descriptions and distributions) >> dist. figured

***Nicrophorus hispaniola* Sikes & Peck, 2000**

Type locality: “Hispaniola: Dominican Republic: Pedernales, 8 km NE Los Arroyos, elev. 1940 m, 18° 16' N, 71° 44'W” [label]

Type depository: CMNH: Pittsburgh [!] holotype female, 10 paratypes [SBPC, CMNH, MAIC, FSCA]

Distribution: Neotropical: Hispaniola: southwestern mountainous Dominican Republic

- 2000 Sikes & Peck: 391 (descriptions, phylogenetics) >> Orig. comb.: *Nicrophorus hispaniola* [!S]

***Nicrophorus humator* (Gleditsch, 1767)**

Type locality: unknown

Type depository: unknown

Distribution: Palearctic: Europe, nAfrica: Morocco, Iran, Israel*, Russian plain, Turkmenistan, Armenia, Afghanistan, Kazakhstan, Turkey; Transcaucasia, Kyrgyzstan, Uzbekistan, Tajikistan

- 1767 Gleditsch: 224 (descriptions in German) >> Orig. comb.: *Silpha humator*; illustrated, tab. 1 [!S]
 1777 Goeze: 190 (in German) >> as *Nicrophorus humator*
 1778 Bergsträsser: 64 (catalog in German)
 1790 Olivier: no. 10, p. 8 (descriptions in French) >> habitus figured
 1790 Scriba: 168 (in German)
 1792 Fabricius: 247 (descriptions) >> incorrect auth. attrib: *N. humator* Olivier
 1792 Frölich: 122 (descriptions in German)
 1792 Kugelann: 503 (in German)
 1793 Herbst: 156 (catalog in German)
 1795 Panzer: 117 (catalog in German)
 1797 Panzer: 2 (catalog in German)
 1798 Cederhielm: 45 (catalog)
 1798 Illiger: 352 (catalog in German)
 1798 Paykull: 323
 1801 Fabricius: 333 (descriptions)
 1802 Marsham: 114 >> as *Silpha humator*

- 1807 Haworth: 82 (descriptions) >> compared to *N. bimaculatus*
 1807 Herschel: 274 (descriptions in German)
 1808 Gyllenhal: 258 (descriptions, catalog)
 1808 Schönherr: 118 (in German)
 1821 Dejean: 42 (catalog)
 1825 Curtis: Pl. 71 (checklist) >> text accompanying Plate 71.
 1825 Duftschmid: 111 (descriptions in German)
 1827 Gyllenhal: 307 (descriptions)
 1829b Stephens: 74 (catalog)
 1830 Stephens: 17 (biology, descriptions)
 1832 Ménériés: 167 (checklist in French)
 1833 Dejean: 117 (catalog in French) >> incorrect auth. attrib. Fabricius
 1836 Dejean: 131 (catalog in French)
 1837 Erichson: 223 (species-group catalog in German)
 1838 Sturm: 59 (in German)
 1839 Matzek: 21 (morphology: internal & external anatomy in Latin) >> as *N. Humatorum*
 1839 Stephens: 113 (descriptions)
 1839 Westwood: 138 (biology)
 1840 Laporte: 2 (descriptions in French)
 1841a Heer: 386 (descriptions in German)
 1841b Heer: 9 (checklist in German)
 1843 Mannerheim: 251 (descriptions in German) >> compared to *N. nigrita*
 1846 Kolenati: 49 (catalog) >> spec. 202 in list
 1846a Küster: nr. 51 (catalog in German)
 1847 Rosenhauer: 105 (checklist in German)
 1849 Bach: 153 (checklist, brief descriptions in German)
 1849 Gaubil: 55 (catalog in French)
 1849 Redtenbacher: 140 (catalog in German)
 1853 Hoffmann: 105 (description of variation in German)
 1854 Lacordaire: 199 (biology, catalog in French)
 1855 Fairmaire & : 271
 1858 Calwer: 106 (checklist, brief descriptions in German)
 1858 Redtenbacher: 289 (catalog in German)
 1859 Gutfleisch & Bose: 202 (key, descriptions in German)
 1859 Schaum: 36 (catalog in German)
 1862 Schaum: 38 (catalog in German) >> incorrect auth. attr. F.
 1862 Thomson: 8 (descriptions)
 1863 Grenier: 13 (checklist in French)
 1863 Marseul: 88 (catalog in French)
 1865 Power: 198 (revision: key, descriptions & catalog)
 1866 Marseul: 38 (catalog in French)
 1868 Gemminger & Harold: 718 (catalog)
 1868 Stein: 42 (catalog in Latin)
 1869 Stierlin & Gautard: 116 (checklist in German)
 1870 Motschulsky: 352 (descriptions in French) >> compares *N. ruficornis* Mots. to *N. humator*

- 1870 Vollenhoven et al.: 54 (checklist in Dutch)
- 1873 Bell: 94 (biology, behavior) >> "Biology" - Hatch 1928
- 1873 Klika: 127 (checklist in Czech)
- 1873 Michow: 18, 20 (in German)
- 1873 Wood: 90 (biology, ecology)
- 1874 Cox: 406 (key, descriptions (brief))
- 1874 Seidlitz: 216 (key in German)
- 1874 Solsky: 213 (checklist in Russian)
- 1876b Kraatz: 395 (morphology: clypeus in German)
- 1877 Hickel & Dragicsevics: 27 (checklist in French)
- 1877 Stein & Weise: 61 (catalog in Latin)
- 1880 Heyden: 86 (checklist in German)
- 1883 Heyden et al.: 73 (checklist) >> incorrect auth. attr. Goeze
- 1884 Marseul: 185 (key, descriptions in French) >> as senior syn. of *N. bimaculatus*
- 1884 Reitter: 86 (descriptions in German) >> as *Silpha humator*
- 1884 Schmidt: 90 (biology in French) >> "Biology" - Hatch
- 1885 Marseul: 169 (catalog in French) >> as *Necrophorus humator*
- 1885 Reitter: 86 (in German)
- 1885 Thomson: 66 (key, checklist in Swedish)
- 1887 Lewis: 341 (description) >> compared with *N. tenuipes*
- 1888 Seidlitz: 312 (key in German) >> misspelled as *Necrophagus humator*
- 1889 Fowler: 43 (descriptions, catalog)
- 1889 Seidlitz: 328 (key in German) >> misspelled as *Necrophagus humator*
- 1891 Heyden et al.: 138 (checklist)
- 1892 Xambeu: 150 (biology in French) >> "Larva" - Hatch 1928
- 1893 Fauconnet: 255 (description of variation)
- 1893 Heyden: 51 (checklist in German)
- 1893 Reitter: 147 (key, descriptions in German)
- 1894 Semenov-Tian-Shanskij: 530 (description in Latin) >> compared to *N. przewalskii*
- 1895b Reitter: 324 (description of variation in German)
- 1896 Acloque: 241 (key in French)
- 1896 Heyden: 38 (checklist in German)
- 1898 Everts: 412
- 1899 Ganglbauer: 163 (key, descriptions, morphology, in German)
- 1899 Herms: 316 (in German) >> "Biology" - Hatch 1928
- 1899 Meier: 98 (description of variation in German)
- 1901 Carret: 329 (description of variation in French)
- 1902 Johnson & Halbert: 690 (checklist)
- 1905 Voigts & Oudemans (biology, symbionts: mites in German)
- 1905 Weber: 31 (biology, ecology, behavior in German)
- 1906 Heyden et al.: 247 (checklist)
- 1909 Bickhardt: 73 (description of variation in German)
- 1909 Reitter: 239 (in German)
- 1910 Jakobson: 611 (checklist in Russian)
- 1913 Delahon: 530 (checklist in German) >> description of variation: 1 unavailable name

- 1913 Kuhnt: 335 (in German)
- 1914 Gorka: 235, 337, fig 2 (morphology: malpighian tubules in German) >> figured
- 1914 Sainte-Claire-Deville: 162 (checklist, discussion of variation in French)
- 1916 Pasquet: 134 (description of variation in French)
- 1916 Schaufuss: 272 (checklist in German)
- 1922 Everts: 182
- 1922 Gimingham (biology, symbionts: mites)
- 1922 Hansen: 114, 115 (key, descriptions, morphology, larval stages in Danish)
- 1922 Henriksen: 257 (key) >> "Larva" - Hatch 1928
- 1922 Portevin: 55 (descriptions in French) >> compared to *N. tenuipes*
- 1922 Sherborn: 3052 (catalog - index)
- 1923 Portevin: 303 (key, descriptions in French)
- 1923 Portevin: 67 (key, descriptions in French) >> comment that this sp. can be found on mushrooms
- 1924 Jakobson: 236 (catalog)
- 1925 Delahon: 306 (comment in German) >> 1 unavailable name
- 1925 Fuente y Morales: 119 (checklist in Spanish)
- 1925 Weber: 124 >> "Biology" - Hatch 1928
- 1925 Winkler: 263 (catalog) >> incorrect auth. attr. Goeze
- 1926 Porta: 332 (key, checklist in Italian)
- 1926a Portevin: 202 (revision: key, descriptions & catalog in French)
- 1927b Hatch: 354 (revision: key, descriptions & catalog)
- 1928 Hatch: 130 (catalog)
- 1929 Kôno: 161, 164 (checklist, annotated) >> incorrect auth. attr. Oliv.; as senior syn. of *N. tenuipes*
- 1929 Portevin: 538 (key, intraspecific variation in French)
- 1930 Collett: 258 (biology, behavior)
- 1930 Roubal: 240 (catalog in Czech)
- 1930 Vitzthum: 390 (biology, symbionts: mites in German) >> as mite host
- 1931 Walsh (biology)
- 1932 Joy: 466 (key)
- 1933 Pukowski: 518-586 (biology, ecology in German)
- 1933 Rapp: 535 (biology, ecology, distribution in German)
- 1933 Semenov-Tian-Shanskij: 150 (catalog in Russian & Latin) >> as type sp. of new subgenus *Necrocleptes*
- 1933a Shchegoleva-Barovskaya: 172 (revision: key, descriptions & catalog in Russian)
- 1933 Walsh: 28 (biology, ecology)
- 1934 Peyerimhoff: 333 (distribution note in French) >> record from Algeria, massif des Mouzaïa
- 1934a Pukowski: 4 (biology, ecology in German)
- 1934b Pukowski: 53-60 (morphology, larval stages in German) >> description of larva
- 1934c Pukowski: 112 (biology, behavior in German)
- 1935 Balduf: 69 (biology, ecology, behavior)
- 1936 Takagi: 192 (checklist in Japanese)
- 1936 Thiel: 415 (morphology: proventriculus in German)
- 1937 Kaufmann: 232 (biology, ecology) >> incorrect auth. attrib. Goeze
- 1938 Crowson: 407 (morphology: metendosternite) >> metendosternite

- 1939 Lengerken: 263 (biology in German)
- 1941 Paulian: 111 (morphology, larval stages in French) >> description of larva; larval mouthparts figured
- 1942 Pickles: 40, 42 (comment: ecology)
- 1943 Cooreman (biology, symbionts: mites in French)
- 1943 Neumann (biology, symbionts: mites in German)
- 1944 Arnett: 4, 22 (morphology: female genitalia) >> female genitalia figured, pl. 3, fig. 5
- 1945 Kloet & Hincks: 155 (checklist)
- 1945 Samsinak: 91 (description of variation in Czech) >> description of variation: 1 unavailable name
- 1946 Paulian: 95 (biology, ecology in French)
- 1947 Arnett: 111 (catalog)
- 1947 Cantonnet & Lecordier: 134 (biology, ecology in French)
- 1949 Horion: 76 (biology, ecology, distribution in German)
- 1949 Mroczkowski: 196 (biology, ecology in Polish (English summary))
- 1949 Roehrich: 44 (biology, ecology in French)
- 1950 Emden: 196 (biology, parasites) >> as host of *Sarcophaga nigriventris* Meig. (Diptera, Sarcophagidae)
- 1950a Théodorides: 97 (checklist in French) >> reliable record from Iberian peninsula
- 1950b Théodoridès: 5 (biology, ecology, morphology in French)
- 1952 Benick: 32 (biology, ecology in German)
- 1952 Novak: 62 (checklist in Croatian)
- 1955 Chapman & Sankey: 396 (biology, ecology)
- 1955 Moore: 292 (biology, ecology)
- 1955 Mroczkowski: 21 (key, descriptions in Polish)
- 1956 Esaki et al.: 1029 (checklist, descriptions in Japanese)
- 1958 Madge: 25 (revision: key, descriptions, ecology, distributions) >> dist. doubtful in North America
- 1959 Linssen: 161 (catalog)
- 1960 Hansen et al.: 72 (checklist in Danish)
- 1960 Théodoridès (biology, symbionts: mites in French)
- 1962 Boeckh: 214 (morphology: antennal in German)
- 1962 Pearson: 133, 146 (fossils) >> fossils from 10,500 B.P., England
- 1964 Petruška: 162 (biology, ecology in Czech (German summary))
- 1965 Báguena: 52 (checklist in Spanish)
- 1965 Lane & Rothschild: 157 (biology, behavior) >> could not be made to stridulate
- 1966 Korbel: 146 (biology, ecology in German (Czech & Russian summary))
- 1968 Hansen: 18 (key, descriptions in Danish)
- 1968 Petruška: 168 (biology, ecology in Czech (English summary))
- 1968 Springett: 417-424 (biology, symbionts: mites) >> focal species
- 1969 Ernst: 75 (morphology: antennal sensillae in German (English summary))
- 1969 Gersdorf: 305 (fossils, descriptions in German)
- 1970 Franz: 214 (checklist, distribution in German)
- 1970 Gersdorf: 366 (morphology: female genitalia in German)
- 1971 Freude: 193 (key in German)
- 1971 Kryzhanovskiy: 212 (in Russian (English summary))

- 1972b Ernst: 96 (morphology: antennal sensillae in German (English summary))
- 1973 Blackwelder: 3 (checklist, synonymy)
- 1973 Krivolutskaya: 70 (checklist in Russian (with electronic english translation))
- 1973 Nabaglo (biology, ecology)
- 1973 Schumacher: 65-75 (morphology: stridulatory files in German (English summary)) >> focal species
- 1973 Spicarová: 297-321 (biology, behavior in Czech (English summary))
- 1975 Schneider: 223 (morphology, behavior: wing motion in German)
- 1976 Bils: 118 (morphology: female abdominal musculature in German)
- 1976 Tischler: 100 (biology, ecology in German)
- 1977 Bockeler: 48 (biology, parasites in German (English summary))
- 1977 Matuszewski et al.: 884 (biology, cytology)
- 1977 Pope: 20 (checklist)
- 1978 Andre (biology, ecology in French)
- 1978 Blas: 51 (key, descriptions in Spanish)
- 1978 Burakowski et al.: 198 (catalog, distribution, synonymy in Polish)
- 1978 Mroczkowski: 239 (biology, ecology in Polish (Russian & German summary))
- 1978 Putman: 136 (biology, ecology) >> incorrect auth. attrib. Cz.
- 1978 Schneider: 199 (morphology: wing folding in German)
- 1979 Blum: 536 (morphology: wing folding, abdominal structure in German)
- 1979 Hammond: 133, 138 (morphology: wing folding) >> SEM of microtrichia on wing surfaces, and abdominal terga
- 1979 Miller & Peck: 98 (fossils) >> does not occur in California
- 1979 Silfverberg: 12 (checklist, distribution)
- 1980 Easton: 121-123 (morphology: sexual dimorphism)
- 1980 Franssen: 46 (morphology: female genitalia in French) >> female genitalia figured
- 1980 Iablokoff-Khnzorian: 268 (morphology: male genitalia in French) >> figured
- 1980 Madge: 356 (catalog)
- 1980 Stork: 200 (morphology: tarsal setae) >> details of tarsal morphology
- 1981 Rozner: 104 (checklist in Hungarian)
- 1981 Spriggs: 115 (descriptions, ecology)
- 1981 Šustek: 40 (key, descriptions, regional in Czech)
- 1982c Korn: 207 (biology, symbionts: mites in German (English summary)) >> mite host
- 1982 Wisiniewski (biology, symbionts: mites in German)
- 1983 Korn: 251 (biology, symbionts: mites in German (English summary))
- 1983 Putman: 35, 38-42 (biology, ecology)
- 1983 Sleeman (biology, symbionts: mites)
- 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary))
- 1984 Denman: 201 (biology, behavior)
- 1984 Harde: 124 (field guide, brief descriptions, ecology) >> brief description
- 1984 Heinzl & Böhm: 173-176 (biology, physiology)
- 1985 Zahradník: 123, 372 (catalog, annotated & figured in German) >> incorrect auth. attrib. Goeze; figured
- 1986 Böhm et al.: 199 (biology, physiology in German)
- 1986 Erbeling & Erbeling: 234 (biology, ecology in German)

- 1986 Nishikawa: 99 (catalog in Japanese (English summary))
- 1987 Böhm & Wendler: 304-305 (biology, physiology in German)
- 1987 Jensen: 116 (biology, ecology in Danish (English summary))
- 1987 Lucht: 67 (catalog in German)
- 1987 Müller & Eggert: 297-304 (biology, behavior) >> focal species
- 1987 Müller & Cordes: 321 (biology, behavior in German)
- 1987 Peschke et al.: 246 (biology, ecology)
- 1988 Böhm & Wendler (biology, behavior, physiology in German (English summary))
- 1988 Müller & Eggert: 38 (biology, behavior in German)
- 1989 Heinzel & Böhm: 775-786 (biology, physiology) >> focal species; antenna figured with SEM
- 1989 Koch: 164 (biology, ecology in German)
- 1989 Núñez et al.: 438 (checklist in Spanish (English summary))
- 1989 Rassi & Rutanen: 212 (distribution note in Finnish)
- 1989 Stresemann et al. (key in German)
- 1990 Erbeling: 116 (biology, ecology in German (English summary))
- 1990 Hyatt: 136 (biology, symbionts: mites)
- 1990 Jones: 590 (comment: ecology) >> as prey item of greater horsehoe bat in England
- 1990 Kentner & Streit: 26 (biology, ecology in English (German summary))
- 1990 Otronen: 980-982 (biology, behavior) >> focal species
- 1990 Rohner: 453-464 (biology, ecology in German (English summary)) >> focal species
- 1990 Zahradník: 123 (key in Spanish)
- 1991 Böhm et al.: 671-683 (biology, physiology) >> focal species
- 1991 Lewis (distribution note)
- 1992 Huerta: 13-21 (morphology: sternal glands in Spanish (English summary)) >> focal species; incorrect author. attrib. to Goeze
- 1992 Kozminykh: 64 (checklist in Russian)
- 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
- 1992 Růžička: 127 (key, descriptions, morphology, larval stages, phylogenetics) >> description of larval instars
- 1992 Schmitt: 272 (morphology: stridulatory files)
- 1992 Silfverberg: 14 (checklist, distribution in English (Finnish & Swedish summaries))
- 1993 Athias-Binche et al.: 76 (biology, symbionts: mites)
- 1993b Kozminykh: 63 (key, descriptions, regional in Russian)
- 1993 Růžička: 34 (checklist, distribution in English & Czech)
- 1994 Bertin & Fallaci: 218 (checklist in Italian (English summary))
- 1994 Brackenbury: 278, 281-282 (morphology: wing folding)
- 1994 Carnier: 124-124 (biology, ecology in German)
- 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
- 1994 Masan: 9 (biology, symbionts: mites in English (French & German summary))
- 1994 Růžička: 69 (biology, ecology)
- 1995 Angelini et al.: 10 (checklist, distribution in Italian)
- 1995 Bocáková: 24 (biology, ecology in Czech (English summary))
- 1995 Böhm: 1995-2005 (biology, behavior, physiology)

- 1995 Dapsio: 120 (checklist in Lithuanian)
 1995 Kozminykh: 108 (key in Russian)
 1995 Kozminykh & Nemkov: 111 (catalog in Russian)
 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English)
 1996 Bertin & Lebboroni: 150 (checklist in Italian (English summary)) >> auth. attrib. incorrectly to Oliv.
 1996 Hansen: 93 (checklist, distribution in Danish & English)
 1996 Hava: 167 (description of variation in English (Czech summary)) >> auth. attrib. incorrectly to Oliv.
 1996 Schwarz: 137 (biology, symbionts: mites)
 1997 Anderson et al.: 14 (checklist)
 1997 Eggert & Müller: 219 (biology, review of: ecology, behavior)
 1997 Hansen: 17 (phylogenetics)
 1997 Klausnitzer: 40 (morphology, larval stages in German)
 1997 Kozminykh: 64 (checklist in Russian)
 1997 Pushkin: 24 (biology, ecology in Russian)
 1997 Pushkin & Charthenko: 62 (biology, ecology in Russian)
 1997 Telnov et al. (checklist)
 1998 Háva et al.: 179 (distribution note in English (Czech summary)) >> auth. attrib. correctly to Gleditsch
 1998 Kocárek: 387 (biology, ecology)
 1998 Pushkin & Sigida: 84 (biology, ecology in Russian)
 1998 Schwarz et al.: 164 (biology, symbionts: mites)
 1998 Schwarz & Koulianos: 623 (biology, symbionts: mites)
 1998b Scott: 598+ (biology, review of: ecology, behavior)
 1999 Bertin & Lebboroni: 55 (checklist in Italian)
 1999 Masán: 517 (biology, symbionts: mites)
 1999 Růžička: 318 (biology, ecology) >> auth. attrib. incorrectly to Oliv.
 2000 Bahillo de la Puebla & López-Colón: 224 (biology, descriptions, distribution in Spanish)
 2000 Bertin et al.: 130 (biology, ecology in Italian (English summary))
 2000 Gwiazdowicz: 44 (biology, symbionts: mites) >> mite host
 2000 Koulianos & Schwarz: 839 (biology, ecology, behavior) >> auth. attrib. incorrectly to Oliv.
 2000b Parkhomenko: 164 (morphology, larval stages in Ukrainian (English summary)) >> auth. attrib. incorrectly to F.
 2001 Kocárek: 431-438 (biology, ecology)
 2002 Nikolajev & Kozminykh: 109 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *atricornis* Meier, 1899 NEW STATUS as absolute syn. of *N. humator* (Gleditsch)

Type locality: not mentioned?

Type depository: ZMUH: Hamburg

1899 Meier: 98 (description of variation in German) >> Orig. comb.: *Necrophorus humator* var. *atricornis* [!N, S]

1906 Heyden et al.: 247 (checklist) >> as *N. humator* var. *atricornis*

- 1909 Bickhardt: 75 (description of variation in German) >> as *N. humator* var. *atricornis*
 1910 Jakobson: 611 (checklist in Russian) >> as *N. humator* var. *atricornis*
 1913 Kuhnt: 303 (in German)
 1916 Schaufuss: 273 (checklist in German)
 1922 Everts: 182
 1923 Portevin: 303 (key, descriptions in French) >> as *N. humator* var. *atricornis*
 1925 Winkler: 263 (catalog) >> as *N. humator* ab. *atricornis*
 1926a Portevin: 202 (revision: key, descriptions & catalog in French) >> as *N. humator* var. *atricornis*
 1928 Hatch: 132 (catalog) >> as *N. humator* var. *atricornis*
 1933a Shchegoleva-Barovskaya: 172 (revision: key, descriptions & catalog in Russian) >> as *N. humator* ab. *atricornis*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. humator* var. *atricornis*
 1965 Báguena: 52 (checklist in Spanish) >> as *N. humator* ab. *atricornis*

= *maculosus* Meier, 1899 NEW STATUS as absolute syn. of *N. humator* (Gleditsch)

Type locality: not mentioned

Type depository: ZMUH: Hamburg

- 1899 Meier: 99 (description of variation in German) >> Orig. comb.: *Necrophorus humator* var. *maculosus* [!N, S]
 1906 Heyden et al.: 247 (checklist) >> as *N. humator* var. *maculosus*
 1909 Bickhardt: 75 (description of variation in German) >> as *N. humator* var. *maculosus*
 1910 Jakobson: 612 (checklist in Russian) >> as *N. humator* var. *maculosus*
 1913 Kuhnt: 335 (in German)
 1916 Schaufuss: 273 (checklist in German)
 1922 Everts: 182
 1923 Portevin: 303 (key, descriptions in French) >> as *N. humator* var. *maculosus*
 1925 Winkler: 263 (catalog) >> as *N. humator* ab. *maculosus*
 1926a Portevin: 202 (revision: key, descriptions & catalog in French) >> as *N. humator* ab. *maculosus*
 1928 Hatch: 132 (catalog) >> as *N. humator* ab. *maculosus*
 1933a Shchegoleva-Barovskaya: 172 (revision: key, descriptions & catalog in Russian) >> as *N. humator* ab. *maculosus*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. humator* var. *maculosus*
 1965 Báguena: 52 (checklist in Spanish) >> as *N. humator* ab. *maculosus*

= *nigerrimus* Kraatz, 1884

Type locality: "Margellan" [Margilan, eastern Uzbekistan; descrip.]

Type depository: DEIC: Eberswalde, holotype

- 1884 Kraatz: 230 (descriptions in German) >> Orig. comb.: *Necrophorus nigerrimus* [!M, S]
 1884 Marseul: 186 (key, descriptions in French) >> as valid species
 1885 Marseul: 169 (catalog in French) >> as valid species
 1893 Heyden: 51 (checklist in German) >> as valid species

- 1893 Reitter: 147 (key, descriptions in German) >> as valid species
 1895b Reitter: 324 (description of variation in German) >> as valid species
 1896 Heyden: 38 (checklist in German) >> as valid species
 1910 Jakobson: 611 (checklist in Russian) >> as valid species
 1923 Portevin: 230 (key, descriptions in French) >> as valid species
 1925 Winkler: 263 (catalog) >> as valid species
 1926a Portevin: 198 (revision: key, descriptions & catalog in French) >> as valid species
 1927b Hatch: 355 (revision: key, descriptions & catalog) >> as valid species; specimens not seen by Hatch
 1928 Hatch: 136 (catalog) >> as valid species
 1932 Hlisnikovskiy: 25 (key, descriptions in German) >> as valid species
 1933 Semenov-Tian-Shanskij: 150 (catalog in Russian & Latin) >> as valid species
 1933a Shchegoleva-Barovskaya: 172 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. humator*
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as valid species
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. humator*
 1995 Kozminykh & Nemkov: 111 (catalog in Russian) >> as syn. of *N. humator*
 2002 Nikolajev & Kozminykh: 109 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. humator*

= *sulcatus* Fischer von Waldheim, 1844

Type locality: "Anatolia" [Turkey; descrip.]

Type depository: : Moscow, Leningrad, or Dresden?

- 1844 Fischer von Waldheim: 140 (descriptions) >> Orig. comb.: *Necrophorus sulcatus* [!M, N, S]
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1863 Marseul: 88 (catalog in French) >> as valid species
 1866 Marseul: 38 (catalog in French) >> as valid species
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1895b Reitter: 323 (description of variation in German) >> as valid species; but unknown to author
 1910 Jakobson: 612 (checklist in Russian) >> as valid species
 1926a Portevin: 252 (revision: key, descriptions & catalog in French) >> as syn. of *N. humator*
 1928 Hatch: 131 (catalog) >> as syn. of *N. humator*
 1933a Shchegoleva-Barovskaya: 172 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. humator*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. humator*
 1965 Báguena: 52 (checklist in Spanish) >> as syn. of *N. humator*
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. humator*
 1995 Kozminykh & Nemkov: 111 (catalog in Russian) >> as syn. of *N. humator*
 2002 Nikolajev & Kozminykh: 109 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. humator*

Nicrophorus hybridus Hatch & Angell, 1925

Type locality: "Aweme, Man." [Canada: Manitoba, ca. east of Brandon; label]

Type depository: NMNH (USNM): Washington, D. C. [!] holotype female

Distribution: Nearctic: north-western mountainous North America

- 1925 Hatch & Angell: 216 (descriptions) >> Orig. comb.: *Nicrophorus hybridus* [!N, S]
- 1926a Portevin: 264 (revision: key, descriptions & catalog in French) >> listed in addenda
- 1927a Hatch: 5, 7, 19 (key, descriptions, description of variation)
- 1927b Hatch: 359 (revision: key, descriptions & catalog)
- 1928 Hatch: 145 (catalog)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1934 Hatch & Rueter: 159 (key, distribution, variation, descriptions)
- 1944 Arnett: 5, 24 (morphology: female genitalia) >> female genitalia figured, pl. 4, fig. 8
- 1945 Hatch: 14 (distribution note)
- 1946a Arnett: 133 (biology) >> purported specimens from New York, prob. erroneous
- 1958 Madge: 34 (revision: key, descriptions, ecology, distributions)
- 1973 Blackwelder: 5 (checklist, synonymy)
- 1982a Anderson: 262 (key, descriptions, morphology, larval stages)
- 1985 Anderson & Peck: 60 (revision: key, descriptions & catalog)
- 1985 Peck & Anderson: 287 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1987 Peck & Kaulbars: 53 (checklist)
- 1990 Peck: 1123 (key)
- 1991 Campbell: 85 (catalog, distribution)
- 1993 Peck & Miller: 7 (species-group catalog)
- 1996 Palestirini et al.: 435 (larval descriptions, phylogenetics)
- 1996 Ratcliffe: 69 (revision: key, descriptions & catalog)
- 1997 Backlund & Marrone: 56 (biology, conservation)
- 1998 Coyle & Larsen: 163 (biology, ecology)
- 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics)

= *minnesotianus* Hatch, 1927 NEW STATUS as absolute syn. of *N. hybridus* Hatch & Angell

Type locality: "Ramsey County" [USA: Minnesota; descrip.]

Type depository: unknown

- 1927a Hatch: 5, 7 (key, descriptions, description of variation) >> Orig. comb.: *Nicrophorus hybridus* var. *minnesotianus* [!N, S]
- 1927b Hatch: 360 (revision: key, descriptions & catalog) >> as *N. hybridus* var. *minnesotianus*
- 1928 Hatch: 146 (catalog) >> as *N. hybridus* var. *minnesotianus*
- 1944 Arnett: 5 (morphology: female genitalia) >> as *N. hybridus* var. *minnesotianus*

Nicrophorus insularis Grouvelle, 1893 desig. lectotype

Type locality: "Sumatra"[Indonesia; label]

Type depository: MNHN: Paris [!] lectotype male, 1 paralectotype female

Distribution: Oriental, Australian: Islands of Malay Archipelago: Bali, sBorneo, Java, Sulawesi, Sumatra

- 1893 Grouvelle: 161 (descriptions in French) >> Orig. comb.: *Nicrophorus insularis* [!M, S]
- 1903 Portevin: 331 (descriptions in French) >> as valid species
- 1920 Portevin: 399 (descriptions in French) >> as valid species
- 1922 Portevin: 55 (descriptions in French) >> as *N. nepalensis* var. *insularis*
- 1923 Bernet Kempers: 78-79 (morphology: wing venation in German) >> as valid species
- 1923 Portevin: 307 (key, descriptions in French) >> as *N. nepalensis* var. *insularis*
- 1926a Portevin: 208 (revision: key, descriptions & catalog in French) >> as *N. nepalensis* var. *insularis*
- 1928 Hatch: 129 (catalog) >> as *N. nepalensis* var. *insularis*
- 1964b Hlisnikovsky: 244 (descriptions in German) >> as *N. nepalensis* form *insularis* [ab. intended?]
- 1975 Emetz & Schawaller: 230 (checklist in German (English summary)) >> as *N. nepalensis* ab. *insularis*
- 1990 Hanski & Niemelä: 149 (biology: ecology) >> as valid species
- 1991 Hanski & Krikken: 195 (biology: ecology) >> as valid species
- 2001 Peck: 94 (keys, descriptions and distributions) >> as valid species

= *humeralis* Pic, 1917 REVISED SYNONYM of *N. insularis* Grouvelle

Type locality: "Java" [Indonesia; label]

Type depository: MNHN: Paris [!] holotype male

- 1917a Pic: 2 (description of variation in French) >> Orig. comb.: *Nicrophorus insularis* var. *humeralis* [!N, S]
- 1920 Portevin: 399 (descriptions in French) >> description of variation: 1 unavailable name
- 1926a Portevin: 253 (revision: key, descriptions & catalog in French) >> as syn. of *N. nepalensis* var. *insularis*
- 1928 Hatch: 129 (catalog) >> as syn. of *N. nepalensis* var. *insularis*
- 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> as syn. of *N. nepalensis*

Comments: Lectotype data for *Nicrophorus insularis* Grouvelle, 1893: 161 "*Nicrophorus insularis* Grouv. Type" (male symbol)/ "MUSEUM PARIS COLL. A. GROUVELL 1917" / red label: "TYPE" "Exp. Yermann"?/ SUMATRA: (coll. Dr. J. Bemmsul (..?)) red rectangular label with double black border "LECTOTYPE *Nicrophorus insularis* (Grouvelle 1893) det. Sikes 1997"- male (Paris [MNHN]); pronotal width: 5.08 mm.

Paralectotype data "*Nicrophorus insularis* Grouv. Type (female symbol) / "MUSEUM PARIS COLL. A. GROUVELL 1917" / red label:"TYPE" "Exp. Yermann"? / SUMATRA: (coll. Dr. J. Bemmsul (..?)) red rectangular label with double black border

“PARALECTOTYPE *Nicrophorus insularis* (Grouvelle 1893) det. Sikes 1997”- female (Paris [MNHN]).

DSS examined the holotype of *N. insularis* var. *humeralis* Pic in the Paris museum. It was a broken specimen, glued onto a card in pieces, the body was on a separate pin from the pieces. The maculations are those of *N. insularis*, not *N. nepalensis*, therefore we disagree with Kozminykh (1993) who treated this name as a synonym of *N. nepalensis* and return the name to synonymy under *N. insularis*.

Nicrophorus interruptus Stephens, 1830 desig. lectotype

Type locality: “Norfolk, the New Forest” [England; descrip., no data on label]

Type depository: BMNH: London [!] lectotype male, 6 paralectotypes

Distribution: Palearctic: Europe; nAfrica: Morocco, Algeria; Turkey; Iran, Transcaucasia; Kazakhstan

- 1830 Stephens: 18 (biology, descriptions) >> Orig. comb.: *Nicrophorus interruptus* [!N, S]
- 1833 Dejean: 117 (catalog in French) >> auth. incorrectly attrib. Dejean
- 1839 Stephens: 114 (descriptions) >> as valid species
- 1840 Laporte: 2 (descriptions in French) >> as valid species
- 1849 Gaubil: 55 (catalog in French) >> as valid species
- 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
- 1862 Schaum: 38 (catalog in German) >> as valid species & senior syn. of *N. fossor*
- 1863 Grenier: 13 (checklist in French) >> as valid species
- 1865 Power: 198 (revision: key, descriptions & catalog) >> as valid species
- 1868 Gemminger & Harold: 718 (catalog) >> as valid species
- 1868 Stein: 42 (catalog in Latin) >> as *N. vestigator* var. *interruptus*
- 1874 Cox: 407 (key, descriptions (brief))
- 1876b Kraatz: 395 (morphology: clypeus in German) >> as valid species
- 1877 Stein & Weise: 61 (catalog in Latin)
- 1882 Gradl: 331 (description of variation in German) >> as valid species
- 1883 Heyden et al.: 73 (checklist) >> as valid species & senior syn. of *N. fossor*
- 1884 Marseul: 188 (key, descriptions in French) >> as syn. of *N. fossor*
- 1884 Reitter: 87 (descriptions in German) >> as *Silpha interrupta*; as valid species
- 1885 Marseul: 169 (catalog in French) >> as *Nicrophorus interruptus*; as syn. of *N. fossor*
- 1885 Reitter: 320 (in German)
- 1887 Reitter: 217 (descriptions in German) >> as *Silpha interrupta*, as valid species; compared to *N. praedator*
- 1888 Matthews: 91 (description) >> as *Nicrophorus interruptus*; as valid species, compared to *N. mexicanus*
- 1888 Seidlitz: 313 (key in German) >> as valid species; misspelled as *Nicrophagus interruptus*
- 1889 Fowler: 44 (descriptions, catalog)
- 1889 Seidlitz: 329 (key in German) >> as valid species; misspelled as *Nicrophagus interruptus*
- 1890 Fauvel: 348 (descriptions in French) >> as valid species; as senior syn. of *N. fossor*

- 1891 Heyden et al.: 138 (checklist) >> as valid species; as senior syn. of *N. fossor*
 1893 Heyden: 51 (checklist in German) >> as valid species; as senior syn. of *N. fossor*
 1895b Reitter: 326 (description of variation in German) >> as valid species; as senior syn. of *N. fossor*
 1896 Heyden: 38 (checklist in German) >> as valid species
 1898 Everts: 413
 1899 Ganglbauer: 163 (key, descriptions, morphology, in German) >> as valid species
 1901 Carret: 331 (description of variation in French) >> as syn. of *N. fossor*
 1902 Schneider: 44-47 (description of variation in German) >> description of variation: 5 unavailable names
 1905a Portevin: 51 (nomenclature in French) >> as valid species
 1906 Heyden et al.: 247 (checklist) >> as valid species; as senior syn. of *N. fossor*
 1909 Reitter: 240 (in German) >> as valid species
 1910 Jakobson: 612 (checklist in Russian) >> as valid species
 1911 Reitter: 106 (description of variation in German) >> as valid species
 1913 Fowler & Donisthorpe: 247
 1913 Kuhnt: 335 (in German)
 1914b Portevin: 225 (description of variation in French) >> as valid species
 1914 Sainte-Claire-Deville: 162 (checklist, discussion of variation in French) >> as valid species
 1916 Pasquet: 149 (description of variation in French)
 1916 Schaufuss: 273 (checklist in German)
 1917 Strand: 83 (descriptions in German) >> as valid species
 1922 Everts: 183
 1922 Hansen: 114 (key, descriptions, morphology, larval stages in Danish)
 1922 Portevin: 56 (descriptions in French) >> as valid species; compared to *N. basalis*
 1922 Sherborn: 3229 (catalog - index)
 1924 Roubal: 81 (description of variation in German) >> description of variation: 2 unavailable names
 1925 Fuente y Morales: 119 (checklist in Spanish) >> as valid species
 1925 Winkler: 264 (catalog) >> as valid species; as senior syn. of *N. fossor*
 1926 Porta: 333 (key, checklist in Italian) >> as valid species
 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> as syn. of *N. fossor*
 1929 Portevin: 539 (key, intraspecific variation in French) >> as valid species
 1930 Kieseritzky: 64 (descriptions in Russian (German summary)) >> as valid species; as senior syn. of *N. fossor*
 1930 Roubal: 241 (catalog in Czech) >> as valid species
 1932 Hlisnikovsky: 29 (key, descriptions in German) >> as valid species
 1932 Joy: 466 (key) >> as valid species
 1933 Rapp: 536 (biology, ecology, distribution in German) >> as valid species
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. fossor*
 1934 Peyerimhoff: 333 (distribution note in French) >> as syn. of *N. fossor*
 1936 Thiel: 413 (morphology: proventriculus in German) >> as valid species
 1943 Portevin: 48 (description of variation in French) >> as valid species: 1 new unavailable name

- 1944 Arnett: 7 (morphology: female genitalia) >> as valid species
 1945 Kloet & Hincks: 155 (checklist) >> as valid species
 1947 Cantonnet & Lecordier: 134 (biology, ecology in French) >> as valid species
 1949 Horion: 77 (biology, ecology, distribution in German) >> as valid species
 1949 Mroczkowski: 196 (biology, ecology in Polish (English summary)) >> as valid species
 1949 Riha (description in Czech) >> description of variation: 1 unavailable name
 1949 Roehrich: 44 (biology, ecology in French) >> as valid species
 1950b Théodoridès: 5 (biology, ecology, morphology in French) >> as valid species
 1952 Benick: 33 (biology, ecology in German) >> as valid species
 1952 Novak: 62 (checklist in Croatian) >> as valid species
 1959 Linssen: 162 (catalog) >> as valid species
 1960 Hansen et al.: 18 (checklist in Danish) >> as valid species
 1964 Petruška: 162 (biology, ecology in Czech (German summary)) >> as valid species
 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. fossor*
 1967 Starzyk (biology, symbionts: mites)
 1968 Hansen: 18 (key, descriptions in Danish) >> as valid species
 1968 Petruška: 168 (biology, ecology in Czech (English summary)) >> as valid species
 1969 Hinton: 186 (morphology: diffraction gratings) >> as valid species; has iridescent morphology
 1970 Franz: 214 (checklist, distribution in German) >> as valid species
 1970 Gersdorf: 367 (morphology: female genitalia in German) >> as valid species
 1971 Freude: 194 (key in German) >> as syn. of *N. fossor*
 1975b Emetz: 104 (checklist in Russian) >> as syn. of *N. fossor*
 1975 Pardo-Alcaide & Yus: 96 (morphology, larval stages in Spanish) >> figured
 1976 Petruška: 167 (biology, ecology in Czech (English summary))
 1977 Pope: 20 (checklist) >> as valid species
 1978 Blas: 51 (key, descriptions in Spanish) >> as valid species
 1978 Burakowski et al.: 200 (catalog, distribution, synonymy in Polish) >> as valid species
 1978 Schneider: 199 (morphology: wing folding in German) >> as valid species
 1979 Salgado & Régil: 86 (catalog, annotated & figured in Spanish) >> as valid species
 1980 Franssen: 46 (morphology: female genitalia in French) >> as valid species; female genitalia figured
 1981 Spriggs: 116 (descriptions, ecology) >> as valid species
 1981 Šustek: 40 (key, descriptions, regional in Czech) >> as valid species
 1983 Putman: 38-42 (biology, ecology) >> as valid species
 1989 Núñez et al.: 439 (checklist in Spanish (English summary)) >> as valid species
 1989 Stresemann et al. (key in German)
 1990 Hyatt: 136 (biology, symbionts: mites) >> as valid species
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. fossor*
 1994 Bertin & Fallaci: 218 (checklist in Italian (English summary)) >> as valid species
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. fossor*
 1996 Bertin & Lebboroni: 151 (checklist in Italian (English summary)) >> as valid species

- 1996 Pushkin: 33 (biology, ecology in Russian) >> as valid specie
 1997 Pushkin: 24 (biology, ecology in Russian) >> as valid species
 1997 Pushkin & Charthenko: 62 (biology, ecology in Russian) >> as valid species
 1999 Bertin & Lebboroni: 57 (checklist in Italian) >> as *N. interruptus* subsp. *interruptus*
 2000 Bahillo de la Puebla & López-Colón: 248 (biology, descriptions, distribution in Spanish) >> as *N. interruptus* subsp. *interruptus*
 2000 Bertin et al.: 130 (biology, ecology in Italian (English summary)) >> as *N. interruptus* subsp. *interruptus*
 2000 Gwiazdowicz: 44 (biology, symbionts: mites) >> mite host
 2002 Nikolajev & Kozminykh: 117 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. fossor*

= *algiricus* Pasquet, 1916 NEW STATUS as absolute syn. of *N. interruptus* Stephens;
 desig. lectotype

Type locality: “Kabylie: Tizi-Ouzou” [Algeria; label

Type depository: MNHN: Paris [!] lectotype male, 2 paralectotypes

- 1916 Pasquet: 154 (description of variation in French) >> Orig. comb.: *Necrophorus interruptus* var. *algiricus* [!M]
 1924 Portevin: 290 (key, descriptions in French) >> as *N. fossor* var. *algiricus*
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *algiricus*
 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> as *N. fossor* var. *algiricus*
 1928 Hatch: 143 (catalog) >> as *N. fossor* var. *algiricus*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as *N. fossor* ab. *algiricus*
 1934 Peyerimhoff: 333 (distribution note in French) >> as *N. fossor* var. *algiricus*
 1965 Báguena: 52 (checklist in Spanish) >> as *N. fossor* ab. *algiricus*
 1989 Núñez et al.: 439 (checklist in Spanish (English summary)) >> as *N. interruptus* var. *algiricus*

= *basalis* Gistel, 1848 (junior primary homonym, not Faldermann 1835) NEW SYNONYM of *N. interruptus* Stephens

Type locality: “Frankreich” [France; descrip.]

Type depository: ZSMC: München?

- 1848 Gistel: 190 (descriptions in German) >> Orig. comb.: *Necrophorus basalis* (attrib. Dejean, nomen nudum 1821); New junior primary homonym, not Faldermann 1835
 1857b Gistel: 565 (in German) >> as valid species; implied as new species
 1917 Strand: 83 (descriptions in German) >> as doubtfully valid species
 1928 Hatch: 153 (catalog) >> *Incertae sedis*

= *brunnipes* Gradl, 1882 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: not mentioned

Type depository: NMPC: Praha? [not found]

- 1882 Gradl: 331 (description of variation in German) >> Orig. comb.: *Necrophorus interruptus* var. *brunnipes* [!S]
 1898 Everts: 413
 1910 Jakobson: 612 (checklist in Russian) >> as *N. interruptus* var. *brunnipes*
 1916 Pasquet: 153 (description of variation in French)
 1924 Portevin: 290 (key, descriptions in French) >> as *N. fossor* var. *brunnipes*
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *brunnipes*
 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> as *N. fossor* var. *brunnipes*
 1928 Hatch: 143 (catalog) >> as *N. fossor* var. *brunnipes*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as *N. fossor* ab. *brunnipes*
 1965 Báguena: 52 (checklist in Spanish) >> as *N. fossor* ab. *brunnipes*
 1989 Núñez et al.: 439 (checklist in Spanish (English summary)) >> as *N. interruptus* var. *brunnipes*

= *centrimaculatus* Reitter, 1895 NEW STATUS as absolute syn. of *N. interruptus*
 Stephens

Type locality: "Göttingen" [Germany; descrip.]

Type depository: HNHM: Budapest? [not found]

- 1895a Reitter: 200 (description of variation in German) >> Orig. comb.: *Necrophorus interruptus* var. *centrimaculatus* [!S]
 1895b Reitter: 326 (description of variation in German) >> as *N. interruptus* var. *centrimaculatus*
 1898 Everts: 413
 1899 Ganglbauer: 164 (descriptions, in German) >> as *N. interruptus* var. *centrimaculatus*
 1906 Heyden et al.: 247 (checklist) >> as *N. interruptus* var. *centrimaculatus*
 1909 Reitter: 240 (in German) >> as *N. interruptus* var. *centrimaculatus*
 1910 Jakobson: 612 (checklist in Russian) >> as *N. interruptus* var. *centrimaculatus*
 1913 Kuhnt: 335 (in German)
 1916 Pasquet: 153 (description of variation in French)
 1916 Schaufuss: 273 (checklist in German)
 1924 Portevin: 289 (key, descriptions in French) >> as *N. fossor* ab. *centrimaculatus*
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *centrimaculatus*
 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> as *N. fossor* ab. *centrimaculatus*
 1928 Hatch: 143 (catalog) >> as *N. fossor* ab. *centrimaculatus*
 1930 Roubal: 241 (catalog in Czech) >> as *N. interruptus* var. *centrimaculatus*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as *N. fossor* ab. *centrimaculatus*
 1965 Báguena: 51 (checklist in Spanish) >> as *N. fossor* ab. *centrimaculatus*
 1989 Núñez et al.: 439 (checklist in Spanish (English summary)) >> as *N. interruptus* var. *centrimaculatus*

= *corsicus* Laporte, 1832 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: “de Corse” [France: Island of Corsica; descrip.]

Type depository: unknown

- 1832 Laporte: 399 (descriptions in French) >> Orig. comb.: *Necrophorus Corsicus* [!N, S]
- 1833 Dejean: 117 (catalog in French) >> as valid species; auth. incorrectly attrib. Dejean
- 1840 Laporte: 2 (descriptions in French) >> as valid species
- 1849 Gaubil: 55 (catalog in French) >> as valid species
- 1854 Lacordaire: 199 (biology, catalog in French) >> as valid species
- 1859 Schaum: 36 (catalog in German) >> as valid species
- 1861 Strauch: 37 (catalog in French) >> as valid species
- 1862 Schaum: 38 (catalog in German) >> as valid species
- 1863 Marseul: 88 (catalog in French) >> as valid species
- 1866 Marseul: 38 (catalog in French) >> as valid species
- 1868 Gemminger & Harold: 718 (catalog) >> as valid species
- 1868 Stein: 42 (catalog in Latin) >> as valid species
- 1874 Seidlitz: 216 (key in German) >> as valid species
- 1877 Stein & Weise: 61 (catalog in Latin) >> as valid species
- 1883 Heyden et al.: 73 (checklist) >> as valid species
- 1884 Marseul: 189 (key, descriptions in French) >> as valid species
- 1884 Reitter: 86 (descriptions in German) >> as *Silpha corsica*; as valid species
- 1885 Marseul: 169 (catalog in French) >> as *N. corsica*; as valid species
- 1888 Seidlitz: 312 (key in German) >> as valid species, misspelled as *Necrophagus corsicus*
- 1889 Seidlitz: 328 (key in German) >> as valid species; misspelled as *Necrophagus corsicus*
- 1891 Heyden et al.: 138 (checklist) >> as valid species
- 1895b Reitter: 325 (description of variation in German) >> as valid species
- 1896 Acloque: 241 (key in French) >> as valid species
- 1900 Meier: 218 (description of variation in German) >> as valid species
- 1902 Schneider: 40 (description of variation in German)
- 1906 Heyden et al.: 247 (checklist) >> as valid species
- 1907 Schulz: 44 (description of variation in German) >> as valid species; description of variation: 16 unavailable names
- 1910 Jakobson: 612 (checklist in Russian) >> as *N. interruptus* subsp. *corsicus*
- 1914 Sainte-Claire-Deville: 162 (checklist, discussion of variation in French) >> as *N. interruptus* subsp. *corsicus*
- 1916 Pasquet: 159 (description of variation in French)
- 1925 Winkler: 264 (catalog) >> as *N. interruptus* subsp. *corsicus*
- 1926 Porta: 332 (key, checklist in Italian) >> as *N. interruptus* subsp. *corsicus*
- 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> as *N. interruptus* subsp. *corsicus*
- 1928 Hatch: 144 (catalog) >> as *N. interruptus* subsp. *corsicus*
- 1929 Portevin: 539 (key, intraspecific variation in French) >> as *N. interruptus* subsp. *corsicus*

- 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. fossor*
 1994 Bertin & Fallaci: 219 (checklist in Italian (English summary)) >> as *N. interruptus* subsp. *corsicus*
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. fossor*
 2002 Nikolajev & Kozminykh: 117 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. fossor*

= *fossor* Erichson, 1837 NEW SYNONYM of *N. interruptus* Stephens

Type locality: not mentioned

Type depository: ZMHB: Berlin?

- 1837 Erichson: 224 (species-group catalog in German) >> Orig. comb.: *Necrophorus fossor* [!N, S]
 1838 Sturm: 66 (in German) >> as valid species
 1839 Stephens: 114 (descriptions) >> as syn. of *N. interruptus*
 1841a Heer: 387 (descriptions in German) >> as *N. ruspator* var. *fossor*
 1841b Heer: 9 (checklist in German) >> as *N. ruspator* var. *fossor*
 1846b Küster: nr. 37 (catalog in German (English summary)) >> as valid species
 1847 Rosenhauer: 105 (checklist in German) >> as valid species
 1849 Bach: 153 (checklist, brief descriptions in German) >> as valid species
 1849 Gaubil: 55 (catalog in French) >> as valid species
 1849 Redtenbacher: 140 (catalog in German)
 1854 Lacordaire: 199 (biology, catalog in French) >> as valid species
 1855 Fairmaire & : 292
 1858 Redtenbacher: 289 (catalog in German) >> as valid species
 1859 Gutfleisch & Bose: 202 (key, descriptions in German) >> as valid species
 1859 Schaum: 36 (catalog in German) >> as valid species
 1862 Schaum: 38 (catalog in German) >> as syn. of *N. interruptus*
 1862 Thomson: 10 (descriptions) >> as valid species
 1863 Grenier: 13 (checklist in French) >> as syn. of *N. interruptus*
 1863 Marseul: 88 (catalog in French) >> as valid species
 1864 Scriba: 377 (descriptions in German)
 1865 Power: 198 (revision: key, descriptions & catalog) >> as syn. of *N. interruptus*
 1866 Marseul: 38 (catalog in French) >> as valid species
 1866 Michow: 411 (description of variation in German)
 1868 Gemminger & Harold: 718 (catalog) >> as syn. of *N. interruptus*
 1868 Stein: 42 (catalog in Latin) >> as syn. of *N. interruptus*
 1869 Stierlin & Gautard: 116 (checklist in German) >> as valid species
 1870 Rye: 182 (comment [translation of Michow 1866]) >> suggested as a form of *Gallicus* following Michow (1866)
 1870 Vollenhoven et al.: 54 (checklist in Dutch) >> as valid species
 1873 Klika: 127 (checklist in Czech) >> as valid species
 1874 Seidlitz: 216 (key in German) >> as valid species
 1876b Kraatz: 395 (morphology: clypeus in German) >> as syn. of *N. interruptus*
 1877 Hickel & Dragicsevics: 27 (checklist in French)
 1877 Stein & Weise: 61 (catalog in Latin) >> as syn. of *N. interruptus*
 1882 Gradl: 331 (description of variation in German) >> as syn. of *N. interruptus*

- 1883 Heyden et al.: 73 (checklist) >> as syn. of *N. interruptus*
- 1884 Marseul: 188 (key, descriptions in French) >> as valid species
- 1884 Reitter: 87 (descriptions in German) >> as *Silpha fossor*; as syn. of *N. interruptus*
- 1885 Marseul: 169 (catalog in French) >> as *Necrophorus fossor*; as valid species
- 1885 Thomson: 66 (key, checklist in Swedish) >> as valid species
- 1888 Fairmaire: 115 (checklist, annotated in French) >> as valid species
- 1888 Seidlitz: 313 (key in German) >> as syn. of *N. interruptus*; misspelled as *Necrophagus fossor*
- 1889 Seidlitz: 329 (key in German) >> as syn. of *N. interruptus*; misspelled as *Necrophagus fossor*
- 1890 Fauvel: 348 (descriptions in French) >> as syn. of *N. interruptus*
- 1891 Heyden et al.: 138 (checklist) >> as syn. of *N. interruptus*
- 1892 Xambeu: 147 (biology in French) >> "Larva" - Hatch 1928
- 1893 Heyden: 51 (checklist in German) >> as syn. of *N. interruptus*
- 1896 Acloque: 241 (key in French) >> as valid species
- 1898 Xambeu: 48 (morphology, larval stages in French) >> "Larva; egg" - Hatch 1928
- 1899 Ganglbauer: 163 (key, descriptions, morphology, larval stages in German) >> as syn. of *N. interruptus*
- 1901 Carret: 331 (description of variation in French) >> as valid species & senior syn. of *N. interruptus*
- 1905a Portevin: 51 (nomenclature in French) >> as syn. of *N. interruptus*
- 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. interruptus*
- 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. interruptus*
- 1924 Portevin: 289 (key, descriptions in French) >> as valid species
- 1925 Weber: 124
- 1925 Winkler: 264 (catalog) >> as syn. of *N. interruptus*
- 1926a Portevin: 256 (revision: key, descriptions & catalog in French) >> as valid species & senior syn. of *N. interruptus*
- 1927b Hatch: 357 (revision: key, descriptions & catalog) >> as valid species
- 1928 Hatch: 142 (catalog) >> as valid species & senior syn. of *N. interruptus*
- 1930 Kieseritzky: 64 (descriptions in Russian (German summary)) >> as syn. of *N. interruptus*
- 1933 Pukowski: 518-586 (biology, ecology in German) >> as valid species
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
- 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as valid species & senior syn. of *N. interruptus*
- 1934 Peyerimhoff: 333 (distribution note in French) >> as valid species & senior syn. of *N. interruptus*
- 1934b Pukowski: 53-60 (morphology, larval stages in German) >> as valid species; description of larva
- 1935 Balduf: 70 (biology, ecology, behavior) >> as valid species
- 1955 Mroczkowski: 22 (key, descriptions in Polish) >> as valid species
- 1964b Roussel: 111 (morphology, larval stages in French) >> as valid species; focal species
- 1965 Báguena: 51 (checklist in Spanish) >> as valid species
- 1965 Lane & Rothschild: 156 (biology, behavior) >> as valid species
- 1965a Roussel: 67 (morphology, larval stages in French (English summary)) >> as valid species; focal species

- 1965b Roussel: 6452 (morphology, larval stages in French) >> as valid species; focal species
- 1966a Mroczkowski: 334 (checklist) >> as valid species
- 1970 Gersdorf: 367 (morphology: female genitalia in German) >> as syn. of *N. interruptus*
- 1971 Freude: 194 (key in German) >> as valid species
- 1971 Mroczkowski: 214 (biology, ecology in Polish (Russian & English summary)) >> as valid species
- 1975a Emetz: 59 (checklist in German) >> as valid species
- 1975b Emetz: 104 (checklist in Russian) >> as valid species and senior syn. of *N. interruptus*
- 1978 Mroczkowski: 239 (biology, ecology in Polish (Russian & German summary)) >> as valid species
- 1979 Silfverberg: 12 (checklist, distribution) >> as valid species
- 1981 Rozner: 104 (checklist in Hungarian) >> as valid species
- 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary)) >> as valid species; focal species
- 1985 Zahradník: 123 (catalog, annotated & figured in German) >> as valid species
- 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
- 1987 Lucht: 67 (catalog in German) >> as valid species
- 1989 Koch: 164 (biology, ecology in German) >> as valid species
- 1989 Lafer: 340 (key, descriptions, description of variation in Russian) >> as valid species
- 1990 Erbeling: 116 (biology, ecology in German (English summary)) >> as valid species
- 1990 Kentner & Streit: 26 (biology, ecology in English (German summary)) >> as valid species
- 1990 Zahradník: 123 (key in Spanish) >> as valid species
- 1992 Kozminykh: 64 (checklist in Russian) >> as valid species
- 1992 Kozminykh & Esjunin: 68 (checklist in Russian) >> as valid species
- 1992 Růžička: 130 (key, descriptions, morphology, larval stages, phylogenetics) >> as valid species; description of larval instars
- 1992 Silfverberg: 14 (checklist, distribution in English (Finnish & Swedish summaries)) >> as valid species
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as valid species
- 1993 Růžička: 34 (checklist, distribution in English & Czech) >> as valid species; as *N. fossor* subsp. *fossor*
- 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary)) >> as valid species
- 1994 Růžička: 69 (biology, ecology) >> as valid species
- 1995 Angelini et al.: 10 (checklist, distribution in Italian) >> as valid species
- 1995 Bocáková: 24 (biology, ecology in Czech (English summary)) >> as valid species; as *N. fossor* subsp. *fossor*
- 1995 Dapsio: 120 (checklist in Lithuanian) >> as valid species
- 1995 Kozminykh: 109 (key in Russian) >> as valid species
- 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as valid species
- 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English) >> as valid species

- 1996 Hansen: 93 (checklist, distribution in Danish & English) >> as valid species
 1996 Palestini et al.: 435 (larval descriptions, phylogenetics) >> as valid species
 1997 Eggert & Müller: 218 (biology, review of: ecology, behavior) >> as valid species
 1997 Klausnitzer: 47 (morphology, larval stages in German) >> as valid species
 1997 Kozminykh: 64 (checklist in Russian) >> as valid species
 1997 Telnov et al. (checklist) >> as valid species
 1998 Háva et al.: 179 (distribution note in English (Czech summary)) >> as valid species
 1998 Kocárek: 387 (biology, ecology) >> as valid species
 1998 Pushkin & Sigida: 84 (biology, ecology in Russian) >> as valid species
 1999 Růžička: 318 (biology, ecology) >> as valid species
 2000a Parkhomenko: 92 (morphology, larval stages in Ukrainian (English summary))
 >> as valid species
 2000b Parkhomenko: 164 (morphology, larval stages in Ukrainian (English summary))
 >> as valid species
 2001 Kocárek: 431-438 (biology, ecology) >> as valid species
 2001 Nishikawa: 81 (larval descriptions, phylogenetics in English (Japanese summary)) >> as valid species; larva compared to *N. maculifrons*
 2002 Nikolajev & Kozminykh: 117 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as valid species

= *funereus* Gén \acute{e} , 1839 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: unknown

Type depository: unknown

- 1839 Gén \acute{e} : 58 (descriptions in Latin) >> Orig. comb.: *Necrophorus funereus* [!N]
 1849 Gaubil: 55 (catalog in French) >> as valid species
 1854 Lacordaire: 199 (biology, catalog in French) >> as valid species
 1859 Schaum: 36 (catalog in German) >> as syn. of *N. corsicus*
 1862 Schaum: 38 (catalog in German) >> as syn. of *N. corsicus*
 1863 Marseul: 88 (catalog in French) >> as syn. of *N. corsicus*
 1868 Gemminger & Harold: 718 (catalog) >> as syn. of *N. corsicus*
 1868 Stein: 42 (catalog in Latin) >> as syn. of *N. corsicus*
 1877 Stein & Weise: 61 (catalog in Latin) >> as syn. of *N. corsicus*
 1883 Heyden et al.: 73 (checklist) >> as syn. of *N. corsicus*
 1885 Marseul: 169 (catalog in French) >> as syn. of *N. corsicus*
 1891 Heyden et al.: 138 (checklist) >> as syn. of *N. corsicus*
 1906 Heyden et al.: 247 (checklist) >> as *N. corsicus* var. *funereus*
 1907 Schulz: 44 (description of variation in German) >> as *N. corsicus* ab. *funereus*
 1910 Jakobson: 612 (checklist in Russian) >> as absolute syn. of *N. interruptus* subsp. *corsicus*
 1914 Sainte-Claire-Deville: 162 (checklist, discussion of variation in French) >> as *N. interruptus* subsp. *corsicus* ab. *funereus*
 1922 Sherborn: 2568 (catalog - index)
 1924 Portevin: 290 (key, descriptions in French) >> as *N. fossor* subsp. *funereus*; valid subspecies
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *funereus*

- 1926a Portevin: 257 (revision: key, descriptions & catalog in French) >> as syn. of *N. interruptus* subsp. *corsicus*
 1928 Hatch: 144 (catalog) >> as syn. of *N. interruptus* subsp. *corsicus*

= *gallicus* Jacquelin du Val, 1860 REVISSED SYNONYM of *N. interruptus* Stephens

Type locality: unknown

Type depository: MNHN: Paris [not found]

- 1860 Jacquelin du Val: 139 (descriptions in French) >> Orig. comb.: *Necrophorus Gallicus* [!N]
 1862 Schaum: 38 (catalog in German) >> as valid species
 1863 Grenier: 13 (checklist in French) >> as valid species
 1863 Marseul: 88 (catalog in French) >> as valid species
 1864 Scriba: 377 (descriptions in German)
 1865 Power: 198-201 (revision: key, descriptions & catalog) >> as valid species
 1866 Marseul: 38 (catalog in French) >> as valid species
 1866 Michow: 412 (description of variation in German)
 1867 Grenier: x
 1868 Gemminger & Harold: 718 (catalog) >> as *N. interruptus* var. *gallicus*
 1868 Stein: 42 (catalog in Latin) >> as valid species
 1870 Rye: 182 (comment [translation of Michow 1866]) >> suggested as the senior syn. of *N. fossor* following Michow (1866)
 1873 Michow: 11, 21
 1874 Cox: 407 (key, descriptions (brief)) >> as *N. interruptus* var. *gallicus*
 1874 Seidlitz: 216 (key in German) >> as syn. of *N. fossor*
 1877 Stein & Weise: 61 (catalog in Latin) >> as *N. interruptus* var. *gallicus*
 1883 Heyden et al.: 73 (checklist) >> as *N. interruptus* var. *gallicus*
 1884 Marseul: 188 (key, descriptions in French) >> as syn. of *N. fossor*
 1885 Marseul: 169 (catalog in French) >> as syn. of *N. fossor*
 1885 Reitter: 320 (in German)
 1888 Seidlitz: 313 (key in German) >> as *N. interruptus* var. *gallicus*; misspelled as *Necrophagus gallicus*
 1889 Fowler: 45 (descriptions, catalog)
 1889 Seidlitz: 329 (key in German) >> as *N. interruptus* var. *gallicus*; misspelled as *Necrophagus gallicus*
 1891 Heyden et al.: 138 (checklist) >> as syn. of *N. interruptus*
 1899 Ganglbauer: 164 (in German) >> as syn. of *N. interruptus*
 1901 Carret: 331 (description of variation in French) >> as syn. of *N. fossor*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. interruptus*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. interruptus*
 1913 Fowler & Donisthorpe: 247
 1916 Schaufuss: 273 (checklist in German)
 1926a Portevin: 256 (revision: key, descriptions & catalog in French) >> as syn. of *N. fossor*
 1928 Hatch: 142 (catalog) >> as syn. of *N. fossor*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. fossor*

- 1965 Báuena: 51 (checklist in Spanish) >> as syn. of *N. fossor*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. fossor*
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. fossor*
 2002 Nikolajev & Kozminykh: 117 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. fossor*

= *infusaticornis* Portevin, 1924 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: unknown

Type depository: MNHN: Paris [not found]

- 1924 Portevin: 289 (key, descriptions in French) >> Orig. comb.: *Necrophorus fossor infusaticornis* [!N, S]
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *infusaticornis*
 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> as *N. fossor* var. *infusaticornis*
 1928 Hatch: 143 (catalog) >> as *N. fossor* var. *infusaticornis*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as *N. fossor* ab. *infusaticornis*
 1965 Báuena: 52 (checklist in Spanish) >> as *N. fossor* ab. *infusaticornis*
 1989 Núñez et al.: 439 (checklist in Spanish (English summary)) >> as *N. interruptus* var. *infusaticornis*

= *laportei* Meier, 1900 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: Mte. d'Oro, Corsica" [France; descrip.]

Type depository: ZMUH: Hamburg

- 1900 Meier: 219 (description of variation in German) >> Orig. comb.: *N. corsicus* var. *laportei* [!N, S]
 1902 Schneider: 46 (description of variation in German) >> as *N. corsicus* ab. *laportei*
 1906 Heyden et al.: 247 (checklist) >> as *N. corsicus* var. *laportei*
 1914 Sainte-Claire-Deville: 162 (checklist, discussion of variation in French) >> as *N. interruptus* subsp. *corsicus* ab. *laportei*
 1928 Hatch: 144 (catalog) >> as *N. fossor* subsp. *corsicus* ab. *laportei*

= *nigricans* Pasquet, 1916 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: Evreux" [France: Eure: 49.05°N, 1.18°E; label]

Type depository: MNHN: Paris [!] holotype female

- 1916 Pasquet: 153 (description of variation in French) >> Orig. comb.: *Necrophorus interruptus* var. *nigricans* [!M]
 1924 Portevin: 289 (key, descriptions in French) >> Revised syn./status as *N. fossor* ab. *nigricans*
 1925 Winkler: 264 (catalog) >> Revised syn. as *N. interruptus* ab. *nigricans*
 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> Revised syn. as *N. fossor* ab. *nigricans*
 1928 Hatch: 143 (catalog) >> as *N. fossor* ab. *nigricans*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as *N. fossor* ab. *nigricans*
 1965 Báuena: 51 (checklist in Spanish) >> as *N. fossor* ab. *nigricans*

= *pasqueti* Pic, 1917 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: unknown

Type depository: MNHN: Paris [not found]

- 1917b Pic: 21 (description of variation in French) >> Orig. comb.: *Necrophorus interruptus* var. *pasqueti*
 1924 Portevin: 289 (key, descriptions in French) >> as *N. fossor* ab. *Pasqueti*
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *pasqueti*
 1926a Portevin: 264 (revision: key, descriptions & catalog in French) >> as *N. fossor* ab. *Pasqueti*
 1928 Hatch: 143 (catalog) >> as *N. fossor* ab. *Pasqueti*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as *N. fossor* ab. *pasqueti*
 1965 Báguena: 51 (checklist in Spanish) >> as *N. fossor* ab. *pasqueti*

= *suturalis* Motschulsky, 1860 REVISED SYNONYM of *N. interruptus* Stephens

Type locality: “de la Géorgie” [descrip.]

Type depository: ZMUM: Moscow

- 1860 Motschulsky: 126 (descriptions in French) >> Orig. comb.: *Necrophorus suturalis* [!N, S]
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1884 Marseul: 191 (key, descriptions in French) >> as *N. sepultor* var. *suturalis*
 1885 Marseul: 169 (catalog in French) >> as *N. sepultor* var. *suturalis*
 1895b Reitter: 326 (description of variation in German) >> as *N. interruptus* var. *suturalis*
 1899 Ganglbauer: 163 (descriptions in German) >> as *N. interruptus* var. *suturalis*
 1906 Heyden et al.: 247 (checklist) >> as *N. interruptus* var. *suturalis*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. interruptus*
 1916 Pasquet: 164 (description of variation in French)
 1922 Everts: 183
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *suturalis*
 1926a Portevin: 255 (revision: key, descriptions & catalog in French) >> as *N. investigator* ab. *suturalis*
 1928 Hatch: 140 (catalog) >> as *N. investigator* ab. *suturalis*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. investigator* subsp. *investigator* ab. *suturalis*

= *trimaculatus* Gradl, 1882 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: not mentioned

Type depository: NMPC: Praha? [not found]

- 1882 Gradl: 331 (description of variation in German) >> Orig. comb.: *Necrophorus interruptus* Steph. var. *trimaculatus* [!S]
 1883 Heyden et al.: 73 (checklist) >> as *N. vestigator* var. *trimaculatus*
 1884 Marseul: 187 (key, descriptions in French) >> as *N. vestigator* var. *trimaculatus*
 1885 Marseul: 169 (catalog in French) >> as *N. vestigator* var. *trimaculatus*

- 1891 Heyden et al.: 139 (checklist) >> as syn. of *N. vestigator* var. *interruptus*
 1898 Everts: 413
 1906 Heyden et al.: 247 (checklist) >> as *N. vestigator* var. *trimaculatus*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. interruptus*
 1916 Pasquet: 152 (description of variation in French)
 1924 Portevin: 290 (key, descriptions in French) >> as *N. fossor* ab. *trimaculatus*
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *trimaculatus*
 1926 Porta: 333 (key, checklist in Italian) >> as *N. vestigator* var. *trimaculatus*
 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> as *N. fossor* ab. *trimaculatus*
 1928 Hatch: 143 (catalog) >> as *N. fossor* ab. *trimaculatus*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as *N. fossor* ab. *trimaculatus*
 1965 Báguena: 51 (checklist in Spanish) >> as *N. fossor* ab. *trimaculatus*
 1989 Núñez et al.: 439 (checklist in Spanish (English summary)) >> as *N. interruptus* var. *trimaculatus*

= *trinotatus* Reitter, 1911 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: “Croatien” [Croatia: 45.16°N, 15.5°E; syntype label] and “Quell. d. Jrbut” [syntype label]

Type depository: HNHM: Budapest [!] 2 syntypes

- 1911 Reitter: 106 (description of variation in German) >> Orig. comb.: *Necrophorus interruptus* var./ab. *trinotatus* [!N, S]
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *trinotatus*
 1926a Portevin: 256 (revision: key, descriptions & catalog in French) >> as syn. of *N. fossor* ab. *trimaculatus*
 1928 Hatch: 143 (catalog) >> as syn. of *N. fossor* ab. *trimaculatus*
 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as *N. fossor* ab. *trinotatus*

= *vodozi* Meier, 1900 NEW STATUS as absolute syn. of *N. interruptus* Stephens

Type locality: “Mte. d’Oro, Corsica” [France; descrip.]

Type depository: ZMUH: Hamburg

- 1900 Meier: 218 (description of variation in German) >> Orig. comb.: *Necrophorus corsicus* var. *vodozi* [!N, S]
 1902 Schneider: 46 (description of variation in German) >> as *N. corsicus* ab. *vodozi*
 1906 Heyden et al.: 247 (checklist) >> as *N. corsicus* var. *vodozi*
 1928 Hatch: 144 (catalog) >> as *N. fossor* subsp. *corsicus* ab. *vodozi*

Comments: Lectotype data for *Necrophorus interruptus* Stephens, 1830: 18 “gallicus” (male symbol)/ [ENGLAND]: no locality data, red rectangular label with double black border “LECTOTYPE *Necrophorus interruptus* (Stephens 1830) det. Sikes 1997” - male (London [BMNH]).

Paralectotype data “gallicus (female symbol)” / [ENGLAND]: no locality data, red rectangular label with double black border “PARALECTOTYPE *Necrophorus interruptus* (Stephens 1830) det. Sikes 1997” - 6 females (London [BMNH]).

Lectotype data for *Nicrophorus interruptus* var. *algericus* Pasquet, 1916: 154 "M. algericus Pasquet"/ red label: "TYPE" / Edough., (coll. A. Lamay) / red rectangular label with double black border "LECTOTYPE *Nicrophorus algericus* (Pasquet 1916) det. Sikes 1997" - male (Paris [MNHN]); pronotal width: 5.62 mm.

Paralectotype data "v. *algericus* co-type / red label: "TYPE" Edough., (coll. L. Bedel.) - female; v. *algericus* Pasq. Type *algericus* Pasq. [Madge's handwriting] red label: "TYPE" / [ALGERIA]: Kabylie Tizi-Ouzou, elev. 182 m, [36.72° ' N, 4.05° ' E,] - / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus algericus* (Pasquet 1916) det. Sikes 1997" male (Paris [MNHN]).

As discussed above (see *N. germanicus*) regarding the names proposed by Gistel (1848, 1857), usually treated as *nomina dubia*, we herein synonymyze *N. basalis* Gistel, 1848 [not Faldermann 1835] under *N. interruptus* Stephens.

As can be seen above, the species *N. interruptus* has been consistently referred to by two names throughout its taxonomic history: *N. fossor* Erichson, 1837 and *N. interruptus* Stephens, 1830, with *N. fossor* being considered the valid name more often than the reverse. Part of the confusion was certainly due to Portevin (1926a) erroneously listing *N. interruptus* Brullé (= *N. vestigator* Herschel) with the wrong date (1822 rather than 1832) which, if he had been correct, would have made *N. interruptus* Stephens 1830 a primary junior homonym. It is clear that Portevin (1926a) had not thought the year 1822 correct for *N. interruptus* Brullé because in the same work he treated *N. interruptus* Brullé as a synonym of its replacement name *N. Brullei* Jakobson (1910). Furthering the confusion, Hatch (1928) missed Portevin's error and copied it in his world catalog reversing the *N. interruptus* Brullé / *N. Brullei* Jakobson synonymy of Portevin (indicating he thought that the replacement name of Jakobson's was unnecessary because Brullé's name would not be a junior primary homonym based on the erroneous date of 1822). However, Portevin was incorrect (we have seen the original Brullé [1832] and confirmed the date) and despite the use of *N. fossor* as valid in dozens of publications, even as recently as Nishikawa (2001) and Nikolajev & Kozminykh (2002), *N. interruptus* Stephens is neither a forgotten name, nor a junior homonym, and is the older, and therefore the valid, name of this species.

The name *N. gallicus* Jacquelin du Val has been considered subordinate to *N. fossor* for most of its history. Because we are herein making *N. fossor* a junior synonym of *N. interruptus*, the name *N. gallicus* must now be considered a synonym of *N. interruptus*.

The name *N. corsicus* Laporte has been considered a subspecies of *N. interruptus* (*N. fossor*) for most of its recent history and was applied to a population of *N. interruptus* with greatly reduced elytral maculations on the islands of Corsica and Sardinia. Although allopatric and apparently diagnosable from the mainland population, and thus perhaps deserving of subspecific status, DSS has seen specimens from mainland Europe (e.g. labelled from Austria in the Vienna collection) with the same elytral pattern. We recommend that it be considered the allopatric island populations of *N. interruptus* because the elytral pattern is apparently not restricted to only those islands.

The name *N. algericus* was given by Pasquet to a population of *N. interruptus* from Northern Africa. This population seems to consistently have the pubescence of the seventh abdominal tergum darker and shorter than that normally seen in European *N. interruptus*. However, *N. interruptus* is a widespread species and shows variation in the pubescence length and darkness on the seventh abdominal tergum with some European individuals showing the same states as seen in the African population. Nevertheless, this allopatric population could represent a distinct species or subspecies, albeit closely related to *N. interruptus*.

Throughout most of the history of the name *N. suturalis* Motschulsky it has been treated as a junior synonym of either *N. investigator* or *N. interruptus*. We transfer this name from synonymy under *N. investigator* to synonymy under *N. interruptus*.

Nicrophorus investigator Zetterstedt, 1824

Type locality: unknown

Type depository: MZLU: Lund

Distribution: Holarctic: Europe, n India, (Kashmir), northern & western (mountainous) North America, Korea, Japan, Mongolia, China, Russia: Siberia, Sakhalin, Kuriles, Ussuri reg., Turkey, Uzbekistan, Tajikistan, Kazakhstan, Pakistan, Kyrgyzstan, Afghanistan, Iran, Turkmenistan, Transcaucasia

1824 Zetterstedt: 151 (descriptions) >> Orig. comb.: *Nicrophorus investigator* [!S]

1827 Gyllenhal: 308 (descriptions) >> Misidentification of *N. investigator* as *N. vestigator*

1829b Stephens: 75 (catalog) >> as valid species

1830 Stephens: 118 (biology, descriptions) >> citation of Gyll. 1827 misid

1833 Dejean: 117 (catalog in French) >> auth. attrib. MacLeay

1838 Zetterstedt: 109 (descriptions)

1842 Fischer von Waldheim: 9 (checklist) >> as valid species

1849 Gaubil: 55 (catalog in French) >> as syn. of *N. ruspator*

1858 Calwer: 106 (checklist, brief descriptions in German) >> as syn. of *N. ruspator*

1868 Gemminger & Harold: 718 (catalog) >> as valid species

1873 Michow: 7 (in German)

1877 Stein & Weise: 61 (catalog in Latin) >> as valid species

1880 Heyden: 86 (checklist in German) >> as valid species

1883 Heyden et al.: 73 (checklist) >> as valid species

1884 Marseul: 190 (key, descriptions in French) >> as syn. of *N. ruspator* var. *microcephalus*

1884 Reitter: 87 (descriptions in German) >> as valid species; as *Silpha investigator*

1885 Marseul: 169 (catalog in French) >> as syn. of *N. ruspator* var. *microcephalus*

1885 Reitter: 320 (in German)

1887 Reitter: 217 (descriptions in German) >> as *Silpha investigator*; compared to *N. praedator*

1888 Seidlitz: 313 (key in German) >> as *N. investigator*; misspelled as *Nicrophagus*

1889 Sahlberg: 19 (checklist in Swedish) >> as valid species

1889 Seidlitz: 329 (key in German) >> misspelled as *Nicrophagus investigator*

- 1891 Heyden et al.: 138 (checklist) >> as valid species
 1893 Heyden: 51 (checklist in German)
 1895b Reitter: 326 (description of variation in German)
 1896 Acloque: 241 (key in French)
 1896 Heyden: 38 (checklist in German)
 1898 Everts: 413
 1899 Ganglbauer: 164 (key, descriptions, morphology, in German)
 1899 Poppius: 58 (checklist in Swedish)
 1901 Carret: 328 (description of variation in French)
 1906 Heyden et al.: 247 (checklist)
 1909 Reitter: 240 (in German)
 1910 Jakobson: 612 (checklist in Russian)
 1911 Selous (biology)
 1913 Kniephof: 187 (in German)
 1913 Kuhnt: 335 (in German)
 1915 Jaques: 83 (biology, ecology) >> as *N. pustulatus* var. *investigator*
 1916 Pasquet: 143 (description of variation in French) >> as *N. investigator*
 1916 Schaufuss: 273 (checklist in German)
 1920 Portevin: 400 (descriptions in French)
 1922 Everts: 183
 1922 Hansen: 114,115 (key, descriptions, morphology, larval stages in Danish)
 1922 Henriksen: 256 (key) >> "Larva" - Hatch 1928
 1924 Portevin: 149 (key, descriptions in French)
 1925 Winkler: 264 (catalog)
 1926 Porta: 333 (key, checklist in Italian)
 1926a Portevin: 222 (revision: key, descriptions & catalog in French)
 1927a Hatch: 5 (key, descriptions, description of variation)
 1927b Hatch: 357 (revision: key, descriptions & catalog)
 1927 Marié: 70, 72 (biology, ecology in French) >> "Biology" - Hatch 1928
 1928 Hatch: 139 (catalog)
 1929 Kôno: 164 (checklist, annotated) >> as *N. investigator* subsp. *maritimus* Guer.
 1929 Portevin: 539 (key, intraspecific variation in French)
 1930 Kieseritzky: 63 (descriptions in Russian (German summary))
 1930 Roubal: 240 (catalog in Czech)
 1932 Hlisnikovsky: 28 (key, descriptions in German)
 1932 Joy: 466 (key)
 1933 Kano: 100 (checklist in Japanese (English summary)) >> misidentified as *N. maculifrons*
 1933 Pukowski: 518-586 (biology, ecology in German)
 1933 Rapp: 536 (biology, ecology, distribution in German)
 1933 Semenov-Tian-Shanskij: 153 (catalog in Russian & Latin) >> as type sp. of new subgenus *Necropter*
 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian)
 1933 Walsh: 29 (biology, ecology)
 1934 Brundin: 257 (biology, ecology in German)
 1934 Hatch & Rueter: 159 (key, distribution, variation, descriptions) >> as *N. investigator* subsp. *investigator*

- 1934b Pukowski: 53-60 (morphology, larval stages in German) >> description of larva
 1935 Balduf: 70 (biology, ecology, behavior)
 1935 Kôno: 1 (checklist, distribution in Japanese (English summary))
 1936 Cho: 155 (checklist in Korean)
 1937 Kaufmann: 232 (biology, ecology)
 1937 Mochizuki & Tsunekawa (checklist)
 1937 Wu (catalog)
 1938 Mori & Cho (checklist)
 1939 Masui (checklist)
 1940 Hatch: 235 (description of variation)
 1940 Šulc: 162 (morphology in Czech (German summary))
 1942 Roubal: 17 (description of variation in Czech) >> description of variation: 1
 unavailable name
 1943 Cooreman (biology, symbionts: mites in French)
 1944 Arnett: 5, 22 (morphology: female genitalia) >> female genitalia figured, pl. 3,
 fig. 8
 1944 Kôno: 84 (checklist in Japanese (German title))
 1945 Kloet & Hincks: 155 (checklist)
 1947 Arnett: 110 (catalog) >> as senior syn. of *N. melsheimeri*
 1949 Bliss: 201 (morphology: sexual dimorphism)
 1949 Horion: 77 (biology, ecology, distribution in German)
 1949 Mroczkowski: 196 (biology, ecology in Polish (English summary))
 1949 Pierce: 67 (fossils, descriptions)
 1951 Jaques: 83 (key, descriptions) >> as *N. pustulatus* var. *investigator*
 1952 Novak: 62 (checklist in Croatian) >> as valid species
 1955 Mroczkowski: 22 (key, descriptions in Polish)
 1955b Nakane: 54 (key, descriptions in Japanese)
 1955 Wachek (biology, parasites in German)
 1956 Osborne (biology, ecology)
 1957 Cho (catalog in Korean)
 1957 Hatch: 13 (description of variation)
 1958 Madge: 52 (revision: key, descriptions, ecology, distributions) >> as *N. investiga-*
tor subsp. *investigator*
 1959 Linssen: 162 (catalog)
 1960 Hansen et al.: 72 (checklist in Danish)
 1962 Boeckh: 214 (morphology: antennal in German)
 1963 Nakane: 75 (checklist, brief descriptions in Japanese)
 1964 Kamimura et al.: A20 (biology, ecology) >> incl. populations often desig. as *N.*
praedator
 1964 Petruška: 162 (biology, ecology in Czech (German summary))
 1965 Lane & Rothschild: 156 (biology, behavior)
 1966c Mroczkowski: 437 (checklist)
 1968 Hansen: 18 (key, descriptions in Danish)
 1968 Springett: 417-424 (biology, symbionts: mites) >> focal species
 1969 Evans (biology, ecology)
 1970 Franz: 214 (checklist, distribution in German)
 1970 Gersdorf: 366 (morphology: female genitalia in German)

- 1971 Freude: 194 (key in German)
- 1971 Mroczkowski: 213 (biology, ecology in Polish (Russian & English summary))
- 1972 Swan & Papp: 356 (description) >> brief description
- 1973 Blackwelder: 5 (checklist, synonymy)
- 1973 Schumacher: 65-75 (morphology: stridulatory files in German (English summary)) >> focal species
- 1974 Medvedev & Sosnina: 525 (biology, ecology) >> found in vole nest (Muridae: *Microtus arvalis* Pall.)
- 1975 Baldwin: 25 (key, description, distribution, ecology)
- 1975a Emetz: 60 (checklist in German)
- 1975b Emetz: 105 (checklist in Russian)
- 1975 Katakura & Fukuda: 78 (biology, ecology)
- 1975 Schneider: 223 (morphology, behavior: wing motion in German)
- 1976 Tischler: 100 (biology, ecology in German)
- 1977 Pope: 20 (checklist)
- 1978 Andre (biology, ecology in French)
- 1978 Burakowski et al.: 201 (catalog, distribution, synonymy in Polish)
- 1978 Kim: 65 (catalog, distribution)
- 1978 Mroczkowski: 239 (biology, ecology in Polish (Russian & German summary))
- 1979 Miller & Peck: 96 (fossils)
- 1979 Silfverberg: 12 (checklist, distribution)
- 1980 Arnett et al.: 129 (key, descriptions)
- 1980 Davis: 247 (biology, conservation)
- 1980 Easton: 121-123 (morphology: sexual dimorphism)
- 1980 Franssen: 46 (morphology: female genitalia in French) >> female genitalia figured
- 1980 Madge: 356 (catalog)
- 1980 Schawaller: 153 (checklist in German (English summary))
- 1981 Arnett & Jacques: plate 91 (field guide) >> brief description, photo
- 1981 Matis: 10 (distributional atlas in Russian) >> dot map of distribution in Russia
- 1981 Spriggs: 116 (descriptions, ecology)
- 1981 Šustek: 40 (key, descriptions, regional in Czech)
- 1982a Anderson: 261 (key, descriptions, morphology, larval stages)
- 1982c Korn: 207 (biology, symbionts: mites in German (English summary)) >> mite host
- 1982 Peck & Miller: 152 (nomenclature)
- 1982 Schawaller: 256 (checklist in German (English summary))
- 1983 Korn: 251 (biology, symbionts: mites in German (English summary)) >> mite host
- 1983 Putman: 17, 38-42 (biology, ecology)
- 1983 Sleeman (biology, symbionts: mites)
- 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary))
- 1984 Papp: 70 (descriptions) >> brief description
- 1985 Anderson & Peck: 61 (revision: key, descriptions & catalog)
- 1985 Katakura & Ueno: 463 (biology, ecology)
- 1985a Kurosawa: 248 (checklist) >> color habitus figure pl. 44
- 1985 Peck & Anderson: 275 (key, descriptions, phylogenetics)

- 1985 Zahradník: 123 (catalog, annotated & figured in German)
- 1986 Anderson & Peck: 283-297 (morphology: color variation) >> focal species
- 1986 Erbeling & Erbeling: 234 (biology, ecology in German)
- 1986 Fisher & Tuckerman: 22 (morphology: mimicry)
- 1986 Katakura et al.: 43-55 (biology, ecology)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1986 Peck: 44 (biology, behavior)
- 1987 Hunter et al.: 589 (comment: ecology)
- 1987 Jensen: 116 (biology, ecology in Danish (English summary))
- 1987 Lucht: 67 (catalog in German)
- 1987 Müller & Eggert: 297-304 (biology, behavior) >> focal species
- 1987 Peck & Kaulbars: 53 (checklist)
- 1987 Ryabukhin & Matis: 7 (key, descriptions, distributions in Russian)
- 1987 Staines: 16 (key, descriptions) >> brief descrip., not recorded from Maryland
- 1988 Blackith et al.: 30
- 1988 Müller & Eggert: 38 (biology, behavior in German)
- 1988 Otronen: 191-201 (biology, behavior) >> focal species
- 1989 Koch: 164 (biology, ecology in German)
- 1989 Lafer: 339 (key, descriptions, description of variation in Russian)
- 1990 Erbeling: 116 (biology, ecology in German (English summary))
- 1990 Hyatt: 136 (biology, symbionts: mites)
- 1990 Kentner & Streit: 26 (biology, ecology in English (German summary))
- 1990 Peck: 1123 (key)
- 1990 Zahradník: 123 (key in Spanish)
- 1991 Campbell: 85 (catalog, distribution)
- 1991 Laplante et al.: 29 (checklist in French)
- 1991 Ohkawara: 463-467 (biology, ecology in Japanese (English summary)) >> focal species
- 1992 Cho & Lee: 25 (revision: key, descriptions & catalog)
- 1992 Kozminykh: 64 (checklist in Russian)
- 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
- 1992 Růžička: 128 (key, descriptions, morphology, larval stages, phylogenetics) >> description of larval instars
- 1992 Silfverberg: 14 (checklist, distribution in English (Finnish & Swedish summaries))
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian)
- 1993 Peck & Miller: 7 (species-group catalog)
- 1993 Richter: 353 (biology, symbionts: mites in English (German summary))
- 1993 Růžička: 34 (checklist, distribution in English & Czech)
- 1994 Bertin & Fallaci: 218 (checklist in Italian (English summary))
- 1994 Blackman & Evans: 223 (biology, symbionts: mites)
- 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
- 1994 Růžička: 69 (biology, ecology)
- 1995 Angelini et al.: 10 (checklist, distribution in Italian)
- 1995 Cho & Lee (revision: key, descriptions & catalog in English (Korean summary))
- 1995 Dapsio: 120 (checklist in Lithuanian)
- 1995 Hines & Smith: 71 (biology, ecology) >> focal species

- 1995 Kozminykh: 110 (key in Russian)
- 1995 Kozminykh & Nemkov: 113 (catalog in Russian)
- 1995 Ôhara et al.: 68 (checklist in Japanese (English summary))
- 1995 Smith & Heese: 50-55 (biology, ecology, behavior) >> focal species
- 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English)
- 1996 Bertin & Lebboroni: 151 (checklist in Italian (English summary))
- 1996 Downie & Arnett: 356 (key, descriptions, regional)
- 1996 Hansen: 93 (checklist, distribution in Danish & English)
- 1996 Palestirini et al.: 435 (larval descriptions, phylogenetics)
- 1996 Ratcliffe: 70 (revision: key, descriptions & catalog)
- 1996 Růžička: 74 (checklist) >> first reliable record from Iran
- 1996 Schwarz: 137 (biology, symbionts: mites)
- 1997 Anderson et al.: 14 (checklist)
- 1997 Eggert & Müller: 218 (biology, review of: ecology, behavior)
- 1997 Hansen: 292, 334 (phylogenetics) >> dorsal habitus figured; larva figured
- 1997 Klausnitzer: 47 (morphology, larval stages in German)
- 1997 Kozminykh: 64 (checklist in Russian)
- 1997 Pushkin: 24 (biology, ecology in Russian)
- 1997 Pushkin & Charthenko: 62 (biology, ecology in Russian)
- 1997 Telnov et al. (checklist)
- 1998 Coyle & Larsen: 163 (biology, ecology)
- 1998 Harusawa: 35 (key in Japanese)
- 1998 Háva et al.: 179 (distribution note in English (Czech summary)) >> first confirmed record for Turkey
- 1998 Kocárek: 387 (biology, ecology)
- 1998 Ohkawara et al.: 553 (biology, ecology)
- 1998 Perreau: 85 (biology, ecology in French (English summary))
- 1998 Pushkin & Sigida: 84 (biology, ecology in Russian)
- 1998 Schwarz et al.: 164 (biology, symbionts: mites)
- 1998 Schwarz & Koulianos: 623 (biology, symbionts: mites)
- 1998b Scott: 602+ (biology, review of: ecology, behavior)
- 1999 Bertin & Lebboroni: 56 (checklist in Italian)
- 1999 De Jong & Chadwick: 843 (biology, ecology)
- 1999 Suzuki: 205 (biology, ecology, behavior)
- 2000 Bertin et al.: 130 (biology, ecology in Italian (English summary))
- 2000 Dobler & Müller: 392 (phylogenetics) >> CO1 based phylogeny
- 2000 Gwiazdowicz: 43 (biology, symbionts: mites) >> mite host
- 2000 Koulianos & Schwarz: 836-840 (biology, ecology, behavior)
- 2000 Nishikawa: 116 (checklist in English (Japanese summary))
- 2000a Parkhomenko: 92 (morphology, larval stages in Ukrainian (English summary))
- 2000b Parkhomenko: 164 (morphology, larval stages in Ukrainian (English summary))
- 2000 Sikes & Peck: 396 (descriptions, phylogenetics)
- 2000 Smith et al.: 290-298 (biology, ecology) >> focal species
- 2001 Kocárek: 431-438 (biology, ecology)
- 2001 Nishikawa: 81 (larval descriptions, phylogenetics in English (Japanese summary)) >> larva compared to *N. maculifrons*

- 2001 Smith et al.: 148-154 (biology, ecology, behavior) >> focal species; use of pre-existing burrows for burial
 2001 Smith & Merrick: 173-180 (biology, ecology, behavior) >> focal species
 2001 Wilhelm et al.: 435-442 (biology, ecology) >> focal species
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= aleuticus Gistel, 1848

Type locality: "Alaska, Sitka" [USA; descrip.]

Type depository: ZSMC: München?

- 1848 Gistel: 190 (descriptions in German) >> Orig. comb.: *Necrophorus aleuticus*
 1857b Gistel: 565 (in German) >> as syn. of *N. maritimus*
 1917 Strand: 83 (descriptions in German) >> as syn. of *N. maritimus*
 1928 Hatch: 141 (catalog) >> as syn. of *N. investigator*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. investigator* subsp. *maritimus*
 1985 Anderson & Peck: 61 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investigator*, auth. incorrectly attrib. Guér.
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. investigator*
 1996 Ratcliffe: 70 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. investigator*

= baeckmanni Kieseritzky, 1930 CONFIRMED as SYNONYM of *N. investigator*
 Zetterstedt

Type locality: "Sibiria occid.: distr. Semipalatinsk, Buchtarma" [?=Bukhtarma river, ne Kazakhstan; label]

Type depository: ZMAS: St. Petersburg [!] holotype male

- 1930 Kieseritzky: 64 (descriptions in Russian (German summary)) >> Orig. comb.: *Necrophorus baeckmanni* [!N, S]
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian) >> as valid species
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
 1992 Kozminykh: 64 (checklist in Russian) >> as syn. of *N. investigator*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investigator*
 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. investigator*
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. investigator*

= confossor LeConte, 1854 CONFIRMED as SYNONYM of *N. investigator*
 Zetterstedt

Type locality: "Prairie Paso" [USA: Washington state; descrip., no data on label]

Type depository: MCZC: Cambridge [!] holotype female

- 1854 LeConte: 20 (descriptions) >> Orig. comb.: *Necrophorus confossor* [!S]
 1866a LeConte: 367 (nomenclature) >> as *N. maritimus* var. *confossor*
 1868 Gemminger & Harold: 718 (catalog) >> as *N. maritimus* var. *confossor*
 1873 Crotch: 37 (checklist) >> as *Silpha confossor*, as syn. of *Silpha melsheimeri*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus*
 sensu Horn 1880
 1920 Leng: 86 (catalog) >> as syn. of *N. pustulatus* subsp. *melsheimeri*
 1926a Portevin: 255 (revision: key, descriptions & catalog in French) >> as syn. of *N.*
investigator
 1928 Hatch: 140 (catalog) >> as syn. of *N. investigator*; auth. attrib. incorrectly to
 Mots.
 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian)
 >> as syn. of *N. investigator*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. investigator*; auth.
 attrib. incorrectly to Mots.
 1982 Peck & Miller: 152 (nomenclature) >> as syn. of *N. investigator*
 1985 Anderson & Peck: 61 (revision: key, descriptions & catalog) >> as syn. of *N.*
investigator
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investi-*
gator
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. investigator*
 1996 Ratcliffe: 70 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in
 Russian (English summary)) >> as syn. of *N. investigator*

= *funerator* Fauvel, 1890 [unjust. emendation of *N. funeror* Reitter] NEW STATUS
 as absolute syn. of *N. investigator* Zetterstedt

Type locality: see *N. funeror* Reitter

Type depository: see *N. funeror* Reitter

- 1890 Fauvel: 348 (descriptions in French) >> Orig. comb.: *Necrophorus funerator*;
 Unjustified emendation of *Silpha funeror*. [!S]
 1926a Portevin: 255 (revision: key, descriptions & catalog in French) >> as objective
 syn. of *N. investigator* ab. *funeror*
 1928 Hatch: 141 (catalog) >> as syn. of *N. investigator* ab. *funeror*
 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian)
 >> as *N. investigator* ab. *funeror*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. investigator* subsp. *investiga-*
tor ab. *funerator*

= *funeror* (Reitter, 1884) NEW STATUS as absolute syn. of *N. investigator* Zetter-
 stedt

Type locality: "Im westlichen Caucasus-Gebirgsstocke: Swanetien" [Georgia; descrip
 & label]

Type depository: HNHM: Budapest [!] 3 syntypes

- 1884 Reitter: 87 (descriptions in German) >> Orig. comb.: *Silpha funeror* [!N, S]
 1885 Reitter: 321 (in German)
 1891 Heyden et al.: 138 (checklist) >> as valid species: *Necrophorus funeror*
 1895b Reitter: 326 (description of variation in German) >> as N. investigator var. *funeror*
 1899 Ganglbauer: 164 (descriptions, in German) >> as N. investigator var. *funeror*
 1901 Carret: 331 (description of variation in French) >> as doubtfully valid
 1906 Heyden et al.: 247 (checklist) >> as N. investigator var. *funeror*
 191 Jakobson: 612 (checklist in Russian) >> as N. investigator var. *funeror*
 1916 Pasquet: 158 (description of variation in French)
 1916 Schaufuss: 273 (checklist in German)
 1922 Everts: 183
 1924 Portevin: 149 (key, descriptions in French) >> as N. investigator ab. *funeror*
 1925 Winkler: 264 (catalog) >> as N. investigator ab. *funeror*
 1926a Portevin: 222 (revision: key, descriptions & catalog in French) >> as N. investigator ab. *funeror*
 1927b Hatch: 358 (revision: key, descriptions & catalog) >> as N. investigator ab. *funeror*; specimens not seen by Hatch
 1928 Hatch: 141 (catalog) >> as N. investigator ab. *funeror*
 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian) >> as N. investigator ab. *funeror*
 1944 Arnett: 5 (morphology: female genitalia) >> as N. investigator subsp. *investigator* ab. *funeror*
 1992 Kozminykh: 64 (checklist in Russian) >> as N. investigator subsp. *funeror*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as N. investigator subsp. *funeror*
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as N. investigator subsp. *funeror*

= *grahami* Swan & Papp, 1972 NEW SYNONYM of *N. investigator* Zetterstedt

Type locality: not mentioned [Swan & Papp 1972]; “Masset, B. C.” [Hatch 1927b]

Type depository: NMNH: Washington D. C. [!] holotype

- 1927b Hatch: 358 (revision: key, descriptions & catalog) >> described in key; as *N. investigator maritimus* ab. *grahami*; unavailable name
 1957 Hatch: 13 (description of variation) >> as *N. investigator maritimus* ab. *grahami*; unavailable name
 1972 Swan & Papp: 357 (description) >> as *N. investigator* subsp. *grahami*, no attribution, not indicated as new; *Nicrophorus* [!N]
 1984 Papp: 71 (descriptions) >> as valid species

= *infodiens* Mannerheim, 1853

Type locality: “insula Unalashka” [USA: Alaska; descrip.]; “Kadjak” [USA: Alaska; syntype (Silfverberg 1987)]

Type depository: MZHF: Helsinki 1 syntype (holotype?)

- 1853 Mannerheim: 170 (descriptions in German) >> Orig. comb.: *Necrophorus infodiens* [!N, S]

- 1868 Gemminger & Harold: 718 (catalog) >> as *N. maritimus* var. *infodiens*
 1873 LeConte: 326 (nomenclature) >> as *N. maritimus* var. *infodiens*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus* sensu Horn
 1908 Heyne & Taschenberg: 38 (descriptions in German) >> as *N. maritimus* Guérin-Méneville var. *infodiens*
 1920 Leng: 86 (catalog) >> as syn of *N. pustulatus* subsp. *melsheimeri*
 1926a Portevin: 255 (revision: key, descriptions & catalog in French) >> as syn. of *N. investigator*
 1928 Hatch: 149 (catalog) >> as syn. of *N. investigator*
 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. investigator*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. investigator*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. investigator* subsp. *maritimus*
 1985 Anderson & Peck: 61 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*
 1987 Silfverberg: 49 (nomenclature) >> as syn. of *N. investigator* (following Hatch 1928); 1 syntype in the MZHF
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investigator*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. investigator*
 1996 Ratcliffe: 70 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*

= *insularis* Lafer, 1989 (junior primary homonym, not Grouvelle) NEW STATUS as absolute syn. of *N. investigator* Zetterstedt

Type locality: "Sakh. [Sachalin], o-v Moneron, Kur. [Kuriles] (ostrova Kunamir, Shikotai, Anuchina).--Japonia (o-v Khokkaido)" [e Russia, ?Japan; descrip.]

Type depository: IBPV: Vladivostok

- 1989 Lafer: 339 (key, descriptions, description of variation in Russian) >> Orig. comb.: *Necrophorus praedator insularis*; New junior primary homonym, not Grouvelle 1893 [!M, N, S]
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as *N. praedator* subsp. *insularis*
 2002 Nikolajev & Kozminykh: 125 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as *N. investigator* subsp. *insularis*

= *intermedius* Reitter, 1895 NEW STATUS as absolute syn. of *N. investigator* Zetterstedt

Type locality: "Deutschland; Oesterreich; Kaukasus" [descrip.] "Caucasus, Swanetien" [Georgia; syntype label], and "Schwarzwald" [Germany?; syntype label]

Type depository: HNHM: Budapest [!] 9 syntypes

- 1895b Reitter: 327 (description of variation in German) >> Orig. comb.: *Necrophorus investigator* var. *intermedius* [!N, S]
 1899 Ganglbauer: 164 (descriptions, in German) >> as *N. investigator* var. *intermedius*

- 1906 Heyden et al.: 247 (checklist) >> as *N. investigator* var. *intermedius*
 1909 Reitter: 240 (in German) >> as *N. investigator* var. *intermedius*
 1910 Jakobson: 612 (checklist in Russian) >> as *N. investigator* var. *intermedius*
 1913 Kniephof: 187 (in German) >> as *N. investigator* ab. *intermedius*
 1913 Kuhnt: 335 (in German)
 1916 Pasquet: 164 (description of variation in French)
 1916 Schaufuss: 273 (checklist in German)
 1922 Everts: 183
 1924 Portevin: 149 (key, descriptions in French) >> as *N. investigator* ab. *intermedius*
 1925 Winkler: 264 (catalog) >> as *N. investigator* ab. *intermedius*
 1926a Portevin: 222 (revision: key, descriptions & catalog in French) >> as *N. investigator* ab. *intermedius*
 1927b Hatch: 358 (revision: key, descriptions & catalog) >> as *N. investigator* ab. *intermedius*
 1928 Hatch: 140 (catalog) >> as *N. investigator* ab. *intermedius*
 1930 Roubal: 241 (catalog in Czech) >> as *N. investigator* f. *intermedia*
 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian) >> as *N. investigator* ab. *intermedius*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. investigator* subsp. *investigator* ab. *intermedius*

= *labiatus* Motschulsky, 1860

Type locality: not mentioned

Type depository: ZMUM: Moscow

- 1860 Motschulsky: 126 (descriptions in French) >> Orig. comb.: *Necrophorus labiatus* [!N, S]
 1868 Gemminger & Harold: 718 (catalog) >> as valid species
 1920 Leng: 86 (catalog) >> as syn. of *N. pustulatus* subsp. *melsheimeri*
 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. investigator*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investigator*

= *latifasciatus* Lewis, 1887 NEW STATUS as absolute syn. of *N. investigator* Zetterstedt

Type locality: “Sapporo” [Japan: Hokkaido; descrip.] and “Mount Niohozan” [Japan: Honshu; descrip.] “Niko” [Japan; syntype label], and “Yojo” [Japan; syntype label]

Type depository: BMNH: London [!] 4 syntypes

- 1887 Lewis: 340 (description) >> Orig. comb.: *Necrophorus latifasciatus* [!N, S]
 1909 Arrow: 191 (redescriptions) >> as syn. of *N. investigator*
 1910 Jakobson: 612 (checklist in Russian) >> as valid species
 1914b Portevin: 224 (description of variation in French) >> as valid species
 1924 Portevin: 185 (key, descriptions in French) >> as valid species; footnote comparison to *N. praedator* p. 288; claims Arrow’s (1919) syn. of *N. latifasciatus* under *N. investigator* was incorrect

- 1925 Winkler: 264 (catalog) >> as valid species
 1926a Portevin: 223 (revision: key, descriptions & catalog in French) >> as valid species
 1927b Hatch: 357 (revision: key, descriptions & catalog) >> as valid species; specimens not seen by Hatch
 1928 Hatch: 141 (catalog) >> as valid species
 1929 Kôno: 162, 164 (checklist, annotated) >> as valid species
 1930 Kieseritzky: 63 (descriptions in Russian (German summary)) >> as valid species
 1932 Hlisnikovsky: 28 (key, descriptions in German) >> as valid species, misspelled as *N. latifasciatus*
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
 1955a Nakane: 48 (checklist, brief descriptions) >> as valid species
 1955b Nakane: 54 (key, descriptions in Japanese) >> as valid species
 1956 Esaki et al.: 1028 (checklist, descriptions in Japanese) >> as valid species
 1973 Krivolutskaya: 71 (checklist in Russian (with electronic english translation)) >> as valid species
 1979 Nakane & Baba: 10 (checklist, distribution in Japanese) >> as *N. investigator* subsp. *latifasciatus*
 1985a Kurosawa: 248 (checklist) >> as *N. investigator* subsp. *latifasciatus*; color habitus figure pl. 44
 1987 Cho et al.: 55 (morphology: SEM, external adult) >> as valid species
 1988 Cho et al.: 9 (phylogenetics) >> as valid species
 1989 Martin: 879 (biology, ecology) >> as syn. of *N. praedator*
 1992 Cho & Lee: 25 (revision: key, descriptions & catalog) >> as valid species
 1992 Kozminykh: 64 (checklist in Russian) >> as syn. of *N. investigator*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as *N. investigator* subsp. *latifasciatus*
 1997 Krivolutskaya: 3 (checklist) >> as valid species following Krivolutskaya (1973)
 2002 Nikolajev & Kozminykh: 121 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> possible synonym of Lafer's (1989) concept of *N. pustulatus*

= *maritimus* Guérin-Méneville, 1835

Type locality: "Sitcha Island, Alaska" [USA; descrip.]

Type depository: ISNB: Brussels

- 1835 Guérin-Méneville: p117:8 (60) (descriptions in French) >> Orig. comb.: *Necrophorus maritimus*; first pub. as figure (1835) text pub, p. 60 (1844)
 1836 Dejean: 131 (catalog in French) >> as valid species, auth. attrib. Eschscholtz
 1840 Laporte: 2 (descriptions in French) >> as valid species; auth. attrib. Esch. but ex. coll. Guérin.
 1842 Fischer von Waldheim: 9 (checklist) >> as valid sp.; auth. attrib to Eschscholtz
 1845a Motschulsky: 53 (descriptions in French) >> compared to *N. lunatus*; auth. attrib to Eschscholtz
 1845b Motschulsky: 364 (descriptions in French) >> suggests poss. syn. of unavailable Dejean/Esch. name *N. auripilosus*
 1853 LeConte: 278 (descriptions) >> as valid species but unknown to author; *N. maritimus* Mann. as valid but Guérin also cited

- 1857b Gistel: 565 (in German) >> as valid species
- 1860 Motschulsky: 126 (descriptions in French) >> as valid species; compared with *N. dauricus*
- 1868 Gemminger & Harold: 718 (catalog) >> as valid species
- 1873 Crotch: 37 (checklist) >> as syn. of *Silpha melsheimeri*
- 1873 LeConte: 326 (nomenclature) >> as senior syn. of *N. Melsheimeri*
- 1877 Kraatz: 102 (descriptions in German) >> as valid species; *N. maritimus* Guérin as valid but Mann. also cited
- 1896 Heller: 24 (in German) >> as valid species
- 1903 Portevin: 330 (descriptions in French) >> as syn. of *N. pustulatus* var. *Melsheimeri*
- 1908 Heyne & Taschenberg: 38 (descriptions in German) >> as valid species; brief description
- 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. pustulatus*
- 1914b Portevin: 225 (description of variation in French) >> as valid species
- 1917 Strand: 83 (descriptions in German) >> as valid species & senior syn. of *N. aleuticus*
- 1926a Portevin: 222 (revision: key, descriptions & catalog in French) >> as syn. of *N. investigator*
- 1927b Hatch: 357 (revision: key, descriptions & catalog) >> as *N. investigator* subsp. *maritimus*
- 1928 Hatch: 141 (catalog) >> as *N. investigator* subsp. *maritimus*
- 1929 Kôno: 164 (checklist, annotated) >> as *N. investigator* subsp. *maritimus* Guer.
- 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. investigator*
- 1938 Hatch: 147 (checklist) >> as *N. investigator* subsp. *maritimus*
- 1944 Arnett: 5 (morphology: female genitalia) >> as *N. investigator* subsp. *maritimus*
- 1957 Hatch: 14 (description of variation) >> as *N. investigator* subsp. *maritimus*
- 1982 Peck & Miller: 153 (nomenclature) >> as syn. of *N. investigator*; auth. attrib. Esch. in Guérin
- 1985 Anderson & Peck: 61 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*; auth. attrib. Esch. in Guérin
- 1985a Kurosawa: 248 (checklist) >> as *N. investigator* subsp. *maritimus*; color habitus figure pl. 44; auth. attrib. Guérin
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as absolute syn. of *N. investigator*; auth. attrib. Guérin
- 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. investigator*; auth. attrib. Guérin
- 1996 Ratcliffe: 70 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*; auth. attrib. Guérin
- 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. investigator*

= *maritimus* Mannerheim, 1843 (attrib. Eschscholtz; junior primary homonym, not Guérin-Méneville 1835) NEW STATUS as absolute syn. of *N. investigator* Zetterstedt
Type locality: “insula Sitkha” [USA: Alaska; descrip.]

Type depository: MZHF: Helsinki 2 syntypes

- 1833 Dejean: 117 (catalog in French) >> as valid species; auth. attrib. Eschscholtz [predescription reference of *N. maritimus* Mann. 1843]
- 1836 Dejean: 131 (catalog in French) >> as valid species, auth. attrib. Eschscholtz [predescription reference of *N. maritimus* Mann. 1843]
- 1843 Mannerheim: 251 (descriptions in German) >> Orig. comb.: *Necrophorus maritimus*; New junior primary homonym, not Guérin-Ménéville 1835, [!S]
- 1853 LeConte: 278 (descriptions) >> as valid species but unknown to author; *N. maritimus* Mann. as valid but Guérin also cited
- 1853 Mannerheim: 169 (descriptions in German) >> as valid species; auth. attrib. to Eschsch & validated by Mann. 1843
- 1853 Melsheimer: 39 (catalog) >> as valid species; Guerin-M. also cited
- 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
- 1868 Gemminger & Harold: 718 (catalog) >> not as available name, but as citation of *N. maritimus* Guérin by Mann. 1843
- 1870 LeConte: 398 (nomenclature) >> as syn. of *N. hebes*
- 1877 Kraatz: 102 (descriptions in German) >> as valid species; as *N. maritimus* Guérin, Mann.
- 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus* (sensu Horn 1880)
- 1920 Leng: 86 (catalog) >> as syn. of *N. pustulatus* subsp. *melsheimeri*
- 1927b Hatch: 357 (revision: key, descriptions & catalog) >> as *N. investigator* subsp. *maritimus*
- 1987 Silfverberg: 49 (nomenclature) >> as syn. of *N. investigator* (following Hatch 1928); 2 syntypes in MZHF

= *maritimus* Gistel, 1857 (junior primary homonym, not *N. maritimus* Guérin-Ménéville)
NEW SYNONYM of *N. investigator* Zetterstedt

Type locality: "Sittcha, Amer. bor. ross." [USA: Alaska; descrip.]

Type depository: unknown

- 1857b Gistel: 565 (in German) >> Orig. comb.: *Necrophorus maritimus*, with *N. aleuticus* Gistel 1848 as syn. [!N]

= *melsheimeri* Kirby, 1837 CONFIRMED as SYNONYM of *N. investigator* Zetterstedt

Type locality: "n. amer" [label] "from New York to Cumberland-House" [descrip.]

Type depository: BMNH: London [!] holotype male

- 1837 Kirby: 97 (descriptions) >> Orig. comb.: *Necrophorus Melsheimeri* [!N, S]
- 1853 LeConte: 275 (descriptions) >> Missid of *N. obscurus* as *N. Melsheimeri*, as valid species
- 1853 Melsheimer: 39 (catalog) >> as valid species
- 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
- 1859c LeConte: 37 (checklist) >> as valid species
- 1866a LeConte: 367 (nomenclature) >> as valid species
- 1870 LeConte: 398 (nomenclature) >> as syn of *N. sayi*

- 1873 Crotch: 37 (checklist) >> as *Silpha melsheimeri*, as valid species
 1873 LeConte: 326 (nomenclature) >> as syn. of *N. maritimus* Guérin var. *infodiens*
 1880 Austin: 16 (checklist) >> as *N. pustulatus* var. *melsheimeri*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as *N. pustulatus* var. *Melsheimeri*
 1885 Henshaw: 26 (checklist) >> as valid species
 1894 Hamilton: 15 (checklist) >> as *N. pustulatus* var. *melsheimeri*
 1895 Keen: 168 (checklist) >> as valid species
 1903 Portevin: 330 (descriptions in French) >> as *N. pustulatus* var. *Melsheimeri*
 1907 Fall & Cockerell: 164 (checklist) >> as *N. pustulatus* subsp. *melsheimeri*
 1911 Wickham: 11 (checklist) >> as *N. pustulatus* var. *melsheimeri*
 1920 Leng: 86 (catalog) >> as *N. pustulatus* subsp. *melsheimeri*
 1926 Fall: 143 (description) >> as valid species; brief description
 1926a Portevin: 255 (revision: key, descriptions & catalog in French) >> as syn. of *N. investigator*
 1928 Hatch: 140 (catalog) >> as syn. of *N. investigator*
 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. investigator*
 1944 Arnett: 5, 15, 24 (morphology: female genitalia) >> as valid species; female genitalia figured, pl. 4, fig. 1; listed as syn. of *N. obscurus* on p.6
 1946 Hatch: 100 (descriptions) >> “status... is not clear”
 1947 Arnett: 110 (catalog) >> as syn. of *N. investigator*; notes missidentification using this name in Arnett 1944
 1972 Swan & Papp: 356 (description) >> brief description; Revised syn. as *N. pustulatus* subsp. *melsheimeri*
 1973 Blackwelder: 5 (checklist, synonymy) >> status questioned
 1975 Kirk & Balsbaugh: 52 (checklist) >> as valid species
 1984 Papp: 70 (descriptions) >> brief description; as *N. pustulatus* subsp. *melsheimeri*
 1985 Anderson & Peck: 61 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investigator*
 1993 Peck & Miller: 7 (species-group catalog) >> as syn. of *N. investigator*
 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. investigator*
 1996 Ratcliffe: 70 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. investigator*

= *microcephalus* Thomson, 1862

Type locality: “Ej sällsynt i Skåne” [descrip.]

Type depository: unknown

- 1862 Thomson: 9 (descriptions) >> Orig. comb.: *Necrophorus microcephalus* [!N, S]
 1863 Marseul: 88 (catalog in French) >> as valid species
 1864 Kraatz: 47 (in German)
 1864 Scriba: 378 (descriptions in German)
 1865 Power: 198-201 (revision: key, descriptions & catalog) >> as valid species

- 1866 Marseul: 38 (catalog in French) >> as valid species
 1866 Michow: 411-412 (description of variation in German) >> as valid species
 1867 Grenier: x
 1868 Gemminger & Harold: 718 (catalog) >> as syn. of *N. investigator*
 1868 Stein: 42 (catalog in Latin) >> as *N. ruspator* var. *microcephalus*
 1869 Stierlin & Gautard: 116 (checklist in German) >> as valid species
 1870 Rye: 182 (comment [translation of Michow 1866]) >> (as valid species following Michow [1866])
 1874 Cox: 407 (key, descriptions (brief)) >> as *N. ruspator* var. *microcephalus*
 1874 Seidlitz: 216 (key in German) >> as syn. of *N. ruspator*
 1876b Kraatz: 396 (morphology: clypeus in German) >> as valid species
 1877 Stein & Weise: 61 (catalog in Latin) >> as *N. investigator* var. *microcephalus*
 1883 Heyden et al.: 73 (checklist) >> as *N. investigator* var. *microcephalus*
 1884 Marseul: 190 (key, descriptions in French) >> as *N. ruspator* var. *microcephalus*
 1885 Marseul: 169 (catalog in French) >> as *N. ruspator* var. *microcephalus*
 1885 Reitter: 320 (in German)
 1885 Thomson: 66 (key, checklist in Swedish) >> as valid species
 1888 Seidlitz: 313 (key in German) >> as syn. of *N. investigator*; misspelled as *Necrophagus microcephalus*
 1889 Fowler: 44 (descriptions, catalog)
 1889 Seidlitz: 329 (key in German) >> as syn. of *N. investigator*; misspelled as *Necrophagus microcephalus*
 1891 Heyden et al.: 138 (checklist) >> as syn. of *N. investigator*
 1895b Reitter: 326 (description of variation in German) >> as syn. of *N. investigator*
 1898 Everts: 413
 1899 Ganglbauer: 164 (in German) >> as syn. of *N. investigator*
 1901 Carret: 330 (description of variation in French) >> as syn. of *N. investigator*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. investigator*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. investigator*
 1913 Fowler & Donisthorpe: 247
 1913 Kuhnt: 335 (in German)
 1926a Portevin: 255 (revision: key, descriptions & catalog in French) >> as syn. of *N. investigator*
 1928 Hatch: 140 (catalog) >> as syn. of *N. investigator*
 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. investigator*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. investigator*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investigator*

= *particeps* Fischer von Waldheim, 1844

Type locality: "Turcomania" [Peck & Miller (1993) cite Heller (1896) who states this locality is in error- repeated by Port. 1926a; descrip.]

Type depository: unknown

- 1844 Fischer von Waldheim: 139 (descriptions) >> Orig. comb.: *Necrophorus particeps* [!M, N, S]

- 1845a Motschulsky: 54 (descriptions in French) >> compared to *N. lunatus*
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1866 Marseul: 38 (catalog in French) >> as valid species
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1880 Heyden: 87 (checklist in German) >> as syn. of *N. lunatus*
 1884 Marseul: 187 (key, descriptions in French) >> as *N. lunatus* var. *particeps*
 1885 Marseul: 169 (catalog in French) >> as *N. lunatus* var. *particeps*
 1895b Reitter: 325 (description of variation in German) >> as valid species (in footnote)
 1896 Heller: 23 (in German) >> as syn. of *N. maritimus* Guér.; “type locality prob. in error”
 1896 Heyden: 38 (checklist in German) >> as *N. lunatus* var. *particeps*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. pustulatus*
 1924 Portevin: 150 (key, descriptions in French) >> as *N. investigator* ab. *particeps*
 1925 Winkler: 263 (catalog) >> as syn. of *N. pustulatus*
 1925 Winkler: 264 (catalog) >> as *N. investigator* ab. *particeps*
 1926a Portevin: 222 (revision: key, descriptions & catalog in French) >> states incorrectly that Fisch. 1844 described *particeps* as a var. of *N. lunatus*
 1927b Hatch: 359 (revision: key, descriptions & catalog) >> as *N. investigator* ab. *particeps*
 1928 Hatch: 141 (catalog) >> as *N. investigator* ab. *particeps*
 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian) >> as *N. investigator* ab. *particeps*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. investigator* subsp. *maritimus* ab. *particeps*
 1947 Arnett: 110 (catalog) >> as valid species
 1972 Swan & Papp: 356 (description) >> as *N. investigator* subsp. *particeps*
 1984 Papp: 70 (descriptions) >> as valid species
 1985 Anderson & Peck: 61 (revision: key, descriptions & catalog) >> as syn. *investigator*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. investigator*
 1996 Ratcliffe: 70 (revision: key, descriptions & catalog) >> as syn. of *N. investigator*
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. investigator*
- = pollinator Mannerheim, 1853 CONFIRMED as SYNONYM of *N. investigator*
 Zetterstedt
 Type locality: “insula Atkha” [USA: Alaska; descrip.], “Alaska” [USA; label]
 Type depository: MCZC: Cambridge [!] syntype female
- 1853 Mannerheim: 169 (descriptions in German) >> Orig. comb.: *Necrophorus pollinator* [!N, S]
 1868 Gemminger & Harold: 718 (catalog) >> as *N. maritimus* var. *pollinator*
 1870 LeConte: 400 (nomenclature) >> as valid species
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus* (sensu Horn 1880)
 1920 Leng: 86 (catalog) >> as syn of *N. pustulatus* subsp. *melsheimeri*
 1924 Portevin: 150 (key, descriptions in French) >> as *N. investigator* ab. *pollinator* Mann.

- 1926a Portevin: 222 (revision: key, descriptions & catalog in French) >> as N. investigator ab. pollinator Mann.
- 1928 Hatch: 141 (catalog) >> as syn. of N. investigator
- 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian) >> as N. investigator ab. pollinator
- 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of N. investigator subsp. maritimus; misspelled as N. pollinator
- 1982 Peck & Miller: 152 (nomenclature) >> as syn. of N. investigator; as senior homonym of N. pollinator LeC.
- 1985 Anderson & Peck: 61 (revision: key, descriptions & catalog) >> as syn. of N. investigator
- 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of N. investigator; misspelled as N. pollinator Mann.
- 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of N. investigator
- 1996 Ratcliffe: 70 (revision: key, descriptions & catalog) >> as syn. of N. investigator
- 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of N. investigator; misspelled as N. pollinator

= praedator (Reitter, 1887) NEW SYNONYM of N. investigator Zetterstedt

Type locality: "Siberia or.: Chabarowka" [Russia; label]

Type depository: HNHM: Budapest [!] holotype

- 1887 Reitter: 217 (descriptions in German) >> Orig. comb.: *Silpha* (*Necrophorus*) praedator [!N, S]
- 1893 Heyden: 51 (checklist in German) >> as *Necrophorus praedator*; as valid species
- 1895b Reitter: 326 (description of variation in German) >> as valid species
- 1896 Heyden: 38 (checklist in German) >> as valid species
- 1910 Jakobson: 612 (checklist in Russian) >> as valid species
- 1924 Portevin: 288 (key, descriptions in French) >> as valid species
- 1925 Winkler: 264 (catalog) >> as valid species
- 1926a Portevin: 228 (revision: key, descriptions & catalog in French) >> as valid species
- 1927b Hatch: 357 (revision: key, descriptions & catalog) >> as valid species; specimens not seen by Hatch
- 1928 Hatch: 142 (catalog) >> as valid species
- 1929 Kôno: 164 (checklist, annotated) >> as valid species
- 1930 Kieseritzky: 64 (descriptions in Russian (German summary)) >> as valid species
- 1932 Hlisnikovsky: 29 (key, descriptions in German) >> as valid species
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
- 1933a Shchegoleva-Barovskaya: 185 (revision: key, descriptions & catalog in Russian) >> as valid species
- 1944 Arnett: 7 (morphology: female genitalia) >> as valid species
- 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian) >> as valid species
- 1955b Nakane: 54 (key, descriptions in Japanese) >> as valid species
- 1956 Esaki et al.: 1028 (checklist, descriptions in Japanese) >> as valid species

- 1966c Mroczkowski: 437 (checklist) >> as valid species
 1975a Emetz: 61 (checklist in German) >> as valid species
 1975b Emetz: 105 (checklist in Russian) >> as valid species
 1980 Schawaller: 153 (checklist in German (English summary)) >> as valid species
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
 1987 Cho et al.: 55 (morphology: SEM, external adult) >> as valid species
 1988 Cho et al.: 9 (phylogenetics) >> as valid species
 1989 Lafer: 339 (key, descriptions, description of variation in Russian) >> as valid species
 1989 Martin: 876-879 (biology, ecology) >> as valid species
 1992 Cho & Lee: 25 (revision: key, descriptions & catalog) >> as valid species
 1992 Kozminykh: 64 (checklist in Russian) >> as valid species
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as valid species
 2002 Nikolajev & Kozminykh: 125 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as valid species; as *N. praedator* subsp. *praedator*

= *ruspator* Erichson, 1837 (unecc. nomen novum for *N. investigator* Zetterstedt)

Type locality: see *N. investigator* Zetterstedt

Type depository: see *N. investigator* Zetterstedt

- 1837 Erichson: 225 (species-group catalog in German) >> Orig. comb.: *Necrophorus ruspator*; unecc. replacement name for *N. investigator* [!N, S]
 1838 Sturm: 68 (in German)
 1841a Heer: 387 (descriptions in German) >> as valid species
 1841b Heer: 9 (checklist in German) >> as valid species
 1843 Mannerheim: 252 (descriptions in German) >> as valid species; compared to *N. maritimus*
 1846b Küster: nr. 38 (catalog in German (English summary)) >> as valid species
 1849 Bach: 153 (checklist, brief descriptions in German) >> as valid species
 1849 Gaubil: 55 (catalog in French) >> as valid species
 1849 Redtenbacher: 140 (catalog in German)
 1854 Lacordaire: 199 (biology, catalog in French) >> as valid species
 1858 Calwer: 106 (checklist, brief descriptions in German) >> as valid species
 1858 Redtenbacher: 289 (catalog in German) >> as valid species
 1859 Gutfleisch & Bose: 202 (key, descriptions in German) >> as valid species
 1859 Schaum: 36 (catalog in German) >> as valid species
 1860 Motschulsky: 125 (descriptions in French) >> as valid species; compared with *N. dauricus*
 1862 Schaum: 38 (catalog in German) >> as valid species
 1862 Schiødte: 226 (morphology, larval stages in Danish) >> as valid species
 1862 Thomson: 9 (descriptions) >> as valid species
 1863 Grenier: 13 (checklist in French) >> as valid species
 1863 Marseul: 88 (catalog in French) >> as valid species
 1864 Scriba: 378 (descriptions in German)
 1865 Power: 198-201 (revision: key, descriptions & catalog) >> as valid species
 1866 Marseul: 38 (catalog in French) >> as valid species

- 1866 Michow: 411 (description of variation in German)
- 1868 Gemminger & Harold: 718 (catalog) >> as syn. of *N. investigator*
- 1868 Stein: 42 (catalog in Latin) >> as valid species
- 1869 Stierlin & Gautard: 116 (checklist in German) >> as valid species
- 1870 Rye: 182 (comment [translation of Michow 1866]) >> (as valid species following Michow [1866])
- 1870 Vollenhoven et al.: 54 (checklist in Dutch) >> as valid species
- 1873 Michow: 10 (in German)
- 1874 Cox: 407 (key, descriptions (brief)) >> as valid species
- 1874 Seidlitz: 217 (key in German) >> as valid species
- 1875 Siebke: 163 (checklist in Norwegian) >> as valid species
- 1876b Kraatz: 396 (morphology: clypeus in German) >> as valid species
- 1877 Hickel & Dragicsevics: 27 (checklist in French)
- 1877 Kraatz: 101 (descriptions in German) >> as valid species; compared to *N. maculifrons*
- 1877 Stein & Weise: 61 (catalog in Latin) >> as syn. of *N. investigator*
- 1878 Deyrolle & Fairmaire: 91 (descriptions in French) >> as valid species; compared to *N. ocellatus*
- 1880 Heyden: 86 (checklist in German) >> as syn. of *N. investigator*
- 1883 Heyden et al.: 73 (checklist) >> as syn. of *N. investigator*
- 1884 Marseul: 190 (key, descriptions in French) >> as valid species
- 1884 Reitter: 87 (descriptions in German) >> as syn. of *Silpha investigator*
- 1885 Marseul: 169 (catalog in French) >> as valid species; as *N. ruspator*
- 1885 Thomson: 66 (key, checklist in Swedish) >> as valid species
- 1888 Fairmaire: 115 (checklist, annotated in French) >> as valid species
- 1888 Matthews: 91 (description) >> as valid species; compared to *N. mexicanus*
- 1888 Seidlitz: 313 (key in German) >> as syn. of *N. investigator*; misspelled as *Necrophagus investigator*
- 1888 Sparre Schneider: 176 (checklist in Norwegian (German summary)) >> as valid species
- 1889 Fowler: 44 (descriptions, catalog)
- 1889 Seidlitz: 329 (key in German) >> as syn. of *N. investigator*; misspelled as *Necrophagus ruspator*
- 1891 Heyden et al.: 138 (checklist) >> as syn. of *N. investigator*
- 1895b Reitter: 326 (description of variation in German) >> as syn. of *N. investigator*
- 1901 Carret: 330 (description of variation in French) >> as syn. of *N. investigator*
- 1902 Johnson & Halbert: 690 (checklist) >> as valid species
- 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. investigator*
- 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. investigator*
- 1914 Gorka: 235 (morphology: malpighian tubules in German) >> as valid species
- 1926a Portevin: 255 (revision: key, descriptions & catalog in French) >> as syn. of *N. investigator*
- 1928 Hatch: 139 (catalog) >> as syn. of *N. investigator*
- 1930 Kieseritzky: 63 (descriptions in Russian (German summary)) >> as syn. of *N. investigator*
- 1932 Joy: 466 (key) >> as syn. of *N. investigator*
- 1933a Shchegoleva-Barovskaya: 186 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. investigator*

- 1934b Pukowski: 54 (morphology, larval stages in German) >> as syn. of *N. investigator*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. investigator*
 1945 Kloet & Hincks: 155 (checklist) >> as syn. of *N. investigator*
 1959 Linssen: 162 (catalog) >> as syn. of *N. investigator*
 1988 Blackith et al.: 30 >> cites Johnson & Halbert 1902 usage
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investigator*
 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. investigator*
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. investigator*

= *sibiricus* Motschulsky, 1860

Type locality: "Sibérie orientale" [descrip.]

Type depository: ZMUM: Moscow

- 1860 Motschulsky: 126 (descriptions in French) >> Orig. comb.: *Necrophorus sibiricus* [!N, S]
 1880 Heyden: 87 (checklist in German) >> as valid species
 1883 Heyden et al.: 73 (checklist) >> as *N. sepultor* var. *sibiricus*
 1884 Marseul: 191 (key, descriptions in French) >> as *N. sepultor* var. *sibiricus*
 1884 Reitter: 87 (descriptions in German) >> as syn. of *Silpha investigator*
 1885 Marseul: 169 (catalog in French) >> as *N. sepultor* Charpentier var. *sibiricus*
 1887 Reitter: 217 (descriptions in German) >> as *Necrophorus sibiricus*; of unknown status/validity
 1891 Heyden et al.: 138 (checklist) >> as syn. of *N. investigator*
 1893 Heyden: 51 (checklist in German) >> as syn. of *N. investigator*
 1895b Reitter: 326 (description of variation in German) >> as syn. of *N. investigator*
 1896 Heyden: 38 (checklist in German) >> as syn. of *N. investigator*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. investigator*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. investigator*
 1916 Pasquet: 164 (description of variation in French)
 1928 Hatch: 141 (catalog) >> as syn. of *N. investigator* subsp. *maritimus*
 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian) >> as *N. investigator* ab. *sibiricus*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. investigator* subsp. *maritimus*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. investigator*
 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. investigator*
 2002 Nikolajev & Kozminykh: 119 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. investigator*

= *submaculatus* Reitter, 1895 REVISED SYNONYM of *N. investigator* Zetterstedt

Type locality: "Carpathen" [descrip.] "Carpenphia" [label]

Type depository: HNHM: Budapest [!] holotype male

- 1895b Reitter: 326 (description of variation in German) >> Orig. comb.: *Necrophorus interruptus* var. *submaculatus* [!N, S]

- 1899 Ganglbauer: 164 (descriptions, in German) >> as *N. interruptus* var. *submaculatus*
 1906 Heyden et al.: 247 (checklist) >> as *N. interruptus* var. *submaculatus*
 1910 Jakobson: 612 (checklist in Russian) >> as *N. interruptus* var. *submaculatus*
 1916 Pasquet: 153 (description of variation in French)
 1916 Schaufuss: 273 (checklist in German)
 1922 Everts: 183
 1924 Portevin: 290 (key, descriptions in French) >> as *N. fossor* ab. *submaculatus*
 1925 Winkler: 264 (catalog) >> as *N. interruptus* ab. *submaculatus*
 1926a Portevin: 229 (revision: key, descriptions & catalog in French) >> as *N. fossor* ab. *submaculatus*
 1928 Hatch: 143 (catalog) >> as *N. fossor* ab. *submaculatus*
 1989 Núñez et al.: 439 (checklist in Spanish (English summary)) >> as *N. interruptus* var. *submaculatus*

= *variolosus* Portevin, 1924 NEW STATUS as absolute syn. of *N. investigator* Zetterstedt

Type locality: "Baberie?" [handwritten illegible label on type; not mentioned in orig. descrip.]

Type depository: MNHN: Paris [!] holotype female

- 1924 Portevin: 149 (key, descriptions in French) >> Orig. comb.: *Necrophorus investigator* var. *variolosus* [!N, S]
 1925 Winkler: 264 (catalog) >> as *N. investigator* ab. *variolosus*
 1926a Portevin: 222 (revision: key, descriptions & catalog in French) >> as *N. investigator* var. *variolosus*
 1927b Hatch: 358 (revision: key, descriptions & catalog) >> as *N. investigator* var. *variolosus*; specimens not seen by Hatch
 1928 Hatch: 141 (catalog) >> as *N. investigator* var. *variolosus*
 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian) >> as *N. investigator* ab. *variolosus*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. investigator* subsp. *investigator* var. *variolosus* ['ab.' intended]

Comments: *N. interruptus* var. *submaculatus* Reitter, 1895b has been considered a name subordinate to *N. interruptus*/*N. fossor* since its original description. DSS studied the only type found of this name in the HNHM and it is a specimen of *N. investigator*, not *N. interruptus*. The metepimeral lobe is glabrous, the epipleuron is orange, there is no erect row of setae on the humerus, among other traits, all of which differentiate *N. investigator* from *N. interruptus*. There remains the possibility that the type specimen examined was not the original, but given no additional evidence either way, we make this name a new synonym of *N. investigator*.

With the sole exception of *N. praedator* all the names we synonymize herein were treated as synonyms or otherwise considered possibly invalid by silphid taxonomists. We herein synonymize *N. praedator* under *N. investigator* with minor reservation for the following reasons: Reitter's (1887) original description of this name included the statement

"in east Siberia there is a species very close to investigator but it can be distinguished from investigator and all other species in that the abdominal setae are yellow." [translated from German]; other authors who have produced keys to *Nicrophorus* species have relied on this abdominal setal color trait (e.g. Portevin 1926, Hlisnikovsky 1932, Lafer 1989, Nikolajev & Kozminykh 2002), or traits that simply do not agree with the type specimen; Hatch (1927), who admitted not having examined specimens of *N. praedator*, and later Cho & Lee (1992), who presumably based their key on that of Hatch, used 'metapimeron pubescent' as a key distinguishing trait of *N. praedator* – a trait that does not agree with the type specimen which has, like *N. investigator*, glabrous metapimera. Shchegoleva-Barovskaya (1933a) used both abdominal setal color and presence (*N. praedator*) or absence (*N. investigator*) of setae on the anterior corners of the pronotum. However, both of these 'species' display short setae on the anterior corners of the pronotum, leaving only abdominal setal color as a possible diagnostic trait. Cho *et al.* (1987) compared two species of *Nicrophorus*, *N. latifasciatus* and *N. praedator*, with SEM to find differentiating characters. They concluded these names belonged to different species. However, their identifications are suspect considering they had not examined the types of either name and no reliable keys to these species exist. In addition, their conclusions were based on the comparison of a female '*N. latifasciatus*' with a male '*N. praedator*'. They remarked on the differences in shape of the postocular region which is well known to differ between the sexes of *Nicrophorus* species. It is thus likely that their two "species" were, in fact, conspecifics of opposite sex. In the *Nicrophorus* key by Nikolajev & Kozminykh (2002) the choice of "abdominal segments with pale setation" sends one to *N. praedator*, *N. investigator funeror*, and *N. chryseus*, supporting the statement that the color of the abdominal pubescence cannot be used to differentiate "*N. praedator*" from *N. investigator*.

DSS has studied long series from the region of *N. praedator* (Japan, Korea, northeast China, eastern Russia [Ussuri]) and has been unsuccessful in sorting specimens according to prior author's concepts of *N. praedator*/*N. investigator*. The abdominal setal color trait is too variable and does not work, with undeniable *N. investigator* (e.g. from Finland; SMFD) showing gradations of yellow, yellow-brown, to all brown, or black. These setae are also often abraded (and thus absent entirely) or dirty (and thus appear darker) which makes confident categorizations difficult. With very few exceptions, genitalia of either sex is not useful to differentiate closely related *Nicrophorus* species, as is true in this case.

RM treats *N. praedator* as a valid species, differentiating it from *N. investigator* not by abdominal setal color, but by the shape of the pronotum. RM concluded that in the large males of both species the pronotum is less transverse in *N. praedator* than *N. investigator*. This trait may prove useful in a morphometric analysis to sort specimens, but presumably only large males of each 'species' will separate.

There is an elytral variant of *N. investigator* that is more common in series of specimens collected from the '*N. praedator*' regions, and these are often identified as *N. praedator* in collections. This variant has the black region of the elytral sutural apex varying

from reduced to absent, but this pattern doesn't correlate 100% with the setal color traits mentioned above and, although rare, we have seen this pattern in North American *N. investigator* (New Mexico; MCZC). Although no prior authors have treated *N. praedator* as a synonym, many have reported *N. investigator* from regions of *N. praedator*, including many Japanese authors, which speaks to the difficulty in distinguishing these 'species'. Because DSS has not found traits that reliably differentiate Reitter's *N. praedator* from *N. investigator* we herein synonymize it with reservations. This problem remains ripe for additional research, particularly behavioral, ecological, morphometric, and molecular investigations which could discover if there is another species near *N. investigator* which can be associated with the name *N. praedator*.

Lafer (1989) described *N. insularis* as a subspecies of *N. praedator* using an epithet preoccupied by *N. insularis* Grouvelle, 1893 thus creating a junior primary homonym. Given our synonymization of *N. praedator* under *N. investigator*, Lafer's name must be made subordinate to *N. investigator*.

Nicrophorus japonicus Harold, 1877 desig. lectotype

Type locality: "Hakone" [Honshu, Japan 35.183°N, 139°E; label]

Type depository: ZMHB: Berlin [!] lectotype male, 3 paralectotypes

Distribution: Palearctic: Japan, Korea, Mongolia, northern and central China, Russia: Ussuri reg., Siberia

- 1877 Harold: 345 (descriptions in German) >> Orig. comb.: *Nicrophorus japonicus* [!N, S]
- 1878 Deyrolle & Fairmaire: 89 (descriptions in French) >> misspelled as *N. japanus*
- 1887 Lewis: 339 (description)
- 1903 Portevin: 331 (descriptions in French)
- 1905a Portevin: 51 (nomenclature in French) >> compared to *N. basalis*
- 1908 Heyne & Taschenberg: 38 (descriptions in German) >> brief description
- 1910 Jakobson: 612 (checklist in Russian)
- 1914b Portevin: 224 (description of variation in French)
- 1922 Portevin: 57 (descriptions in French) >> compared to *N. basalis*
- 1924 Okamoto (checklist)
- 1924 Portevin: 192 (key, descriptions in French) >> description of variation: 1 unavailable name
- 1925 Winkler: 264 (catalog)
- 1926a Portevin: 227 (revision: key, descriptions & catalog in French)
- 1927b Hatch: 360 (revision: key, descriptions & catalog)
- 1928 Hatch: 146 (catalog)
- 1929 Kôno: 164 (checklist, annotated)
- 1931 Miwa: 47 (catalog)
- 1931 Yokoyama: 115 (description in Japanese)
- 1932 Hlisnikovsky: 29 (key, descriptions in German)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1933a Shchegoleva-Barovskaya: 183 (revision: key, descriptions & catalog in Russian) >> description of variation: 1 unavailable name

- 1936 Cho: 155 (checklist in Korean)
 1936 Mochizuki (checklist)
 1936 Morita (checklist in Japanese)
 1937 Mochizuki & Tsunekawa (checklist)
 1937 Wu (catalog)
 1938 Mori & Cho (checklist)
 1939 Masui (checklist)
 1955a Nakane: 48 (checklist, brief descriptions)
 1955b Nakane: 54 (key, descriptions in Japanese)
 1956 Esaki et al.: 1028 (checklist, descriptions in Japanese)
 1957 Cho (catalog in Korean)
 1963 Cho (catalog in Korean)
 1963 Nakane: 75 (checklist, brief descriptions in Japanese)
 1964 Kamimura et al.: A20 (biology, ecology)
 1966c Mroczkowski: 436 (checklist)
 1970 Gersdorf: 368 (morphology: female genitalia in German)
 1970 Seok (checklist)
 1975b Emetz: 105 (checklist in Russian)
 1978 Kim: 64 (catalog, distribution)
 1979 Nakane & Baba: 10 (checklist, distribution in Japanese)
 1980 Schawaller: 153 (checklist in German (English summary))
 1985a Kurosawa: 248 (checklist) >> color habitus figure pl. 44
 1985 Lee et al. (checklist in Korean)
 1985 Paik: 2-12
 1986 Cho & Lee: 21 (phylogenetics)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1988 Cho et al.: 9 (phylogenetics)
 1989 Lafer: 338 (key, descriptions, description of variation in Russian)
 1992 Cho & Lee: 28 (revision: key, descriptions & catalog) >> misspelled as *N. japonicus*
 1992 Kozminykh: 64 (checklist in Russian)
 1992 Nomura & Lee: 81 (catalog)
 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> ungrouped; incertae sedis
 1997 Gu & Bai: 249 (biology, symbionts: mites in Chinese (English summary))
 1998 Harusawa: 35 (key in Japanese)
 2002 Nikolajev & Kozminykh: 116 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

Comments: Lectotype data for *Nicrophorus japonicus* Harold, 1877: 345 "Hakone" / "59040" / Large yellow label "japonicus Harold * Japonica" / Hiat. coll. (Coleoptera) Nr. 59040 (1 ex.) *Nicrophorus japonicus* Harold; Hakone; Zool. Mus. Berlin"/ red rectangular label with double black border "LECTOTYPE *Nicrophorus japonicus* Harold 1877:345 Det. D. S. Sikes 2001 ZMHB007629Nic"- male (Berlin [ZMHB]); pronotal width: 7.46 mm.

Paralectotype data “17/673” illegible handwritten word / small red label “Type” / "Hiat. coll. (Coleoptera) Nr. 59040 (2 ex.) Necrophorus japonicus Harold Zool. Mus. Berlin" / red rectangular label with double black border “PARALECTOTYPE Necrophorus japonicus Harold 1877:345 Det. D. S. Sikes 2001 ZMHB007630Nic” - male (Berlin [ZMHB]); "Hakone Dönitz" [?] / small red label “Type” / "Hiat. coll. (Coleoptera) Nr. 59040 (3 ex.) Necrophorus japonicus Harold Zool. Mus. Berlin" / Hakone Dönitz, [35.18° ' N, 139.03° ' E,] / red rectangular label with double black border “PARALECTOTYPE Necrophorus japonicus Harold 1877:345 Det. D. S. Sikes 2001 ZMHB007631Nic”- 1 male (Berlin [ZMHB]); "Hiat. coll. (Coleoptera) Nr. 59040 (4 ex.) Necrophorus japonicus Harold Zool. Mus. Berlin" / Hakone Dönitz, [35.18° ' N, 139.03° ' E,] / red rectangular label with double black border “PARALECTOTYPE Necrophorus japonicus Harold 1877:345 Det. D. S. Sikes 2001 ZMHB007633Nic”- 1 male (Berlin [ZMHB]).

Necrophorus kieticus Mroczkowski, 1959

Type locality: “Kieta, Bougainville” [Papua New Guinea: Solomon Islands, 6.22°N 155.63°E; label]

Type depository: ZMPA: Warsaw [!] holotype female

Distribution: Australian: Papua New Guinea: Solomon Islands: Bougainville: Kieta

- 1959 Mroczkowski: 66 (description) >> Orig. comb.: *Necrophorus kieticus* [!N, S]
- 1969 Hinton: 186 (morphology: diffraction gratings) >> has iridescent morphology
- 1985 Peck & Anderson: 274 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1990 Hanski & Niemelä: 149 (biology: ecology)
- 1991 Hanski & Krikken: 195 (biology: ecology)
- 2001 Peck: 94 (keys, descriptions and distributions)

Necrophorus lunatus Fischer von Waldheim, 1842

Type locality: “Songoria” [Dzungaria, Sinkiang (Xinjiang), nw China; label]

Type depository: SMTD: Dresden [!] holotype male

Distribution: Palearctic: nw China: Xinjiang, Kazakhstan, Kyrgyzstan, Uzbekistan

- 1842 Fischer von Waldheim: 9 (checklist) >> Orig. comb.: *Necrophorus lunatus* [9 word description] [!N, S]
- 1844 Fischer von Waldheim: 40 (descriptions) >> extended description
- 1845a Motschulsky: 53 (descriptions in French)
- 1854 Lacordaire: 200 (biology, catalog in French)
- 1868 Gemminger & Harold: 718 (catalog)
- 1880 Heyden: 87 (checklist in German)
- 1884 Marseul: 187 (key, descriptions in French)
- 1885 Marseul: 169 (catalog in French)
- 1895b Reitter: 325 (description of variation in German)
- 1896 Heller: 23 (in German) >> as senior syn. of *N. stenophthalmus*
- 1896 Heyden: 38 (checklist in German)
- 1910 Jakobson: 612 (checklist in Russian)
- 1922 Sherborn: 3707 (catalog - index)

- 1923 Portevin: 309 (key, descriptions in French)
 1925 Winkler: 263 (catalog)
 1926a Portevin: 210 (revision: key, descriptions & catalog in French)
 1927b Hatch: 349 (revision: key, descriptions & catalog) >> specimens not seen by Hatch
 1928 Hatch: 130 (catalog)
 1930 Kieseritzky: 61 (descriptions in Russian (German summary)) >> in footnote
 1932 Hlisnikovsky: 27 (key, descriptions in German)
 1933 Semenov-Tian-Shanskij: 152 (catalog in Russian & Latin) >> as type sp. of new subgenus *Necrophorus*
 1933a Shchegoleva-Barovskaya: 171 (revision: key, descriptions & catalog in Russian)
 1964a Hlisnikovsky: 224 (key, descriptions in German) >> compared to *N. unifasciatus*
 1980 Madge: 356 (catalog)
 1982 Peck & Miller: 152 (nomenclature) >> as senior homonym of *N. lunatus* LeC.
 1986 Nishikawa: 99 (catalog in Japanese (English summary))
 1992 Kozminykh: 64 (checklist in Russian)
 1993b Kozminykh: 63 (key, descriptions, regional in Russian)
 1996 Hava: 167-170 (description of variation in English (Czech summary)) >> description of variation; focal species
 2002 Nikolajev & Kozminykh: 110 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *stenophthalmus* (Jakovlev, 1887)

Type locality: "Tourkestan: Constantinowka" [Georgiyevka, se Kazakhstan; 10 mi n of Bishkek, Kyrgyzstan; descrip.]

Type depository: unknown, not ZMAS? (Gusarov in litt.)

- 1887 Jakovlev: 154 (descriptions) >> Orig. comb.: *Silpha* (*Necrophorus*) *stenophthalmus* [!N, S]
 1889 Reitter: 276 (in German)
 1893 Heyden: 51 (checklist in German) >> as valid species
 1894 Semenov-Tian-Shanskij: 530 (description in Latin) >> as *Necrophorus stenophthalmus*; as valid species; compared to *N. przewalskii*
 1895b Reitter: 325 (description of variation in German) >> as valid species
 1896 Heller: 23 (in German) >> as syn. of *N. lunatus* Fisch.
 1896 Heyden: 38 (checklist in German) >> as syn. of *N. lunatus* Fisch.
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. lunatus* Fisch.
 1925 Winkler: 263 (catalog) >> as syn. of *N. lunatus* Fisch.
 1926a Portevin: 252 (revision: key, descriptions & catalog in French) >> as syn. of *N. lunatus* Fisch.
 1928 Hatch: 130 (catalog) >> as syn. of *N. lunatus* Fisch.
 1933a Shchegoleva-Barovskaya: 171 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. lunatus* Fisch.
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. lunatus* Fisch.
 2002 Nikolajev & Kozminykh: 110 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. lunatus* Fisch.

Nicrophorus maculifrons Kraatz, 1877

Type locality: "Japan" [descrip.]

Type depository: unknown; not DEIC: Eberswalde [L. Zerche, in litt.] 2 syntype males

Distribution: Palearctic: Russia: easternSiberia, Amur, Ussuri reg., Kuriles, Sakhalin; northeastern China, Japan, Korea

- 1877 Kraatz: 101 (descriptions in German) >> Orig. comb.: *Nicrophorus maculifrons* [!N, S]
- 1877 Harold: 346 (descriptions in German) >> as syn. of *N. nepalensis*
- 1878 Deyrolle & Fairmaire: 91 (descriptions in French) >> as valid species; compared to *N. ocellatus*
- 1887 Lewis: 339 (description) >> as valid species; disagrees with Harold 1877 syn. under *N. nepalensis*
- 1891 Fairmaire: 191 (checklist in French) >> as valid species; as *N. maculifrons* var. *quadripunctatus*
- 1895b Reitter: 325 (description of variation in German) >> as valid species
- 1897 Reitter: 48 (description of variation in German) >> comments on (agrees with) status as valid species
- 1908 Heyne & Taschenberg: 38 (descriptions in German) >> as *N. nepalensis* var. *maculifrons*
- 1910 Jakobson: 612 (checklist in Russian) >> as valid species
- 1914b Portevin: 224 (description of variation in French) >> as valid species
- 1915 Roubal: 169 (description of variation in German)
- 1921 Lucas: 185 >> as valid species
- 1923 Portevin: 306 (key, descriptions in French) >> as valid species
- 1925 Winkler: 263 (catalog) >> as valid species
- 1926a Portevin: 206 (revision: key, descriptions & catalog in French) >> as valid species
- 1927b Hatch: 354 (revision: key, descriptions & catalog)
- 1928 Hatch: 130 (catalog)
- 1929 Kôno: 161, 164 (checklist, annotated) >> description of variation: 1 unavailable name
- 1930 Yokoyama: 123 (descriptions in Japanese)
- 1932 Hlisenkovsky: 27 (key, descriptions in German)
- 1933 Kano: 100 (checklist in Japanese (English summary)) >> misidentification of *N.* investigator as *N. maculifrons*
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1933a Shchegoleva-Barovskaya: 177 (revision: key, descriptions & catalog in Russian)
- 1936 Cho: 156 (checklist in Korean) >> new record for Korea
- 1937 Mochizuki & Tsunekawa (checklist)
- 1937 Wu (catalog)
- 1939 Masui (checklist)
- 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian)
- 1955a Nakane: 48 (checklist, brief descriptions)
- 1955b Nakane: 53 (key, descriptions in Japanese)
- 1956 Esaki et al.: 1029 (checklist, descriptions in Japanese)
- 1957 Cho (catalog in Korean)

- 1963 Nakane: 75 (checklist, brief descriptions in Japanese)
 1964b Hlisenkovsky: 244 (descriptions in German)
 1964 Kamimura et al.: A20 (biology, ecology)
 1969 Gersdorf: 304 (fossils, descriptions in German)
 1969 Hinton: 186 (morphology: diffraction gratings) >> has iridescent morphology
 1970 Gersdorf: 367 (morphology: female genitalia in German)
 1973 Krivolutskaya: 71 (checklist in Russian (with electronic english translation))
 1975 Katakura & Fukuda: 78 (biology, ecology)
 1978 Kim: 66 (catalog, distribution)
 1979 Nakane & Baba: 10 (checklist, distribution in Japanese)
 1985 Katakura & Ueno: 463 (biology, ecology)
 1985a Kurosawa: 247 (checklist) >> color habitus figure pl. 44
 1986 Katakura et al.: 43-55 (biology, ecology)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1987 Ryabukhin & Matis: 9 (key, descriptions, distributions in Russian)
 1988 Cho et al.: 9 (phylogenetics)
 1989 Lafer: 337 (key, descriptions, description of variation in Russian)
 1989 Martin: 876-879 (biology, ecology)
 1991 Ohkawara: 463-467 (biology, ecology in Japanese (English summary)) >> focal species
 1992 Cho & Lee: 22 (revision: key, descriptions & catalog)
 1992 Kozminykh: 64 (checklist in Russian)
 1992b Ôhara: 9 (checklist in Japanese (English summary))
 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> ungrouped; incertae sedis
 1994 Takaku et al.: 306 (biology, symbionts: mites) >> mite host
 1995a Ôhara: 25 (checklist in Japanese (English summary))
 1995 Ôhara et al.: 68 (checklist in Japanese (English summary))
 1997 Krivolutskaya: 3 (checklist) >> (translation of Krivolutskaya 1973)
 1998 Harusawa: 35 (key in Japanese)
 1998 Ohkawara et al.: 551-559 (biology, ecology) >> focal species
 1999 Suzuki: 207 (biology, ecology, behavior)
 2000 Růžička et al.: 381 (descriptions)
 2000c Suzuki: 38 (biology, ecology, behavior in Japanese with English abstract)
 2001 Nishikawa: 79-81 (larval descriptions, phylogenetics in English (Japanese summary)) >> focal species, larva described & illustrated
 2001 Trumbo et al.: 552-553 (biology, ecology, behavior) >> least common sp. in field samples
 2002 Nikolajev & Kozminykh: 129 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= karafutonis Kôno, 1929 NEW SYNONYM of *N. maculifrons* Kraatz

Type locality: "Otomari, Sachalin", "Hokkaido,: Moiwa, Jozankei, der Berg Mashû"
 [Russia, Japan; descrip.]

Type depository: NSMT: Tokyo [!] 5 syntypes

1929 Kôno: 161 (checklist, annotated) >> Orig. comb.: *N. maculifrons* form karafutonis [subspecies implied; available name ICZN 45.6.4] [!N, S]

- 1955b Nakane: 54 (key, descriptions in Japanese) >> as *N. maculifrons* subsp. *karafutonis*
 1963 Nakane: 75 (checklist, brief descriptions in Japanese) >> as valid species

= *maculiceps* (Jakovlev, 1887) CONFIRMED as SYNONYM of *N. maculifrons* Kraatz

Type locality: "Wladiwostok" [southern Ussuri, e Siberia, Russia; label]

Type depository: ZMAS: St. Petersburg [!] holotype female, allotype male, paratype female

- 1887 Jakovlev: 154 (descriptions) >> Orig. comb.: *Silpha* (*Necrophorus*) *maculiceps* [!N, S]
 1893 Heyden: 51 (checklist in German) >> as valid species
 1895b Reitter: 325 (description of variation in German) >> as valid species; New comb. as *Necrophorus maculiceps*
 1923 Portevin: 305 (key, descriptions in French) >> as valid species
 1925 Winkler: 263 (catalog) >> as valid species
 1926a Portevin: 205 (revision: key, descriptions & catalog in French) >> as valid species
 1927b Hatch: 354 (revision: key, descriptions & catalog) >> as valid species; specimens not seen by Hatch
 1928 Hatch: 130 (catalog) >> as valid species
 1932 Hlisnikovsky: 27 (key, descriptions in German) >> as valid species
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
 1933a Shchegoleva-Barovskaya: 178 (revision: key, descriptions & catalog in Russian) >> as valid species
 1964b Hlisnikovsky: 244 (descriptions in German) >> as valid species
 1975b Emetz: 105 (checklist in Russian) >> as valid species
 1985a Kurosawa: 247 (checklist) >> as valid species; color habitus figure pl. 44
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
 1989 Lafer: 337 (key, descriptions, description of variation in Russian) >> as valid species
 1992 Kozminykh: 64 (checklist in Russian) >> as syn. of *N. maculifrons*
 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> as syn. of *N. maculifrons*
 2002 Nikolajev & Kozminykh: 129 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. maculifrons*

= *parvulus* Hlisnikovsky, 1964 NEW STATUS as absolute synonym of *N. maculifrons* Kraatz

Type locality: "Kami Kochiki-schima Insel, Japan Nördliche Berge" [Kami Koshiki Shima, small island off southwest coast of Kyushu, Japan; label & descrip.]

Type depository: NMPC: Praha [!] holotype female

- 1964b Hlisnikovsky: 243 (descriptions in German) >> Orig. comb.: *Necrophorus* (*Necropter*) *maculifrons parvulus*; also misspelled as *parvus* [!N, S]
 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> as *N. maculifrons* subsp. *parvulus*

Nicrophorus marginatus Fabricius, 1801

Type locality: "North America" [descrip.]

Type depository: ZMUC: Kiel

Distribution: Nearctic: North America (southern Canada through northern Mexico, except southeast United States)

- 1792 Frölich: 125 (descriptions in German) >> description of variation: 1 unavailable name
- 1801 Fabricius: 334 (descriptions) >> Orig. comb.: *Nicrophorus marginatus* [!N, S]
- 1806 Melsheimer (catalog)
- 1807 Herschel: 271 (descriptions in German)
- 1821 Dejean: 42 (catalog)
- 1825 Say: 178 (description) >> compared to *N. orbicollis*
- 1833 Dejean: 117 (catalog in French)
- 1835 Harris
- 1836 Dejean: 131 (catalog in French)
- 1839 Matzek: 23 (morphology: internal & external anatomy in Latin) >> as *N. marginatum*
- 1853 LeConte: 275 (descriptions)
- 1853 Melsheimer: 39 (catalog)
- 1854 Lacordaire: 200 (biology, catalog in French)
- 1854 LeConte: 20 (descriptions)
- 1857b Gistel: 565 (in German)
- 1859c LeConte: 37 (checklist)
- 1866a LeConte: 367 (nomenclature)
- 1867 Walsh: 108 (comment: ecology)
- 1868 Gemminger & Harold: 718 (catalog)
- 1869 Glover (biology, behavior)
- 1869 Walsh & Riley: 61 (comment) >> "Biology" - Hatch 1928
- 1870 LeConte: 398 (nomenclature)
- 1873 Crotch: 37 (checklist) >> as *Silpha marginata*
- 1877 Provancher: 224, 225 (in French)
- 1878b Hubbard & Schwarz: 650 (checklist)
- 1880 Horn: 231 (revision: key, descriptions & catalog)
- 1885 Henshaw: 26 (checklist)
- 1888 Matthews: 93 (description)
- 1895 Clark: 61 (biology, behavior) >> feeding on maggots
- 1895 Hamilton: 324 (checklist)
- 1901 Fall: 13, 58 (checklist)
- 1902 Dury: 12 (checklist)
- 1902 Snow (biology, ecology)
- 1904 Davis: 18 (checklist)
- 1907 Fall & Cockerell: 164 (checklist)
- 1908 Heyne & Taschenberg: 38 (descriptions in German)
- 1910 Barkowski: 79 (key, descriptions, regional in German)
- 1910 Blatchley: 275 (key, descriptions, regional)
- 1910 Smith: 229 (checklist)

- 1911 Wickham: 10 (checklist)
 1915 McIndoo (biology, behavior)
 1917 Strand: 84 (descriptions in German) >> as senior syn. of *N. requiescator*
 1920 Britton: 224 (checklist)
 1920 Leng: 86 (catalog)
 1922 Sherborn: 3875 (catalog - index)
 1924 Portevin: 84 (key, descriptions in French) >> description of variation: 1 unavailable name
 1925 Hatch & Angell: 216 (descriptions) >> compared with *N. hybridus*
 1926a Portevin: 212 (revision: key, descriptions & catalog in French)
 1927a Hatch: 5, 7, 19 (key, descriptions, description of variation)
 1927b Hatch: 360 (revision: key, descriptions & catalog)
 1928 Leonard: 271 (checklist)
 1930 Johnson: 44 (checklist)
 1933 Roberts: 313 (comment: ecology) >> Reported as an infrequent predator of blow-flies
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1934 Hatch & Rueter: 159 (key, distribution, variation, descriptions)
 1936 Meserve: 133 (checklist, distribution)
 1936 Williams: 391 (comment: ecology)
 1937 Moore: 21 (checklist)
 1938 Brimley: 135 (checklist)
 1941 Foster: 21 (biology, ecology)
 1944 Arnett: 4, 24 (morphology: female genitalia) >> female genitalia figured, pl. 4, fig. 6
 1944 Blackwelder: 100 (catalog)
 1944 Milne & Milne: 311 (biology, behavior)
 1944 Walkden (biology, ecology)
 1945 Blake: 234 (checklist) >> listed among grassland habitat community
 1946 La Rivers: 117 (methods, ecology)
 1949 Bliss: 201 (morphology: sexual dimorphism)
 1949 Pierce: 67 (fossils, descriptions)
 1950 Stroud: 667 (checklist)
 1951 Jaques: 83 (key, descriptions)
 1958 Madge: 62 (revision: key, descriptions, ecology, distributions)
 1961 Dillon & Dillon: 175 (key, descriptions)
 1966 Payne & Crossley: 56 (biology, ecology)
 1970 Gersdorf: 366 (morphology: female genitalia in German)
 1970 Kirk: 25 (checklist)
 1970 Payne & King: 230 (biology, ecology)
 1972 Swan & Papp: 356 (description) >> brief description
 1973 Blackwelder: 3 (checklist, synonymy)
 1975 Baldwin: 24 (key, description, distribution, ecology)
 1975 Kirk & Balsbaugh: 52 (checklist)
 1976 Milne & Milne: 86 (popular review)
 1976 Shubeck: 265 (biology, ecology) >> cites Smith (1910)
 1977 Headstrom: 106 (description) >> brief description

- 1979 Miller & Peck: 96 (fossils)
- 1979 Powell & Hogue: 272 (field guide) >> brief description
- 1980 Arnett et al.: 128 (key, descriptions)
- 1980 Milne & Milne: 549 (field guide, brief descriptions, ecology)
- 1981 Kozol: 13 (biology, conservation, genetics)
- 1981 Schoenly (biology, ecology)
- 1982 Abell et al.: 304 (biology, ecology)
- 1982a Anderson: 258 (key, descriptions, morphology, larval stages)
- 1982c Anderson: 1316 (biology, ecology)
- 1982 Shubeck & Blank (biology, ecology)
- 1983 Schoenly & Reid: 256 (biology, ecology)
- 1983 White: 121 (field guide) >> descriptive note
- 1984 Papp: 70 (descriptions) >> brief description
- 1984 Shubeck (biology, ecology)
- 1985 Anderson & Peck: 63 (revision: key, descriptions & catalog)
- 1985 Peck & Anderson: 266 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1987 Peck & Kaulbars: 54 (checklist)
- 1987 Staines: 16 (key, descriptions) >> Maryland records
- 1989 Kozol et al.: 170 (biology, conservation)
- 1990 Peck: 1122 (key)
- 1991 Campbell: 86 (catalog, distribution)
- 1991 Laplante et al.: 29 (checklist in French)
- 1991 Raithel: 2 (biology, conservation)
- 1993 Creighton et al.: 276 (biology, conservation)
- 1993 Peck & Miller: 8 (species-group catalog)
- 1993 Shubeck: 89 (biology, ecology)
- 1994 Brown & Wilson: 3 (biology, symbionts: mites)
- 1995 Lingafelter: 220 (biology, ecology)
- 1995 Lomolino et al.: 609 (biology, conservation in English (Spanish summary))
- 1995 Navarrete-Heredia: 14 (biology, ecology, key in Spanish)
- 1996 Downie & Arnett: 356 (key, descriptions, regional)
- 1996 Lomolino & Creighton: 238 (biology, conservation)
- 1996 Ratcliffe: 72 (revision: key, descriptions & catalog)
- 1997 Backlund & Marrone: 56 (biology, conservation)
- 1997 King & Cummings: 1088-1095 (biology, genetics)
- 1997 Rana et al.: 375-380 (biology, physiology) >> focal species
- 1998 Arellano: 9 (checklist, distribution in Spanish)
- 1998 Carlton & Rothwein: 183 (biology, conservation)
- 1998 Coyle & Larsen: 163 (biology, ecology)
- 1998 Peck & Thomas: 37 (checklist, distribution)
- 1998b Scott: 599+ (biology, review of: ecology, behavior)
- 1999 Bedick et al.: 177 (biology, conservation)
- 1999 De Jong & Chadwick: 843 (biology, ecology)
- 2000 Navarrete-Heredia & Fierros-López: 407 (checklist, distribution in Spanish (English summary))
- 2000 Peck: 268 (family treatment) >> figured

- 2000 Sikes & Peck: 395 (descriptions, phylogenetics)
 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics)
 2000 Trumbo & Bloch: 247 (biology, ecology, conservation)
 2001 Navarrete-Heredia: 170 (checklist, distribution in Spanish)

= *labreae* Pierce, 1949 [fossil]

Type locality: "Pit X, Pit A, Pit B..." [USA: California: Los Angeles Co., Rancho La Brea; descrip]

Type depository: LACM: Los Angeles

- 1949 Pierce: 63 (fossils, descriptions) >> Orig. comb.: *Nicrophorus guttulus labreae* [fossil] [!N, S]
 1979 Miller & Peck: 96 (fossils) >> as syn. of *N. marginatus*; desig. lectotype
 1985 Anderson & Peck: 63 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. marginatus*
 1996 Ratcliffe: 72 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*

= *latifrons* Pierce, 1949 [fossil]

Type locality: "Pit X" [USA: California: Los Angeles Co., Rancho La Brea; descrip.]

Type depository: LACM: Los Angeles [head C120d]

- 1949 Pierce: 67 (fossils, descriptions) >> Orig. comb.: *Nicrophorus investigator latifrons* [fossil] [!N, S]
 1979 Miller & Peck: 96 (fossils) >> as syn. of *N. marginatus*
 1985 Anderson & Peck: 63 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. marginatus*
 1996 Ratcliffe: 72 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*

= *lunatus* Gistel, 1857 NEW SYNONYM of *N. marginatus*

Type locality: "America borealis" [Canada?; descrip.]

Type depository: unknown

- 1857b Gistel: 564 (in German) >> Orig. comb.: *Nicrophorus lunatus*, with *N. lunulatus* Gistel as syn., preocc., not Fischer [!N]

= *lunulatus* Gistel, 1848 NEW SYNONYM of *N. marginatus*

Type locality: "North America" [descrip.]

Type depository: ZSMC: München?

- 1848 Gistel: 189 (descriptions in German) >> Orig. comb.: *Nicrophorus lunulatus*
 1857b Gistel: 564 (in German) >> New junior primary homonym, not Fischer 1842
 1917 Strand: 83 (descriptions in German)
 1928 Hatch: 129 (catalog) >> as syn. of *N. sayi* Lap.
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. sayi*; misspelled as *N. lumulatus*
 1985 Anderson & Peck: 69 (revision: key, descriptions & catalog) >> as syn. of *N. sayi*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. sayi* (cited as "following Hatch 1928")

- = mckittricki Pierce, 1949 [fossil]
 Type locality: "McKittrick" [USA: California: Kern Co.; descrip]
 Type depository: LACM: Los Angeles
 1949 Pierce: 66 (fossils, descriptions) >> Orig. comb.: *Nicrophorus mckittricki* [fossil] [!N, S]
 1979 Miller & Peck: 96 (fossils) >> as syn. of *N. marginatus*
 1985 Anderson & Peck: 63 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. marginatus*
 1996 Ratcliffe: 72 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*
- = montezumae Matthews, 1888 CONFIRMED as SYNONYM of *N. marginatus*
 Fabricius
 Type locality: "Mexico, Villa Lerdo in Durango, Cholula, Jalapa, Mexico city, Esperanza" [descrip.]
 Type depository: BMNH: London [!] 3 syntypes
 1888 Matthews: 92 (description) >> Orig. comb.: *Nicrophorus montezumae* [!N, S]
 1924 Portevin: 83 (key, descriptions in French) >> as valid species, with reservation
 1926a Portevin: 211 (revision: key, descriptions & catalog in French) >> as valid species
 1928 Hatch: 147 (catalog) >> as syn. of *N. marginatus*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. marginatus*
 1985 Anderson & Peck: 63 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*
 1985 Peck & Anderson: 266 (key, descriptions, phylogenetics) >> as syn. of *N. marginatus*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. marginatus*
 1996 Ratcliffe: 72 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*
- = obtusiscutellum Pierce, 1949 [fossil]
 Type locality: "Pit A" [USA: California: Los Angeles Co., Rancho La Brea; descrip]
 Type depository: LACM: Los Angeles
 1949 Pierce: 67 (fossils, descriptions) >> Orig. comb.: *Nicrophorus obtusiscutellum* [fossil] [!N, S]
 1979 Miller & Peck: 96 (fossils) >> as syn. of *N. marginatus*
 1985 Anderson & Peck: 63 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. marginatus*
 1996 Ratcliffe: 72 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*

Comments: As discussed above (see *N. germanicus* and *N. interruptus*) regarding the names proposed by Gistel (1848, 1857), usually treated as *nomina dubia*, we herein move *N. lunulatus* Gistel, 1848 from synonymy under *N. sayi* to *N. marginatus* based on the following: Gistel described *N. lunulatus* from North America as being like *N. vespillo* but

with the elytral fascia sharply “toothed, as if tattered,” and bound with the side margins of the elytra. The similarity to *N. vespillo* suggests curved metatibiae, which are possessed by *N. sayi* and *N. marginatus*. However, *N. sayi* does not have the elytral fascia toothed, whereas *N. marginatus* does.

Nicrophorus mexicanus Matthews, 1888 desig. lectotype

Type locality: “Mexico City”[Mexico; 19.4°N, 99.15°W; label]

Type depository: BMNH: London [!] lectotype male, 8 paralectotypes

Distribution: Nearctic, Neotropical: southwestern North America, Mexico, Guatemala, El Salvador, Honduras*

- 1888 Matthews: 91 (description) >> Orig. comb.: *Nicrophorus mexicanus*; auth. attrib. Chevrolat [!N, S]
- 1901 Villada: 35 (checklist in Spanish)
- 1924 Portevin: 188 (key, descriptions in French)
- 1926a Portevin: 226 (revision: key, descriptions & catalog in French)
- 1927b Hatch: 357 (revision: key, descriptions & catalog)
- 1928 Hatch: 144 (catalog)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1943 Portevin: 48 (description of variation in French) >> description of variation: 1 unavailable name
- 1944 Arnett: 6, 22 (morphology: female genitalia) >> female genitalia figured, pl. 3, fig. 7
- 1944 Blackwelder: 100 (catalog)
- 1958 Madge: 56 (revision: key, descriptions, ecology, distributions) >> as *N. investigator* subsp. *mexicanus*
- 1972 Howden & Peck: 71 (biology, ecology)
- 1973 Blackwelder: 6 (checklist, synonymy)
- 1975 Zaragoza et al.: 459-475 (biology, ecology in Spanish (English summary)) >> focal species
- 1982 Halffter et al.: 50-52 (biology, behavior, morphology: ovaries, in Spanish) >> focal species
- 1984 Halffter et al.: 648-666 (biology, behavior in French) >> focal species
- 1985 Anderson & Peck: 49 (revision: key, descriptions & catalog) >> in key only
- 1985 Peck & Anderson: 267 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1987 Peck & Kaulbars: 53 (checklist)
- 1990 Peck: 1122 (key)
- 1992 Halffter: 283 (biology, behavior)
- 1992 Huerta: 13-21 (morphology: sternal glands in Spanish (English summary)) >> focal species
- 1992 Terrón et al.: 315-324 (biology, ecology in Spanish (English summary))
- 1993 Huerta et al.: 151-157 (biology, behavior) >> focal species
- 1993 Peck & Miller: 8 (species-group catalog)
- 1995 Lingafelter: 220 (biology, ecology) >> not found during surveys
- 1995 Navarrete-Heredia: 12 (biology, ecology, key in Spanish)

- 1996 Halffter et al.: 162 (biology, ecology)
 1996 Palestini et al.: 435-445 (larval descriptions, phylogenetics) >> focal species;
 larval stage descriptions
 1996 Ratcliffe: 74 (revision: key, descriptions & catalog)
 1998 Arellano: 9 (checklist, distribution in Spanish)
 1998 Huerta & Anduaga: 79-81 (biology, behavior, physiology in Spanish) >> focal
 species
 1998 Rivera-Cervantes & García-Real: 14 (biology, ecology in Spanish)
 2000 Navarrete-Heredia & Quiroz-Rocha: 4 (biology, ecology, distribution in Spanish)
 2000 Navarrete-Heredia & Fierros-López: 407 (checklist, distribution in Spanish
 (English summary)) >> distribution and habitat notes
 2000 Sikes & Peck: 395 (descriptions, phylogenetics)
 2001 Anduaga & Huerta: 264-271 (biology, behavior, physiology) >> focal species
 2001 Burgos Solorio & Trejo-Loyo: 94 (checklist in Spanish)
 2001 Fierros-Lopez & Navarrete-Heredia: 45-46 (biology, ecology)
 2001 Navarrete-Heredia: 170 (checklist, distribution in Spanish)

Comments: Lectotype data for *Nicrophorus mexicanus* Matthews, 1888: 91 (The only male in the syntype series.) MEXICO: Mexico City, [19.4°N, 99.15°W,](coll. Höge) / red rectangular label with double black border "LECTOTYPE *Nicrophorus mexicanus* (Matthews1888) det. Sikes 1997"- male (London [BMNH]); pronotal width: 6.80 mm.

Paralectotype data "N. mexicanus Chevrolat" red bordered circular label: "Type", / MEXICO: Ciudad, Mex., elev. 8100 ', (coll. Forrer) / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus mexicanus* (Matthews1888) det. Sikes 1997"- female (London [BMNH]) / MEXICO: Mexico City, [19.4° ' N, 99.15° ' W,](coll. Höge) / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus mexicanus* (Matthews1888) det. Sikes 1997"- 4 females (London [BMNH]); "Nicrophorus mexicanus Chev. apud Sallé" / MEXICO: Parada, (coll. Sallé) / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus mexicanus* (Matthews1888) det. Sikes 1997"- 2 females (London [BMNH]); "Nicrophorus mexicanus Chev. apud Sallé" / "1777" / MEXICO: Yolotepec, (coll. Sallé) / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus mexicanus* (Matthews1888) det. Sikes 1997"- female (London [BMNH]).

Nicrophorus mongolicus Shchegoleva-Barovskaya, 1933 desig. lectotype

Type locality: "Nordl. Mongolei. Changai"[Mongolia; 47.5°N, 100°E; label]

Type depository: ZMAS: St. Petersburg [!] lectotype male, 6 paralectotypes [BMNH, ZMAS]

Distribution: Palearctic: Mongolia, Russia: Siberia, Tadzhikistan*, Kazahkstan*

- 1933a Shchegoleva-Barovskaya: 189 (revision: key, descriptions & catalog in Russian)
 >> Orig. comb.: *Nicrophorus* (*Nicrophorus*) *mongolicus* [!N, S]
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1964a Hlisnikovsky: 223 (key, descriptions in German)

- 1975a Emetz: 60 (checklist in German)
 1975b Emetz: 105 (checklist in Russian)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1992 Kozminykh: 64 (checklist in Russian)
 1993b Kozminykh: 66 (key, descriptions, regional in Russian)
 2002 Nikolajev & Kozminykh: 123 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

Comments: Lectotype data for *Nicrophorus mongolicus* Shchegoleva-Barovskaya, 1933 "Nicrophorus semenowi; N. mongolicus Stsh-Bar. Typ. x Barovskaja 1931 det. [handwritten]/Paratypus [red label]Nicrophorus mongolicus"; / "collection the Zoological Institute Academy of Sciences, St. Petersburg, Russia"; /"201";/ gold-foil circular label; /"48" [-corresponds to genitalia on separate pin with label "48"]; /"Coll. Semenov-Tian-Shansky"/ [MONGOLIA]: Nordl. Mongolei. Changai, [47.5°N, 100°E,](coll. Leder) / white black bordered label "Nicrophorus mongolicus Shchegoleva-Bar., 1933 Det. D. S. Sikes 1998 ZMAS006217Nic" / red rectangular label with double black border "LECTOTYPE Nicrophorus mongolicus (Shchegoleva-Barovskaya 1933) det. Sikes 1997"- male (St. Petersburg [ZMAS]); pronotal width: 5.86 mm.

Paralectotype data "Nicrophorus semenowi pseudobrutato Rtt. Nicrophorus mongolicus / "collection the Zoological Institute Academy of Sciences, St. Petersburg, Russia"; "201"; gold-foil circular label; "k. g. Sueersa" / [MONGOLIA]: Nordl. Mongolei. Changai, [47.5° ' N, 100° ' E,](coll. Leder) / red rectangular label with double black border "PARALECTOTYPE Nicrophorus mongolicus (Shchegoleva-Bar. 1933) det. Sikes 1997"- male (St. Petersburg [ZMAS]); "mongolicus" [handwritten] / "Nicrophorus mongolicus" / "collection the Zoological Institute Academy of Sciences, St. Petersburg, Russia"; "201"; gold-foil circular label / MONGOLIA: Changai mts, [47.5° ' N, 100° ' E,] 22 July 1926 (coll. Kiritshenko) / red rectangular label with double black border "PARALECTOTYPE Nicrophorus mongolicus (Shchegoleva-Bar. 1933) det. Sikes 1997"- female (St. Petersburg [ZMAS]); "Nicrophorus mongolicus" / "collection the Zoological Institute Academy of Sciences, St. Petersburg, Russia"; "201"; gold-foil circular label / MONGOLIA: S-3. Mongolía Klemenú, 23 May - 15 June 1894 / red rectangular label with double black border "PARALECTOTYPE Nicrophorus mongolicus (Shchegoleva-Bar. 1933) det. Sikes 1997" - female (St. Petersburg [ZMAS]); "Nicrophorus semenowi" [handwritten] / "Nicrophorus mongolicus" / "collection the Zoological Institute Academy of Sciences, St. Petersburg, Russia"; "201"; gold-foil circular label; "33" -corresponds to genitalia on separate pin with label "33" / [MONGOLIA]: Nordl. Mongolei. Changai, [47.5° ' N, 100° ' E,](coll. Leder) / red rectangular label with double black border "PARALECTOTYPE Nicrophorus mongolicus (Shchegoleva-Bar. 1933) det. Sikes 1997"- female (St. Petersburg [ZMAS]); "N. mongolicus Stsh-Bar. Typ. z Barovskaja 1931 det." [handwritten] / "Nicrophorus mongolicus" / "collection the Zoological Institute Academy of Sciences, St. Petersburg, Russia"; "201"; gold-foil circular label; "47" -corresponds to genitalia on sepa-

rate pin with label "47"; "Coll. Semenov-Tian-Shansky"; data label handwritten & illegible / 16 July 1899 / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus mongolicus* (Shchegoleva-Bar. 1933) det. Sikes 1997" - female (St. Petersburg [ZMAS]).

***Nicrophorus montivagus* Lewis, 1887** desig. lectotype

Type locality: "Chiuzenji" [Lake Chuzenji, Honshu Japan; 36.73°N, 139.48°E; label]

Type depository: BMNH: London [!] lectotype male, 14 paralectotypes

Distribution: Palearctic: Japan: Honshu, Shikoku

- 1887 Lewis: 340 (description) >> Orig. comb.: *Nicrophorus montivagus* [!N, S]
- 1910 Jakobson: 612 (checklist in Russian)
- 1914b Portevin: 224 (description of variation in French)
- 1914b Portevin: 224 (description of variation in French)
- 1924 Portevin: 291 (key, descriptions in French)
- 1925 Winkler: 264 (catalog)
- 1926a Portevin: 231 (revision: key, descriptions & catalog in French)
- 1928 Hatch: 136 (catalog)
- 1929 Kôno: 164 (checklist, annotated)
- 1932 Hlisnikovsky: 29 (key, descriptions in German)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1955b Nakane: 54 (key, descriptions in Japanese)
- 1956 Esaki et al.: 1029 (checklist, descriptions in Japanese)
- 1963 Nakane: 75 (checklist, brief descriptions in Japanese)
- 1964 Kamimura et al.: A20 (biology, ecology)
- 1979 Nakane & Baba: 10 (checklist, distribution in Japanese)
- 1985a Kurosawa: 248 (checklist) >> color habitus figure pl. 44
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1989 Martin: 876-879 (biology, ecology)
- 1993b Kozminykh: 67 (key, descriptions, regional in Russian)
- 1998 Harusawa: 35 (key in Japanese)
- 2000 Růžička et al.: 381 (descriptions)

= *mixtus* Hlisnikovsky, 1964 NEW SYNONYM of *N. montivagus* Lewis

Type locality: "Insel Sado, Japan" [Sado Island, w of central Honshu, Japan; label]

Type depository: NMPC: Praha [!] holotype male, paratype male

- 1964b Hlisnikovsky: 242 (descriptions in German) >> Orig. comb.: *Nicrophorus*
(*Necropter*) *mixtus* [!N, S]
- 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> as valid species,
incertae sedis

Comments: Lectotype data for *Nicrophorus montivagus* Lewis, 1887: 340 "*Nicrophorus montivagus* Lewis Type male" / [on card, only 2 of the 15 syntypes are carded, one male and one female, this is the best choice as lectotype]. JAPAN: Chiuzenji, [36.73°N, 139.48°E,]19-24 August 1881 (coll. G. Lewis) / red rectangular label with double black

border “LECTOTYPE *Nicrophorus montivagus* (Lewis 1887) det. Sikes 1997”- male (London [BMNH]); pronotal width: 3.97 mm.

Paralectotype data “*Nicrophorus montivagus* Lewis Type male” / “Type”, / JAPAN: Nikko., [36.75° ' N, 139.6° ' E,]10-18 August 1881 (coll. G. Lewis) / red rectangular label with double black border “PARALECTOTYPE *Nicrophorus montivagus* (Lewis 1887) det. Sikes 1997”– 1 male, 1 female [on card] (London [BMNH]); “*Nicrophorus montivagus* Lewis Type male” / “Type”, / JAPAN: Chiuzenji, [36.73° ' N, 139.48° ' E,]1-30 June 1880 (coll. G. Lewis) / red rectangular label with double black border “PARALECTOTYPE *Nicrophorus montivagus* (Lewis 1887) det. Sikes 1997”– 2 males (London [BMNH]); JAPAN: Chiuzenji, [36.73° ' N, 139.48° ' E,]19-24 August 1881 (coll. G. Lewis) / red rectangular label with double black border “PARALECTOTYPE *Nicrophorus montivagus* (Lewis 1887) det. Sikes 1997”– 3 males, 6 females (London [BMNH]); “*montivagus* Lewis” / “*Nicrophorus montivagus* Lewis co-type” / [JAPAN]: Chiuzenji, [36.73° ' N, 139.48° ' E,] / red rectangular label with double black border “PARALECTOTYPE *Nicrophorus montivagus* (Lewis 1887) det. Sikes 1997”- male (London [BMNH])

DSS examined the types of the name *N. mixtus* Hlisnikovskiy and concluded they were conspecific with *N. montivagus* Lewis. They share the nonproduced apical angles of the mesotibiae, no row of setae on the humerus, and the most diagnostic character of *N. montivagus* – the basal three segments of the antennal club are black/grey and the apical segment is orange (a color pattern unique in the subfamily). The types differ from most *N. montivagus* in having an orange spot on the frons and in a few aspects of the elytral maculations.

***Nicrophorus morio* Gebler, 1817** NEW STATUS as valid species

Type locality: not mentioned, no data on types

Type depository: MNHN: Paris [!] lectotype female, 1 paralectotype male

Distribution: Palearctic: neChina, Mongolia, Turkmenistan*, Kazakhstan, Kirgiziya*, Afghanistan, Iran*, eastern and sRussia, Uzbekistan

- 1817 Gebler: 319 (descriptions in Latin) >> Orig. Comb.: *Nicrophorus Morio* [!N, S]
- 1833 Dejean: 117 (catalog in French)
- 1835b Faldermann: 340 (descriptions)
- 1836 Dejean: 131 (catalog in French) >> as valid species
- 1849 Ménétrés: 52 (checklist in French)
- 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
- 1859 Gebler: 459 (checklist)
- 1859b Motschulsky: 304
- 1863 Marseul: 88 (catalog in French)
- 1866 Marseul: 38 (catalog in French)
- 1868 Gemminger & Harold: 718 (catalog)
- 1868 Stein: 42 (catalog in Latin)
- 1874 Seidlitz: 215 (key in German)

- 1874 Solsky: 213 (checklist in Russian)
- 1876c Kraatz: 396 (in German)
- 1877 Stein & Weise: 61 (catalog in Latin)
- 1880 Heyden: 86 (checklist in German) >> as valid species
- 1883 Heyden et al.: 73 (checklist) >> as valid species
- 1884 Kraatz: 230 (descriptions in German) >> as valid species; compared to *N. nigerimus*
- 1884 Marseul: 185 (key, descriptions in French) >> suggests might be var. of *N. germanicus*
- 1884 Reitter: 86 (descriptions in German) >> as *Silpha morio*; as valid species
- 1885 Marseul: 169 (catalog in French)
- 1885 Reitter: 319 (in German)
- 1890 Jakovlev: 127 (descriptions in Russian) >> as *Necrophorus morio*; compared to *N. funebris* (as *N. morioni* Gebl.)
- 1891 Heyden et al.: 138 (checklist) >> as valid species
- 1893 Heyden: 51 (checklist in German) >> as valid species
- 1893 Reitter: 147 (key, descriptions in German) >> as valid species
- 1895b Reitter: 324 (description of variation in German) >> as valid species
- 1896 Heyden: 38 (checklist in German) >> as valid species
- 1906 Heyden et al.: 247 (checklist) >> as valid species
- 1910 Jakobson: 611 (checklist in Russian) >> as valid species
- 1914b Portevin: 224 (description of variation in French) >> as valid species
- 1916 Pasquet (description of variation in French)
- 1922 Sherborn: 4164 (catalog - index)
- 1923 Portevin: 229 (key, descriptions in French) >> as valid species
- 1925 Winkler: 263 (catalog) >> as valid species
- 1926a Portevin: 197 (revision: key, descriptions & catalog in French) >> as valid species
- 1927b Hatch: 355 (revision: key, descriptions & catalog) >> as valid species
- 1928 Hatch: 135 (catalog) >> as valid species
- 1929 Kôno: 164 (checklist, annotated) >> as valid species
- 1932 Hlisnikovsky: 25 (key, descriptions in German) >> as valid species
- 1933 Semenov-Tian-Shanskij: 155 (catalog in Russian & Latin) >> as *N. germanicus* subsp. *morio*
- 1933a Shchegoleva-Barovskaya: 175 (revision: key, descriptions & catalog in Russian) >> as *N. germanicus* subsp. *morio*
- 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian) >> as *N. germanicus* subsp. *morio*
- 1955b Nakane: 53 (key, descriptions in Japanese)
- 1964a Hlisnikovsky: 223 (key, descriptions in German) >> as valid species
- 1966a Mroczkowski: 333 (checklist) >> as *N. germanicus* subsp. *morio*
- 1969 Gersdorf: 305 (fossils, descriptions in German) >> as valid species but possible subsp. of *N. germanicus*
- 1970 Gersdorf: 366 (morphology: female genitalia in German) >> as valid species
- 1975a Emetz: 59 (checklist in German) >> as *N. germanicus* subsp. *morio*
- 1975b Emetz: 104 (checklist in Russian) >> as *N. germanicus* subsp. *morio*
- 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as valid species

- 1992 Kozminykh: 64 (checklist in Russian) >> as *N. germanicus* subsp. *morio*
 1992 Kozminykh & Esjunin: 68 (checklist in Russian) >> as *N. germanicus* subsp. *morio*
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as *N. germanicus* subsp. *morio*
 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary)) >> as *N. germanicus* subsp. *morio*
 1995 Kozminykh: 109 (key in Russian) >> as *N. germanicus* subsp. *morio*
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as *N. germanicus* subsp. *morio*
 1996 Růžička & Schneider: 80 (checklist in English (Czech summary)) >> as *N. germanicus* subsp. *morio*
 2002 Nikolajev & Kozminykh: 106 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as *N. germanicus* subsp. *morio*

= *funnebris* Jakovlev, 1890 REVISED SYNONYM of *N. morio* Gebler

Type locality: “circa Urgam urbem”, [Ulaan Bator, Mongolia; descrip.] and “Ordos” [Ulan Balgas, Mongolia, 39.08N, 107.98E; label]

Type depository: ZMAS: St. Petersburg [!] holotype male

- 1890 Jakovlev: 127 (descriptions in Russian) >> Orig. comb.: *Necrophorus funnebris* [!N, S]
 1893 Heyden: 51 (checklist in German) >> as valid species
 1893 Reitter: 147 (key, descriptions in German) >> as *N. morio* var. *funnebris*
 1895b Reitter: 324 (description of variation in German) >> as *N. morio* var. *funnebris*
 1896 Heyden: 38 (checklist in German) >> as *N. morio* var. *funnebris*
 1910 Jakobson: 611 (checklist in Russian) >> as *N. morio* var. *funnebris*
 1914b Portevin: 224 (description of variation in French) >> as *N. morio* var. *funnebris*
 1923 Portevin: 230 (key, descriptions in French) >> as *N. morio* var. *funnebris*
 1925 Winkler: 263 (catalog) >> as *N. morio* ab. *funnebris*
 1926a Portevin: 197 (revision: key, descriptions & catalog in French) >> as *N. morio* var. *funnebris*
 1928 Hatch: 135 (catalog) >> as *N. morio* var. *funnebris*
 1933a Shchegoleva-Barovskaya: 175 (revision: key, descriptions & catalog in Russian) >> as *N. germanicus* subsp. *morio* ab. *funnebris*
 1975b Emetz: 104 (checklist in Russian) >> as syn. of *N. germanicus* subsp. *morio*
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as absolute syn. of *N. germanicus*
 1995 Kozminykh & Nemkov: 111 (catalog in Russian) >> as absolute syn. of *N. germanicus*

= *rugulipennis* Jakovlev, 1890 NEW SYNONYM of *N. morio* Gebler

Type locality: “prope urbem chinensen Kalgan” [Zhangjiakou; 125m. nw of Beijing; Hebei Prov., ne China; label]

Type depository: ZMAS: St. Petersburg [!] holotype female

- 1890 Jakovlev: 126 (descriptions in Russian) >> Orig. comb.: *Necrophorus rugulipennis* [!N, S]

- 1893 Heyden: 51 (checklist in German) >> as valid species
 1895b Reitter: 324 (description of variation in German) >> as valid species
 1896 Heyden: 38 (checklist in German) >> as valid species
 1910 Jakobson: 611 (checklist in Russian) >> as valid species
 1923 Portevin: 230 (key, descriptions in French) >> as valid species
 1925 Winkler: 263 (catalog) >> as valid species
 1926a Portevin: 198 (revision: key, descriptions & catalog in French) >> as valid species
 1927b Hatch: 355 (revision: key, descriptions & catalog) >> as valid species; specimens not seen by Hatch
 1928 Hatch: 136 (catalog) >> as valid species
 1932 Hlisnikovsky: 25 (key, descriptions in German) >> unknown to author
 1933 Semenov-Tian-Shanskij: 155 (catalog in Russian & Latin) >> as valid species
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as valid species
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as valid species

Comments: The name *Nicrophorus morio* has been treated as a valid species throughout most of its earlier history and as a subspecies of *N. germanicus* during most of its more recent history. This problem would be ideal for the application of molecular data to help establish how divergent these two taxa are. However, without such data, we base our decision to elevate this name to species rank on the following: *N. morio* is consistently diagnosable from *N. germanicus* based on the color of the epipleura which is black in *N. morio* and orange in *N. germanicus*, and on the row of setae near the humerus which is longer and has setae of equal length in *N. morio* but shorter and has setae of decreasing length in *N. germanicus*. Additionally, these two species' distributions overlap between 34° to 46°E longitude and 47° to 52°N latitude with no specimens from this region showing mixed character states indicative of gene flow between *N. morio* and *N. germanicus*.

The name *N. morio* var. *funebri* Jakovlev has been considered subordinate to *N. morio* throughout most of its history but with the more recent treatment of *N. morio* as a subspecies of *N. germanicus*, this name has been considered subordinate to *N. germanicus*. DSS has studied the type of *N. morio* var. *funebri* and it is *N. morio*, not *N. germanicus*.

The name *N. rugulipennis* Jakovlev has never been treated as anything but a valid species. However, DSS has studied the type, which is the only known specimen of this name, and although the elytra are unusually rugose for *N. morio*, it matches *N. morio* in all other respects and thus we herein synonymize it under *N. morio*.

***Nicrophorus nepalensis* Hope, 1831**

Type locality: "Nepaul" [Nepal; descrip.]

Type depository: BMNH: London [!] holotype male

Distribution: Oriental: nPakistan, Himalayas, Indonesia: Java, Flores, China, Laos, Burma, Malaysia, Japan: Ryukyu; Philippines, Taiwan, Thailand, Vietnam

1831 Hope: 21 (descriptions) >> Orig. comb.: *Nicrophorus Nepalensis* [!N, S]

1877 Harold: 346 (descriptions in German) >> "mainland relative of *N. maculifrons*"

- 1879 Dohrn: 459 (comment in German)
- 1887 Lewis: 339 (description) >> compared with *N. maculifrons*
- 1897 Reitter: 48 (description of variation in German)
- 1908 Heyne & Taschenberg: 38 (descriptions in German) >> brief description
- 1910 Jakobson: 612 (checklist in Russian)
- 1912 Fowler: 84 (comment) >> dorsal habitus figured
- 1916 Heller: 276 (in German) >> from Luzon Prov. Philippines, Benguet: Baguio
- 1920 Portevin: 399 (descriptions in French)
- 1922 Portevin: 55 (descriptions in French)
- 1922 Sherborn: 4291 (catalog - index)
- 1923 Bernet Kempers: 79 (morphology: wing venation in German) >> "Wing venation" -Hatch 1928
- 1923 Portevin: 307 (key, descriptions in French) >> description of variation: 1 unavailable name p. 308
- 1925 Winkler: 263 (catalog)
- 1926a Portevin: 208 (revision: key, descriptions & catalog in French)
- 1927b Hatch: 354 (revision: key, descriptions & catalog)
- 1928 Hatch: 129 (catalog)
- 1931 Miwa: 46 (catalog)
- 1932 Hlisnikovsky: 27 (key, descriptions in German)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1937 Wu (catalog)
- 1946b Arnett: 208 (descriptions) >> compared with *N. benguetensis*; female genitalia figured.
- 1950 Arnett: 66 (description)
- 1964b Hlisnikovsky: 244 (descriptions in German) >> description of variation: 1 unavailable name
- 1966b Mroczkowski: 325 (checklist)
- 1969 Hinton: 185 (morphology: diffraction gratings) >> focal species on iridescent morphology study
- 1969 Shibata: 53 (catalog) >> compared to *N. quadripunctatus*- no male genitalic differences found
- 1975 Emetz & Schawaller: 230 (checklist in German (English summary)) >> description of variation: 1 unavailable name
- 1977 Schawaller: 259 (checklist in German)
- 1982 Schawaller: 253 (checklist in German (English summary))
- 1985a Kurosawa: 247 (checklist) >> color habitus figure pl. 44
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1990 Hanski & Niemelä: 149 (biology: ecology)
- 1991 Hanski & Krikken: 195 (biology: ecology)
- 1992 Zhang (checklist in Chinese (English summary))
- 1993b Kozminykh: 67 (key, descriptions, regional in Russian)
- 1993 Zhang (in Chinese (English summary))
- 1996 Růžička & Schneider: 81 (checklist in English (Czech summary))
- 1998 Harusawa: 35 (key in Japanese)
- 2000 Růžička et al.: 381 (descriptions)
- 2001 Peck: 94 (keys, descriptions and distributions)

- = *benguetensis* Arnett, 1946 NEW SYNONYM of *N. nepalensis* Hope
 Type locality: “Baguio, Mountain Province, Luzon Island, Philippines” [descrip. & label]
 Type depository: NMNH: Washington, D. C. [!] holotype female, allotype male, 5 paratypes [USNM, BMNH]
 1946b Arnett: 207 (descriptions) >> Orig. comb.: *Nicrophorus benguetensis* [!M, N, S]
 1950 Arnett: 67 (description) >> as valid species
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
 2001 Peck: 94 (keys, descriptions and distributions) >> as valid species
- = *ocellatus* Deyrolle & Fairmaire, 1878 CONFIRMED as SYNONYM of *N. nepalensis* Hope
 Type locality: not mentioned [in descr. nor on type labels]
 Type depository: MNHN: Paris [!] holotype female
 1878 Deyrolle & Fairmaire: 90 (descriptions in French) >> Orig. comb.: *Nicrophorus ocellatus* [!S]
 1903 Portevin: 331 (descriptions in French) >> as doubtfully valid
 1915 Schultze: 31 (checklist) >> as valid species
 1917a Pic: 2 (description of variation in French) >> as valid species
 1920 Portevin: 399 (descriptions in French) >> as valid species
 1922 Portevin: 56 (descriptions in French) >> as syn. of *N. nepalensis*
 1925 Winkler: 263 (catalog) >> as questionable syn. of *N. quadripunctatus*
 1926a Portevin: 253 (revision: key, descriptions & catalog in French) >> as syn. of *N. nepalensis*
 1928 Hatch: 129 (catalog) >> as syn. of *N. nepalensis*
 1982 Schawaller: 253 (checklist in German (English summary)) >> as syn. of *N. nepalensis*
 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> as syn. of *N. nepalensis*

Comments: Arnett (1946b) described *N. benguetensis* based on differences in punctuation density and the apparent shininess of the elytra, and differences in elytral setal color between the types of this species and *N. nepalensis*. We have studied the types of *N. benguetensis* at the USNM and the BMNH and noted that Arnett's diagnosable characters were not constant in all the type specimens. In some specimens the characters were identical to *N. nepalensis* and in others the states were the reverse of Arnett's description, e.g. some *N. benguetensis* were shinier than *N. nepalensis*. Nevertheless, in some specimens, Arnett's characters were apparent and could be used to sort specimens according to Arnett's concept. However, although the *N. benguetensis* population is clearly isolated from *N. nepalensis s. str.*, being restricted to Luzon Island in the Philippines, the degree of the differences do not indicate that this island population is sufficiently distinct to warrant species rank.

Nicrophorus nigricornis Faldermann, 1835

Type locality: "Russia" [descrip.]

Type depository: ZMAS: St. Petersburg? [not found]

Distribution: Palearctic: Caucasus, Armenia, Azerbaijan, n. Iran, Turkey, Georgia

- 1833 Dejean: 118 (catalog in French) >> pre description; nomen nudum; auth. attrib. Dejean
- 1835a Faldermann: 217 (descriptions) >> Orig. comb.: *Nicrophorus nigricornis* [auth. attrib. Dejean] [!M, S]
- 1854 Lacordaire: 200 (biology, catalog in French)
- 1863 Marseul: 88 (catalog in French)
- 1866 Marseul: 38 (catalog in French)
- 1868 Gemminger & Harold: 719 (catalog)
- 1876d Kraatz: 397 (comment in German)
- 1877 Stein & Weise: 61 (catalog in Latin)
- 1877 Stierlin: 288 (in German)
- 1883 Heyden et al.: 73 (checklist)
- 1883 Reitter: 60 (comment in German) >> in Caucasus
- 1884 Marseul: 192 (key, descriptions in French) >> (considered separate from *N. sepulchralis*)
- 1884 Reitter: 88 (descriptions in German) >> as *Silpha nigricornis*
- 1885 Marseul: 169 (catalog in French)
- 1885 Reitter: 322 (in German)
- 1888 Seidlitz: 312 (key in German) >> misspelled as *Necrophagus nigricornis*
- 1889 Seidlitz: 329 (key in German) >> misspelled as *Necrophagus nigricornis*
- 1891 Heyden et al.: 139 (checklist) >> as *Nicrophorus nigricornis*
- 1895b Reitter: 329 (description of variation in German)
- 1899 Ganglbauer: 166 (key, descriptions, in German)
- 1901 Carret: 328 (description of variation in French) >> compared with *N. sepulchralis*
- 1902 Heyden: 12 (nomenclature in French)
- 1906 Heyden et al.: 247 (checklist)
- 1909 Reitter: 240 (in German)
- 1910 Jakobson: 612 (checklist in Russian)
- 1913 Kuhnt: 336 (in German)
- 1916 Pasquet: 175 (description of variation in French)
- 1922 Sherborn: 4338 (catalog - index)
- 1925 Portevin: 165 (description of variation in French)
- 1925 Winkler: 265 (catalog) >> *N. sepulchralis* not mentioned
- 1926 Porta: 333 (key, checklist in Italian)
- 1926a Portevin: 243 (revision: key, descriptions & catalog in French)
- 1927b Hatch: 363 (revision: key, descriptions & catalog) >> from Europe, Greece, Caucasus
- 1928 Hatch: 152 (catalog)
- 1929 Portevin: 540 (key, intraspecific variation in French)
- 1932 Hlisnikovskiy: 30 (key, descriptions in German) >> from Turkey
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1933a Shchegoleva-Barovskaya: 179 (revision: key, descriptions & catalog in Russian)

- 1939 Roubal: 85 (description of variation in Czech (French summary))
 1949 Horion: 77 (biology, ecology, distribution in German)
 1955 Mroczkowski: 23 (key, descriptions in Polish)
 1965 Báguena: 51 (checklist in Spanish)
 1971 Freude: 194 (key in German)
 1985 Zahradník: 122 (catalog, annotated & figured in German)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1987 Lucht: 67 (catalog in German)
 1989 Koch: 165 (biology, ecology in German)
 1990 Zahradník: 122 (key in Spanish)
 1992 Kozminykh: 64 (checklist in Russian)
 1993b Kozminykh: 65 (key, descriptions, regional in Russian)
 1995 Angelini et al.: 10 (checklist, distribution in Italian)
 1998 Háva et al.: 179 (distribution note in English (Czech summary)) >> cites Hlisenikovsky (1932) record
 1999 Bertin & Lebboroni: 60 (checklist in Italian)
 1999 Háva et al.: 78 (key, descriptions)
 2002 Nikolajev & Kozminykh: 114 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

Nicrophorus nigrita Mannerheim, 1843

Type locality: "California"[USA: descrip.]

Type depository: not MZHF: Helsinki (H. Silfverberg in litt.); not ZMAS : St. Petersburg (Gusarov in litt.) - lost?

Distribution: Nearctic: North America west of the Sierra Nevada mountains

- 1843 Mannerheim: 251 (descriptions in German) >> Orig. comb.: *Nicrophorus nigrita* [!S]
 1845a Motschulsky: 53 (descriptions in French) >> as valid species; compared to *N. guttula*
 1853 LeConte: 276 (descriptions) >> as valid species
 1853 Melsheimer: 39 (catalog) >> as valid species
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1854 LeConte: 20 (descriptions) >> as valid species
 1859a LeConte: 69 (checklist)
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1870 Motschulsky: 352 (descriptions in French) >> compares *N. plagiatus* Mots. to *N. nigrita*
 1873 Crotch: 37 (checklist) >> as *Silpha nigrita*
 1880 Austin: 16 (checklist) >> as *N. pustulatus* var. *nigrita*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as *N. pustulatus* (sensu Horn) var. *nigrita*
 1885 Henshaw: 26 (checklist) >> as *N. nigritus*
 1897 Fall (checklist) >> recorded from Santa Rosa Isl., CA, USA
 1901 Fall: 13, 58 (checklist) >> as *N. pustulatus* var. *nigritus*
 1908 Heyne & Taschenberg: 38 (descriptions in German)
 1910 Jakobson: 612 (checklist in Russian) >> as *N. pustulatus* var. *nigrita* Mann.

- 1920 Leng: 86 (catalog) >> as *N. pustulatus* subsp. *nigritus*
 1922 Sherborn: 4359 (catalog - index)
 1924 Portevin: 150 (key, descriptions in French) >> as *N. investigator* var. *nigrita*
 1925 Essig: 381 (comment)
 1925 Winkler: 264 (catalog) >> as *N. investigator* ab. *nigrita*
 1926a Portevin: 222 (revision: key, descriptions & catalog in French) >> *N. investigator* var. *nigrita*
 1927b Hatch: 357 (revision: key, descriptions & catalog) >> as *N. investigator* subsp. *nigritus*
 1927 Illingworth (biology, ecology) >> noted as feeding on maggots
 1928 Hatch: 141 (catalog) >> as *N. investigator* var. *nigrita*
 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian) >> as absolute syn. of *N. investigator*
 1934 Hatch & Rueter: 159 (key, distribution, variation, descriptions) >> as *N. investigator* subsp. *nigritus*
 1936 Meserve: 133 (checklist, distribution) >> as *N. pustulatus* subsp. *nigritus*
 1937 Moore: 21 (checklist) >> as *N. pustulatus* var. *nigritus*
 1940 Hatch: 235 (description of variation) >> as *N. investigator* subsp. *nigritus*
 1940 Hatch: 235 (description of variation) >> as *N. investigator* subsp. *nigritus*
 1944 Arnett: 5, 15, 22 (morphology: female genitalia) >> as valid species; female genitalia figured, pl. 3, fig. 3
 1945 Hatch: 14 (distribution note) >> as valid species
 1945 Löding: 32 (checklist) >> locality data probably erroneous
 1946 Hatch: 99 (descriptions) >> agrees with Arnett's (1944) treatment as valid species
 1948 Clark: 27 (checklist) >> as *N. nigritus*
 1949 Bliss: 201 (morphology: sexual dimorphism) >> as valid species
 1949 Pierce: 67 (fossils, descriptions) >> as *N. investigator* subsp. *nigritus*
 1951 Jaques: 83 (key, descriptions) >> as *N. pustulatus* var. *nigrita*
 1958 Madge: 54 (revision: key, descriptions, ecology, distributions) >> as *N. investigator* subsp. *nigrita*
 1972 Swan & Papp: 356 (description) >> as *N. pustulatus* subsp. *nigritus*
 1973 Blackwelder: 5 (checklist, synonymy) >> as *N. nigritus*
 1975 Kirk & Balsbaugh: 52 (checklist) >> as *N. nigritus*
 1979 Miller & Peck: 95 (fossils) >> as valid species
 1979 Powell & Hogue: 272 (field guide)
 1980 Arnett et al.: 129 (key, descriptions) >> as *N. nigritus*
 1982a Anderson: 261 (key, descriptions, morphology, larval stages) >> as valid species
 1984 Papp: 70 (descriptions) >> brief description; as *N. pustulatus* subsp. *nigritus*
 1985 Anderson & Peck: 64 (revision: key, descriptions & catalog)
 1985 Miller & Miller: 25, 124 (biology, symbionts: mites, checklist) >> prob. host of *Poecilochirus pilosula* mites
 1985 Peck & Anderson: 268 (key, descriptions, phylogenetics)
 1986 Anderson & Peck: 283 (morphology: color variation)
 1987 Peck & Kaulbars: 53 (checklist)
 1990 Peck: 1122 (key)
 1991 Campbell: 86 (catalog, distribution)

- 1993 Peck & Miller: 8 (species-group catalog)
 1993 Sikes: 231-232 (description of variation) >> comment on variation
 1995 Navarrete-Heredia: 14 (biology, ecology, key in Spanish)
 1996 Hava: 167 (description of variation in English (Czech summary))
 1996 Palestirini et al.: 435 (larval descriptions, phylogenetics)
 1996 Sikes: 70-81 (biology, ecology) >> focal species
 2000 Navarrete-Heredia & Fierros-López: 407 (checklist, distribution in Spanish (English summary))
 2000 Sikes & Peck: 396 (descriptions, phylogenetics)
 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics)
 2001 Navarrete-Heredia: 170 (checklist, distribution in Spanish)
 2001 Nishikawa: 81 (larval descriptions, phylogenetics in English (Japanese summary)) >> larva compared to *N. maculifrons*

= *alpha* Pierce, 1949 [fossil]

Type locality: "Pit A" [USA: California: Rancho La Brea; descrip.]

Type depository: LACM: Los Angeles

- 1949 Pierce: 67 (fossils, descriptions) >> Orig. comb.: *Nicrophorus investigator alpha* [fossil] [!N, S]
 1979 Miller & Peck: 95 (fossils) >> as syn. of *N. nigrita*; desig. lectotype
 1985 Anderson & Peck: 65 (revision: key, descriptions & catalog) >> as syn. of *N. nigrita*
 1993 Peck & Miller: 8 (species-group catalog) >> as absolute syn. of *N. nigrita*

= *ruficornis* Motschulsky, 1870

Type locality: "Californie" [USA: California; descrip.]

Type depository: ZMUM: Moscow

- 1870 Motschulsky: 352 (descriptions in French) >> Orig. comb.: *Nicrophorus ruficornis* [!N, S]
 1924 Portevin: 288 (key, descriptions in French) >> as valid species
 1927b Hatch: 359 (revision: key, descriptions & catalog) >> as *N. investigator* var. *ruficornis*; specimens not seen by Hatch
 1928 Hatch: 146 (catalog) >> Misidentification as *N. guttulus* ab. *ruficornis*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. nigritus* var. *ruficornis*; also as *N. guttula* subsp. *guttula* ab. *ruficornis*
 1985 Anderson & Peck: 65 (revision: key, descriptions & catalog) >> as syn. of *N. nigrita*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. nigrita*

Nicrophorus oberthuri Portevin, 1924

Type locality: "Yunnan" [Yunnan Province, China; label]

Type depository: MNHN: Paris [!] holotype female

Distribution: Palearctic: China: Yunnan, Shaanxi, Qinghai, Sichuan; nBurma

- 1924 Portevin: 187 (key, descriptions in French) >> Orig. comb.: *Nicrophorus Oberthuri* [!N, S]

- 1925 Winkler: 264 (catalog)
 1926a Portevin: 225 (revision: key, descriptions & catalog in French)
 1930 Kieseritzky: 63 (descriptions in Russian (German summary))
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1993b Kozminykh: 67 (key, descriptions, regional in Russian)

= *burmanicus* Hlisnikovsky, 1964 NEW SYNONYM of *N. oberthuri* Portevin

Type locality: "Adung Valley, Nord Burma, 12,000 feet" [label]

Type depository: BMNH: London [!] 2 (or more) syntypes

- 1964a Hlisnikovsky: 223 (key, descriptions in German) >> Orig. comb.: *Necrophorus* (*Necrophorus*) *burmanicus* [!N, S]
 1982 Schawaller: 256 (checklist in German (English summary)) >> as valid species
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as valid species
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as valid species
 2002 Nikolajev & Kozminykh: 111 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as valid species, compared with *N. lunatus*

= *unifasciatus* Hlisnikovsky, 1964 NEW SYNONYM of *N. oberthuri* Portevin

Type locality: "Tasienlu-Kiulung China" [Kangding; 30.00°N, 102.04° E; label]

Type depository: NMPC: Praha [!] holotype male

- 1964a Hlisnikovsky: 224 (key, descriptions in German) >> Orig. comb.: *Necrophorus* (*Necrophorus*) *unifasciatus* [!N, S]
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as valid species
 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as valid species
 1996 Růžička & Schneider: 81 (checklist in English (Czech summary)) >> as valid species
 2002 Nikolajev & Kozminykh: 111 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as valid species, compared with *N. lunatus*

Comments: Hlisnikovsky (1964a) showed no indication that he was aware of Portevin's *N. oberthuri* when he described two new unifasciate species of *Nicrophorus*. He compared his two new species, which differed apparently in aspects of their pygidial pubescence, to another unifasciate *Nicrophorus*, *N. lunatus* Fisch. – a species not closely related to *N. oberthuri*. We have studied the types of both of Hlisnikovsky's *N. burmanicus* and *N. unifasciatus* and they agree in all critical respects with the holotype of *N. oberthuri* in the Paris museum (which itself bore a determination label of *N. unifasciatus*!)

***Nicrophorus obscurus* Kirby, 1837**

Type locality: "N. amer." [label] "from New York to Cumberland-House" [descrip]

Type depository: BMNH: London [!] holotype female

Distribution: Nearctic: northeastern Rocky mountains

- 1837 Kirby: 97 (descriptions) >> Orig. comb.: *Nicrophorus obscurus* [!N, S]
 1853 LeConte: 275 (descriptions) >> missidentified as *N. Melsheimeri*

- 1853 Melsheimer: 39 (catalog)
 1854 Lacordaire: 200 (biology, catalog in French)
 1866a LeConte: 367 (nomenclature) >> suggests does not differ from *N. Melsheimeri*
 1868 Gemminger & Harold: 719 (catalog)
 1870 LeConte: 398 (nomenclature) >> notes prior misid of this sp. as *N. melsheimeri*
 1873 Crotch: 37 (checklist) >> as *Silpha obscura*
 1878a Hubbard & Schwarz: 632 (checklist)
 1880 Horn: 231 (revision: key, descriptions & catalog)
 1885 Henshaw: 26 (checklist)
 1910 Barkowski: 80 (key, descriptions, regional in German)
 1911 Wickham: 10 (checklist)
 1920 Leng: 86 (catalog)
 1922 Sherborn: 4491 (catalog - index)
 1924 Portevin: 86 (key, descriptions in French)
 1925 Hatch & Angell: 216 (descriptions) >> compared with *N. hybridus*
 1926a Portevin: 215 (revision: key, descriptions & catalog in French)
 1927a Hatch: 5, 7, 19 (key, descriptions, description of variation)
 1927b Hatch: 360 (revision: key, descriptions & catalog) >> description of variation: 2
 unavailable names
 1928 Hatch: 147 (catalog)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1934 Hatch & Rueter: 158 (key, distribution, variation, descriptions)
 1936 Meserve: 132 (checklist, distribution)
 1944 Arnett: 6, 24 (morphology: female genitalia) >> female genitalia figured, pl. 4,
 fig. 5
 1947 Arnett: 110 (catalog) >> notes that LeConte 1870 misidentified this sp. as *N.*
 melsheimeri
 1958 Madge: 67 (revision: key, descriptions, ecology, distributions)
 1973 Blackwelder: 6 (checklist, synonymy)
 1975 Baldwin: 25 (key, description, distribution, ecology)
 1975 Kirk & Balsbaugh: 52 (checklist)
 1982a Anderson: 258 (key, descriptions, morphology, larval stages)
 1985 Anderson & Peck: 65 (revision: key, descriptions & catalog)
 1985 Peck & Anderson: 287 (key, descriptions, phylogenetics)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1987 Peck & Kaulbars: 54 (checklist)
 1990 Peck: 1122 (key)
 1991 Campbell: 86 (catalog, distribution)
 1993 Peck & Miller: 8 (species-group catalog)
 1996 Ratcliffe: 76 (revision: key, descriptions & catalog)
 1997 Backlund & Marrone: 56 (biology, conservation)
 1999 Bedick et al.: 177 (biology, conservation)
 2000 Sikes & Peck: 395 (descriptions, phylogenetics)

***Nicrophorus olidus* Matthews, 1888**

Type locality: "Mexico, Cordova" [28°46'N, 110°20'W; label]

Type depository: BMNH: London [!] holotype female

Distribution: Nearctic: n Mexico; Neotropical: Mexico, Honduras*

- 1888 Matthews: 92 (description) >> Orig. comb.: *Necrophorus olidus*; auth. attrib. Chevrolat [!N, S]
- 1924 Portevin: 376 (key, descriptions in French)
- 1926a Portevin: 239 (revision: key, descriptions & catalog in French)
- 1927b Hatch: 353 (revision: key, descriptions & catalog)
- 1928 Hatch: 129 (catalog)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1944 Blackwelder: 100 (catalog)
- 1973 Blackwelder: 6 (checklist, synonymy)
- 1985 Peck & Anderson: 269 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1995 Navarrete-Heredia: 12 (biology, ecology, key in Spanish)
- 1996 Halffter et al.: 162 (biology, ecology)
- 1997 Deloya: 39 (biology, ecology in Spanish)
- 1998 Arellano: 9 (checklist, distribution in Spanish)
- 1998 Navarrete-Heredia & Fierros-López: 49 (distribution note in Spanish)
- 1998 Rivera-Cervantes & García-Real: 14 (biology, ecology in Spanish)
- 2000 Navarrete-Heredia & Quiroz-Rocha: 4 (biology, ecology, distribution in Spanish)
- 2000 Navarrete-Heredia & Fierros-López: 407 (checklist, distribution in Spanish (English summary)) >> distribution and habitat notes
- 2000 Sikes & Peck: 395 (descriptions, phylogenetics)
- 2001 Burgos Solorio & Trejo-Loyo: 94 (checklist in Spanish)
- 2001 Fierros-Lopez & Navarrete-Heredia: 45-46 (biology, ecology)
- 2001 Navarrete-Heredia: 170 (checklist, distribution in Spanish)

= *quadricollis* Gistel, 1848

Type locality: "Mexico" [descrip.]

Type depository: ZSMC: München? [lost?]

- 1848 Gistel: 190 (descriptions in German) >> Orig. comb.: *Necrophorus quadricollis*
- 1857b Gistel: 565 (in German) >> described as new
- 1917 Strand: 83 (descriptions in German) >> as *nomen dubium*
- 1928 Hatch: 153 (catalog) >> *Incertae sedis*
- 1944 Blackwelder: 100 (catalog) >> as valid species
- 1973 Blackwelder: 6 (checklist, synonymy) >> as valid species

Gistel's description of the Mexican *N. quadricollis* matches *N. olidus* of Matthews more than the few alternatives (*N. mexicanus*, *N. marginatus*, *N. quadrimaculatus*). Unfortunately, the Gistel name is older, and thus would have priority over the Matthews name but is apparently without a type and has never been used as the senior to *N. olidus*. The Matthews name does not fit the criteria of the ICZN 23.9.1.1. to be made a *nomen protectum* so we will request the Commission of the ICZN preserve stability and retain *N. olidus* as the valid name. The ICZN (23.9.3) states that while such a case is under consideration "use of the junior name is to be maintained."

Nicrophorus orbicollis Say, 1825

Type locality: "N.W. Territory" [USA; Minnesota, Wisconsin, Illinois, Michigan, Indiana, or Ohio; descrip. no data on type]

Type depository: MCZC: Cambridge [!] neotype female

Distribution: Nearctic: North America east of the Rocky Mountains

- 1825 Say: 177 (description) >> Orig. comb.: *Nicrophorus orbicollis* [!M, N, S]
1853 LeConte: 277 (descriptions)
1853 Melsheimer: 39 (catalog) >> misspelled *N. orbicularis*
1854 Lacordaire: 200 (biology, catalog in French)
1859c LeConte: 37 (checklist)
1868 Gemminger & Harold: 719 (catalog)
1873 Crotch: 37 (checklist) >> as *Silpha orbicollis*
1877 Harold: 345 (descriptions in German) >> compared with *N. japonicus*
1877 Provancher: 225 (in French)
1878a Hubbard & Schwarz: 632 (checklist)
1878b Hubbard & Schwarz: 650 (checklist)
1878 Schwarz: 443 (checklist)
1880 Horn: 230 (revision: key, descriptions & catalog)
1885 Henshaw: 26 (checklist)
1895 Clark: 61 (biology, behavior)
1895 Hamilton: 324 (checklist)
1902 Dury: 12 (checklist)
1904 Davis: 18 (checklist)
1908 Houghton: 120-121 (biology, behavior) >> observation of stridulation & fighting for carcass
1910 Barkowski: 79 (key, descriptions, regional in German)
1910 Blatchley: 275 (key, descriptions, regional)
1910 Smith: 229 (checklist)
1911 Wickham: 10 (checklist)
1915 Frost: 209 (biology, ecology)
1915 Jaques: 526 (biology, ecology)
1920 Britton: 224 (checklist)
1920 Leng: 86 (catalog)
1922 Sherborn: 4595 (catalog - index)
1924 Hatch: 560 (checklist)
1927b Abbott: 208-216 (biology, behavior)
1927c Abbott: 552 (biology, behavior) >> focal species
1927a Hatch: 5, 7, 19 (key, descriptions, description of variation)
1927b Hatch: 353 (revision: key, descriptions & catalog)
1927 Steele: 77 (biology, behavior)
1928 Hatch: 128 (catalog)
1928 Leonard: 271 (checklist)
1929 Frost & Dietrich (biology, ecology)
1930 Johnson: 44 (checklist)
1932 Jones: 352 (biology, ecology) >> not accepted as prey by birds in tests
1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)

- 1933 Wolcott & Montgomery: 131 (comment: ecology)
 1935 Balduf: 70 (biology, ecology, behavior)
 1936 Abbott: 37-39 (biology, ecology)
 1936 Meserve: 133 (checklist, distribution)
 1937 Abbott (biology, behavior)
 1938 Brimley: 135 (checklist)
 1944 Arnett: 3, 20 (morphology: female genitalia) >> female genitalia figured, pl. 2, fig. 9
 1944 Milne & Milne: 311 (biology, behavior)
 1945 Löding: 32 (checklist)
 1946 Procter: 121 (checklist, ecology)
 1948 Clark: 27 (checklist)
 1949 Bliss: 201 (morphology: sexual dimorphism)
 1949 Hoffmann et al.: 10 (comment: ecology) >> eliminated from area sprayed with DDT, 1 year later
 1951 Jaques: 83 (key, descriptions)
 1957 Walker: 273 (biology, ecology)
 1958 Madge: 34 (revision: key, descriptions, ecology, distributions)
 1958 Reed: 232 (biology, ecology)
 1961 Dillon & Dillon: 175 (key, descriptions)
 1961 Robertson: 248 (morphology: ovaries) >> 12 ovarioles per ovary
 1964 Frost (biology, ecology)
 1966 Payne & Crossley: 56 (biology, ecology)
 1968a Shubeck: 565 (methods)
 1968b Shubeck: 256 (biology, behavior)
 1969 Shubeck: 143 (biology, ecology)
 1970 Kirk: 25 (checklist)
 1970 Payne & King: 230 (biology, ecology)
 1970 Shubeck: 67 (biology, ecology)
 1971 Shubeck: 43 (biology, behavior)
 1973 Blackwelder: 3 (checklist, synonymy)
 1974 Pirone: 658 (biology, ecology)
 1975 Baldwin: 21 (key, description, distribution, ecology)
 1975 Kirk & Balsbaugh: 52 (checklist)
 1975 Shubeck: 37 (biology, behavior)
 1976 Milne & Milne: 88 (popular review)
 1976 Shubeck: 267 (biology, ecology)
 1977 Headstrom: 106 (description)
 1977 Shubeck et al.: 13 (biology, ecology)
 1979 Miller & Peck: 98 (fossils)
 1980 Arnett et al.: 128 (key, descriptions)
 1980 Wallace & Fox: 619 (morphology: wing venation) >> hind wing figured
 1981 Kozol: 12 (biology, conservation, genetics)
 1981 Shubeck et al.: 14 (biology, ecology)
 1982a Anderson: 262 (key, descriptions, morphology, larval stages)
 1982c Anderson: 1316 (biology, ecology)
 1982 Peck & Miller: 153 (nomenclature) >> desig. neotype

- 1982 Shubeck & Blank (biology, ecology)
 1982 Wilson: 293-296 (biology, symbionts: mites) >> focal species
 1983 Lago & Miller: 85 (checklist)
 1983 Wilson: 858-870 (biology, symbionts: mites) >> focal species
 1984 Shubeck (biology, ecology)
 1984 Shubeck & Schleppek (biology, ecology)
 1984 Wilson & Fudge: 195-203 (biology, ecology) >> focal species
 1984 Wilson & Knollenberg: 165-170 (biology, behavior, physiology) >> focal species
 1984 Wilson et al.: 205-216 (biology, ecology) >> focal species
 1985 Anderson & Peck: 66 (revision: key, descriptions & catalog)
 1985 Peck & Anderson: 273 (key, descriptions, phylogenetics)
 1985 Shubeck: 164 (biology, ecology)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1987 Peck & Kaulbars: 52 (checklist)
 1987 Staines: 16 (key, descriptions) >> Maryland records
 1987 Wilson & Knollenberg: 139-159 (biology, symbionts: mites) >> focal species
 1988a Bartlett: 123 (biology, symbionts: mites)
 1988 Scott et al.: 325-331 (biology, ecology) >> focal species
 1989 Kozol et al.: 170 (biology, conservation)
 1989 Scott: 133-137 (biology, behavior) >> focal species
 1989 Scott & Traniello: 32-36 (popular review) >> focal species
 1989 Staines: 69 (key, descriptions, distributions) >> Maryland records
 1990 Fetherston et al. (biology, behavior)
 1990 Peck: 1123 (key)
 1990 Scott: 31-39 (biology, behavior) >> focal species
 1990 Scott & Traniello: 274-283 (biology, ecology, behavior) >> focal species
 1990a Trumbo: 347-355 (biology, ecology) >> focal species
 1990b Trumbo: 269-273 (biology, behavior) >> focal species
 1990c Trumbo: 1-11 (biology, behavior) >> focal species
 1991 Campbell: 86 (catalog, distribution)
 1991 Laplante et al.: 29 (checklist in French)
 1991 Newton: 340 (morphology, larval stages) >> larva habitus illustrated
 1991 Raithel: 2 (biology, conservation)
 1991 Trumbo: 82-105 (biology, behavior) >> focal species
 1991 Trumbo & Fiore: 637-642 (biology, genetics) >> focal species
 1992 Beninger & Peck: 79-86 (biology, ecology)
 1992 Brown & Wilson: 463-478 (biology, symbionts: mites) >> focal species
 1992b Creamer: 5-8 (biology)
 1992 Muths: 447-450 (biology, ecology) >> focal species
 1992 Robertson: 191 (biology, ecology)
 1992 Trumbo: 289-298 (biology, behavior) >> focal species
 1993 Creighton et al.: 276 (biology, conservation)
 1993 Peck & Miller: 8 (species-group catalog)
 1993 Robertson: 583-593 (biology, behavior) >> focal species
 1993 Scott & Gladstein: 362-378 (biology, behavior) >> focal species
 1993 Shubeck: 89 (biology, ecology)
 1993 Trumbo & Wilson: 332-339 (biology, behavior) >> focal species

- 1994 Beninger: 135-143 (biology, ecology in English (French summary))
- 1994 Berdela et al.: 49 (biology, symbionts: bacteria) >> gut bacteria
- 1994 Brown & Wilson: 3 (biology, symbionts: mites) >> focal species
- 1994 Dunn (biology, behavior)
- 1994 Fetherston et al.: 777-785 (biology, behavior) >> focal species
- 1994 Kozol et al.: 928-935 (biology, conservation, genetics) >> genetic variation compared to *N. americanus*
- 1994 Neal et al.: 128 (checklist)
- 1994a Scott: 367-373 (biology, ecology, behavior) >> focal species
- 1994b Scott: 537-543 (biology, behavior) >> focal species
- 1994 Trumbo: 241-249 (biology, behavior) >> focal species
- 1995 Eggert & Sakaluk: 150 (biology, behavior)
- 1995 Lingafelter: 220 (biology, ecology)
- 1995 Lomolino et al.: 609 (biology, conservation in English (Spanish summary))
- 1995 Matthews (biology, conservation)
- 1995 Robertson: 418-420 (biology, behavior) >> focal species
- 1995 Trumbo: 125-130 (biology, behavior) >> focal species
- 1995 Trumbo & Fernandez: 313-322 (biology, behavior) >> focal species
- 1995 Trumbo et al.: 535-543 (biology, behavior, physiology) >> focal species
- 1996 Downie & Arnett: 356 (key, descriptions, regional)
- 1996 Dunn: 169 (catalog)
- 1996 Lomolino & Creighton: 238 (biology, conservation)
- 1996 Ratcliffe: 77 (revision: key, descriptions & catalog)
- 1996 Scott: 378 (popular review)
- 1996a Trumbo: 14-16 (biology, behavior)
- 1997 Amaral et al.: 128 (biology, conservation)
- 1997 Backlund & Marrone: 56 (biology, conservation)
- 1997 Eggert & Müller: 224 (biology, review of: ecology, behavior)
- 1997 King & Cummings: 1088-1095 (biology, genetics)
- 1997 Trumbo: 479-490 (biology, behavior, physiology) >> focal species
- 1998 Carlton & Rothwein: 183 (biology, conservation)
- 1998 Coyle & Larsen: 163 (biology, ecology)
- 1998 Eggert et al.: 105 (biology, behavior)
- 1998 Peck & Thomas: 37 (checklist, distribution)
- 1998a Scott: 597-603 (biology, behavior) >> focal species
- 1998b Scott: 598+ (biology, review of: ecology, behavior)
- 1998 Trumbo & Thomas: 85-95 (biology, ecology) >> focal species
- 1999 Bedick et al.: 177 (biology, conservation)
- 1999 Beeler et al.: 578-584 (biology, behavior) >> focal species
- 1999 Rauter & Moore: 1691-1696 (biology, ecology, behavior) >> focal species
- 2000 Eggert & Sakaluk: 263 (biology, behavior)
- 2000 Safryn & Scott: 291-297 (biology, behavior) >> focal species
- 2000 Sikes & Peck: 393 (descriptions, phylogenetics)
- 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics)
- 2000 Trumbo & Sikes: 585-589 >> focal species
- 2000 Trumbo & Bloch: 247 (biology, ecology, conservation)
- 2000 Werner & Raffa: 144 (comment: ecology)

- 2001 Scott et al.: 295-302 (biology, behavior, physiology) >> focal species
 2001 Trumbo et al.: 552 (biology, ecology, behavior) >> compared changes in ovarian mass with *P. morio*

= *hallii* Kirby, 1837 CONFIRMED as SYNONYM of *N. orbicollis* Say

Type locality: "Nova Scotia" and "Massachusetts" [descrip.]

Type depository: BMNH: London [!] 2 (or more) syntypes

- 1837 Kirby: 98 (descriptions) >> Orig. comb.: *Necrophorus Hallii* [!N, S]
 1853 LeConte: 277 (descriptions) >> as syn. of *N. orbicollis*
 1853 Melsheimer: 39 (catalog) >> as valid but possible syn. of *N. orbicollis* [misspelled *N. orbicularis*]
 1854 Lacordaire: 200 (biology, catalog in French) >> as syn. of *N. orbicollis*
 1859c LeConte: 37 (checklist) >> as syn. of *N. orbicollis*
 1868 Gemminger & Harold: 719 (catalog) >> as syn. of *N. orbicollis*
 1873 LeConte: 327 (nomenclature) >> as syn. of *N. orbicollis*
 1920 Leng: 86 (catalog) >> as syn. of *N. orbicollis*
 1924 Portevin: 189 (key, descriptions in French) >> as valid species
 1926a Portevin: 242 (revision: key, descriptions & catalog in French) >> as valid species
 1928 Hatch: 128 (catalog) >> as syn. of *N. orbicollis*
 1944 Arnett: 3 (morphology: female genitalia) >> as syn. of *N. orbicollis*
 1970 Gersdorf: 368 (morphology: female genitalia in German) >> as valid species
 1985 Anderson & Peck: 66 (revision: key, descriptions & catalog) >> as syn. of *N. orbicollis*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. orbicollis*
 1996 Ratcliffe: 77 (revision: key, descriptions & catalog) >> as syn. of *N. orbicollis*

= *quadrisignatus* Laporte, 1840

Type locality: "Amérique du Nord" [North America; descrip.]

Type depository: unknown

- 1840 Laporte: 1 (descriptions in French) >> Orig. comb.: *Necrophorus 4-signatus* [!N, S]
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1920 Leng: 86 (catalog) >> as syn. of *N. orbicollis*
 1926a Portevin: 259 (revision: key, descriptions & catalog in French) >> as syn. of *N. Halli* (as *N. quadrisignatus* Cast.)
 1928 Hatch: 128 (catalog) >> assyn. of *N. orbicollis* (as *N. quadrisignatus* Cast.)
 1944 Arnett: 3 (morphology: female genitalia) >> as syn. of *N. orbicollis*
 1985 Anderson & Peck: 66 (revision: key, descriptions & catalog) >> as syn. of *N. orbicollis*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. orbicollis* (as *N. quadrisignatus* Laporte)
 1996 Ratcliffe: 77 (revision: key, descriptions & catalog) >> as syn. of *N. orbicollis*

Nicrophorus podagricus Portevin, 1920 desig. lectotype

Type locality: "Bornéo," [Malaysia, label]

Type depository: MNHN: Paris [!] lectotype male, 6 paralectotypes

Distribution: Oriental: Borneo

- 1920 Portevin: 400 (descriptions in French) >> Orig. comb.: *Nicrophorus* (*Nicrophorus*) *podagricus* [!N, S]
- 1922 Portevin: 55 (descriptions in French)
- 1923 Portevin: 308 (key, descriptions in French)
- 1926a Portevin: 209 (revision: key, descriptions & catalog in French)
- 1926b Portevin: 211 (descriptions in French) >> compared to *N. Heurni*
- 1927b Hatch: 354 (revision: key, descriptions & catalog)
- 1928 Hatch: 129 (catalog)
- 1933 Semenov-Tian-Shanskij: 153 (catalog in Russian & Latin) >> as type sp. of new subgenus *Nesonicrophorus*
- 1933a Shchegoleva-Barovskaya: 166 (revision: key, descriptions & catalog in Russian) >> as *Nicrophorus* (*Nesonicrophorus*) *podagricus*, in key
- 1969 Hinton: 186 (morphology: diffraction gratings) >> has iridescent morphology
- 1980 Madge: 357 (catalog)
- 1985 Peck & Anderson: 274 (key, descriptions, phylogenetics)
- 1986 Hanski & Hammond: 4 (biology, ecology)
- 1986 Nishikawa: 99 (catalog in Japanese (English summary))
- 1990 Hanski & Niemelä: 149 (biology: ecology)
- 1991 Hanski & Krikken: 195 (biology: ecology)
- 1997 Kikuta et al.: 125 (biology, ecology) >> 224 adults in carrion traps, 2 in dung traps
- 2000 Růžička et al.: 381 (descriptions)
- 2001 Peck: 94 (keys, descriptions and distributions)

= *nigrifrons* Portevin, 1922 NEW STATUS as absolute syn. of *N. podagricus*
Portevin

Type locality: "Kina Balu" [Malaysia: Borneo; label]

Type depository: MNHN: Paris [!] holotype male

- 1922 Portevin: 56 (descriptions in French) >> Orig. comb.: *Nicrophorus podagricus* var. *nigrifrons* [!N, S]
- 1923 Portevin: 308 (key, descriptions in French) >> as *N. podagricus* var. *nigrifrons*
- 1926a Portevin: 209 (revision: key, descriptions & catalog in French) >> as *N. podagricus* var. *nigrifrons*
- 1928 Hatch: 129 (catalog) >> as *N. podagricus* var. *nigrifrons*

Comments: Lectotype data for *Nicrophorus podagricus* Portevin, 1920: 400 "co-type";/ "Acquis de Portevin" [Pic/Port coll. MNHN]/ BORNEO: / red rectangular label with double black border "LECTOTYPE *Nicrophorus podagricus* (Portevin 1920) det. Sikes 1997" - male (Paris [MNHN]); pronotal width: 6.12 mm.

Paralectotype data "N. *podagricus* Port." / red label: "PARATYPE" designated by Madge, according to the type list. / [MALAYSIA]: Kina Balu, elev. 8 m, [5.98° ' N,

116.07° ' E,](coll. Waterstradt) / red rectangular label with double black border “PARALECTOTYPE *Nicrophorus podagricus* (Portevin 1920) det. Sikes 1997” – 2 males, 2 females (Paris [MNHN]); “*N. podagricus* Port.” / red label: "TYPE" "MUSEUM PARIS Coll. A. GROUVELLE 1915" "MUSÉUM PARIS Coll. M. Pic" [Pic/Port coll. MNHN] / [MALAYSIA]: Kina Balu, elev. 8 m, [5.98° ' N, 116.07° ' E,](coll. Waterstradt) / red rectangular label with double black border “PARALECTOTYPE *Nicrophorus podagricus* (Portevin 1920) det. Sikes 1997” - male (Paris [MNHN]); “*Nicrophorus* [sic] *podagricus* m.” / "co-type" "Acquis de Portevin" "MUSÉUM PARIS Coll. M. Pic" [Pic/Port coll. MNHN] / BORNEO: / red rectangular label with double black border “PARALECTOTYPE *Nicrophorus podagricus* (Portevin 1920) det. Sikes 1997” - female (Paris [MNHN]).

Nicrophorus przewalskii Semenov-Tian-Shanskij, 1894 desig. lectotype

Type locality: “Ganq-su” [c China: Gansu Prov.; label]

Type depository: ZMAS: St. Petersburg [!] lectotype male

Distribution: Palearctic: China: Sichuan, Gansu, Qinghai

- 1894 Semenov-Tian-Shanskij: 528 (description in Latin) >> Orig. comb.: *Nicrophorus przewalskii* [!S]
- 1895b Reitter: 328 (description of variation in German)
- 1896 Heyden: 38 (checklist in German)
- 1910 Jakobson: 612 (checklist in Russian)
- 1922 Portevin: 54 (descriptions in French) >> compared to *N. armeniacus*
- 1923 Portevin: 232 (key, descriptions in French)
- 1925 Winkler: 263 (catalog)
- 1926a Portevin: 200 (revision: key, descriptions & catalog in French)
- 1926 Semenov-Tian-Shanskij: 46 (descriptions in Latin) >> as *Necroxenus przewalskii*
- 1927b Hatch: 354 (revision: key, descriptions & catalog) >> as *Nicrophorus przewalskyi*; specimens not seen by Hatch
- 1928 Hatch: 132 (catalog) >> as *Nicrophorus przewalskyi*
- 1932 Hlisnikovsky: 26 (key, descriptions in German) >> as *Nicrophorus przewalskyi*
- 1933 Semenov-Tian-Shanskij: 150 (catalog in Russian & Latin) >> as type sp. of genus *Necroxenus* Sem.
- 1933a Shchegoleva-Barovskaya: 164 (revision: key, descriptions & catalog in Russian) >> as *Necroxenus przewalskii*, in key
- 1933b Shchegoleva-Barovskaya: 251 (descriptions in Russian) >> as *Necroxenus przewalskii*
- 1937 Wu (catalog)
- 1964b Hlisnikovsky: 242 (descriptions in German) >> as *Nicrophorus przewalskii*; compared to *N. tibetanus*
- 1969 Gersdorf: 305 (fossils, descriptions in German)
- 1980 Madge: 356 (catalog)
- 1986 Nishikawa: 99 (catalog in Japanese (English summary))
- 1996 Růžička & Schneider: 80 (checklist in English (Czech summary))

- 1999 Háva et al.: 76 (key, descriptions) >> compared to *N. smefarka*
 2000 Sikes & Peck: 396 (descriptions, phylogenetics)

Comments: Lectotype data for *Nicrophorus przewalskii* Semenov-Tian-Shanskij, 1894 "Nicrophorus Przewaskii m. typ. [male symbol] A. Semenow det."; /"Nicrophorus przewalskii"/ [only type specimen found in ZMAS- orig. descr. indicates another exists, but were not found, thus we designate the found specimen the lectotype]; "Collection the Zoological Institute, Academy of Sciences, St. Petersburg, Russia"; /gold foil circle label; / [CHINA]: [Gansu prov.], "Ganq-su", 1-31 August 1872 (coll. N. Przewalsky) / red rectangular label with double black border "LECTOTYPE *Nicrophorus przewalskii* Semenov-Tian-Shanskij, 1894 Det. D. S. Sikes 2001 ZMAS70116Nic" - male (St. Petersburg [ZMAS]); pronotal width: 7.90 mm.

***Nicrophorus pustulatus* Herschel, 1807**

Type locality: "aus NordAmerika" [descrip.]

Type depository: ZMHB: Berlin ?

Distribution: Nearctic: eastern through northeastern & north central North America

- 1807 Herschel: 271 (descriptions in German) >> Orig. comb.: *Nicrophorus pustulatus*; described in footnote [!N, S]
 1853 LeConte: 276 (descriptions)
 1853 Melsheimer: 39 (catalog) >> auth. attrib. Illiger
 1854 Lacordaire: 200 (biology, catalog in French)
 1859c LeConte: 37 (checklist)
 1868 Gemminger & Harold: 719 (catalog)
 1873 Crotch: 37 (checklist) >> as *Silpha pustulata*
 1877 Provancher: 225 (in French)
 1878b Hubbard & Schwarz: 650 (checklist)
 1880 Horn: 233 (revision: key, descriptions & catalog)
 1885 Henshaw: 26 (checklist)
 1895 Hamilton: 324 (checklist)
 1903 Portevin: 330 (descriptions in French) >> as *N. pustulatus* var. *Melsheimeri* (*maritimus* Guér.)
 1905 Davis: 13 (checklist)
 1910 Barkowski: 80 (key, descriptions, regional in German)
 1910 Blatchley: 275 (key, descriptions, regional)
 1910 Jakobson: 612 (checklist in Russian)
 1910 Smith: 229 (checklist)
 1911 Wickham: 11 (checklist)
 1918 McAtee (biology, ecology)
 1920 Britton: 224 (checklist)
 1920 Leng: 86 (catalog)
 1920 Weiss & West: 4 (biology, ecology) >> "Biology" - Hatch 1928
 1924 Hatch: 560 (checklist)
 1924 Portevin: 86 (key, descriptions in French) >> description of variation: 2 unavailable names

- 1925 Winkler: 263 (catalog)
- 1926a Portevin: 214 (revision: key, descriptions & catalog in French) >> description of variation: 2 unavailable names
- 1927a Hatch: 5, 7, 19 (key, descriptions, description of variation)
- 1927b Hatch: 357 (revision: key, descriptions & catalog)
- 1928 Hatch: 141 (catalog)
- 1928 Leonard: 271 (checklist)
- 1929 Kôno: 164 (checklist, annotated)
- 1932 Hlisnikovsky: 27 (key, descriptions in German)
- 1932 Jones: 352 (biology, ecology) >> not accepted as prey by birds in tests
- 1933 Semenov-Tian-Shanskij: 154 (catalog in Russian & Latin) >> as type sp. of new subgenus *Stictonecropter*
- 1933a Shchegoleva-Barovskaya: 166 (revision: key, descriptions & catalog in Russian) >> as *Necrophorus (Stictonecropter) pustulatus*, in key
- 1938 Brimley: 135 (checklist)
- 1944 Arnett: 5, 22 (morphology: female genitalia) >> female genitalia figured, pl. 3, fig. 4
- 1944 Milne & Milne: 311 (biology, behavior)
- 1945 Löding: 32 (checklist)
- 1946 Procter: 121 (checklist, ecology)
- 1947 Arnett: 110 (catalog) >> notes that Horn missidentified this sp. as *N. melsheimeri*
- 1948 Clark: 27 (checklist)
- 1949 Bliss: 201 (morphology: sexual dimorphism)
- 1951 Jaques: 83 (key, descriptions)
- 1957 Walker: 273 (biology, ecology)
- 1958 Madge: 39 (revision: key, descriptions, ecology, distributions)
- 1964 Frost (biology, ecology)
- 1966 Payne & Crossley: 56 (biology, ecology)
- 1968a Shubeck: 565 (methods)
- 1969 Kirk: 28 (checklist)
- 1969 Shubeck: 143 (biology, ecology)
- 1970 Kirk: 25 (checklist)
- 1970 Payne & King: 230 (biology, ecology)
- 1972 Swan & Papp: 356 (description)
- 1973 Blackwelder: 5 (checklist, synonymy)
- 1974 Pirone: 664 (biology, ecology)
- 1975 Baldwin: 23 (key, description, distribution, ecology)
- 1975 Kirk & Balsbaugh: 52 (checklist) >> as *N. pustulatus* subsp. *pustulatus*
- 1976 Shubeck: 267 (biology, ecology)
- 1977 Headstrom: 106 (description) >> brief description
- 1977 Shubeck et al.: 13 (biology, ecology)
- 1979 Miller & Peck: 98 (fossils)
- 1980 Arnett et al.: 129 (key, descriptions)
- 1980 Madge: 359 (catalog)
- 1980 Milne & Milne: 550 (field guide, brief descriptions, ecology)
- 1981 Kozol: 115 (biology, conservation, genetics)
- 1981 Shubeck et al.: 14 (biology, ecology)

- 1982c Anderson: 1316 (biology, ecology)
 1982 Shubeck & Blank (biology, ecology)
 1982 Wilson: 293 (biology, symbionts: mites) >> not a host for *Poecilochirus necrophori*
 1983 Lago & Miller: 85 (checklist)
 1984 Papp: 70 (descriptions)
 1984 Shubeck (biology, ecology)
 1985 Anderson & Peck: 68 (revision: key, descriptions & catalog)
 1985 Peck & Anderson: 276 (key, descriptions, phylogenetics)
 1985 Shubeck: 164 (biology, ecology)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1987 Peck & Kaulbars: 55 (checklist)
 1987 Ryabukhin & Matis: 9 (key, descriptions, distributions in Russian)
 1987 Staines: 16 (key, descriptions) >> Maryland records
 1989 Lafer: 339 (key, descriptions, description of variation in Russian)
 1989 Staines: 69 (key, descriptions, distributions) >> Maryland records
 1990 Peck: 1123 (key)
 1990c Trumbo: 1-11 (biology, behavior) >> focal species
 1991 Campbell: 86 (catalog, distribution)
 1991 Laplante et al.: 29 (checklist in French)
 1992 Robertson: 189-197 (biology, ecology) >> focal species
 1992 Trumbo: 294-298 (biology, behavior) >> focal species
 1993 Creighton et al.: 276 (biology, conservation)
 1993b Kozminykh: 66 (key, descriptions, regional in Russian)
 1993 Peck & Miller: 9 (species-group catalog)
 1993 Shubeck: 89 (biology, ecology)
 1994 Madge: 545 (comment)
 1994 Neal et al.: 128 (checklist)
 1994 Trumbo: 241-249 (biology, behavior) >> focal species
 1995 Lingafelter: 221 (biology, ecology)
 1995 Robertson: 418-420 (biology, behavior) >> focal species
 1996 Downie & Arnett: 356 (key, descriptions, regional)
 1996 Lomolino & Creighton: 238 (biology, conservation)
 1996 Ratcliffe: 80 (revision: key, descriptions & catalog)
 1997 Backlund & Marrone: 56 (biology, conservation)
 1997 Eggert & Müller: 233 (biology, review of: ecology, behavior)
 1998 Carlton & Rothwein: 183 (biology, conservation)
 1998 Coyle & Larsen: 163 (biology, ecology)
 1998 Peck & Thomas: 37 (checklist, distribution)
 1998b Scott: 600+ (biology, review of: ecology, behavior)
 1998 Trumbo & Thomas: 85-95 (biology, ecology) >> focal species
 1999 Bedick et al.: 177 (biology, conservation)
 2000 Blouin-Demers & Weatherhead: 395-397 (biology, ecology, behavior) >> focal species; as parasitoid of snake eggs
 2000 Sikes & Peck: 396 (descriptions, phylogenetics)
 2001 Keller & Heske: 167-169 (biology, ecology, behavior) >> focal species; as parasitoid of snake eggs

- 2002 Rauter & Moore: 96 (biology, behavior, genetics) >> focal species
 2002 Nikolajev & Kozminykh: 121 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> “it is clear that this species is missing in the fauna of Russia”

= bicolon Newman, 1838 CONFIRMED as SYNONYM of *N. pustulatus* Herschel

Type locality: “North America” [descrip.]

Type depository: BMNH: London [!] holotype female

- 1838 Newman: 385 (descriptions) >> Orig. comb.: *Necrophorus bicolon* [!S]
 1853 LeConte: 276 (descriptions) >> as syn. of *N. pustulatus*
 1853 Melsheimer: 39 (catalog) >> as syn. of *N. pustulatus*; misspelled as *N. bicolor*
 1854 Lacordaire: 200 (biology, catalog in French) >> as syn. of *N. pustulatus*
 1859b LeConte: 37 >> as syn. of *N. pustulatus*
 1868 Gemminger & Harold: 719 (catalog) >> as syn. of *N. pustulatus*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. pustulatus*
 1920 Leng: 86 (catalog) >> as syn. of *N. pustulatus*
 1926a Portevin: 254 (revision: key, descriptions & catalog in French) >> as syn. of *N. pustulatus*
 1928 Hatch: 142 (catalog) >> as syn. of *N. pustulatus*; misspelled as *N. bicolor*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. pustulatus*; misspelled as *N. bicolor*
 1985 Anderson & Peck: 68 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. pustulatus*
 1996 Ratcliffe: 80 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus*

= tardus Mannerheim, 1853

Type locality: “Insula Sitka”, Alaska, USA [prob. erroneous; descrip.]

Type depository: unknown, not MZHF: Helsinki, lost? [Silfverberg, in litt.]

- 1853 Mannerheim: 170 (descriptions in German) >> Orig. comb.: *Necrophorus tardus* [!N, S]
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1873 Crotch: 37 (checklist) >> as syn. of *Silpha pustulata*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. pustulatus* (sensu Horn 1880)
 1920 Leng: 86 (catalog) >> as syn. of *N. pustulatus*
 1926b Portevin: 254 (descriptions in French) >> as syn. of *N. pustulatus*
 1928 Hatch: 142 (catalog) >> as syn. of *N. pustulatus*; misspelled as *N. tarsus*
 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. pustulatus*
 1985 Anderson & Peck: 68 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. pustulatus*
 1996 Ratcliffe: 80 (revision: key, descriptions & catalog) >> as syn. of *N. pustulatus*

Nicrophorus quadraticollis Portevin, 1903 desig. lectotype

Type locality: “Mou-Pin”=Bao Xin [30:23 °N, 102:50 °E], Sichuan Province, sw China [label]

Type depository: MNHN: Paris [!] lectotype male, 1 paralectotype female

Distribution: Palearctic: China: Tibet*, Sichuan, Heilongjiang; Korea; Russia: Amur, Siberia*, Ussuri reg.

- 1903 Portevin: 330 (descriptions in French) >> Orig. comb.: *Nicrophorus quadraticollis* [!N, S]
- 1910 Jakobson: 612 (checklist in Russian)
- 1924 Portevin: 87 (key, descriptions in French)
- 1925 Winkler: 263 (catalog)
- 1926a Portevin: 216 (revision: key, descriptions & catalog in French)
- 1928 Hatch: 146 (catalog) >> as syn. of *N. quadricollis* [replacement name]
- 1930 Kieseritzky: 61 (descriptions in Russian (German summary)) >> as valid species
- 1932 Hlisnikovsky: 28 (key, descriptions in German) >> as valid species
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
- 1933a Shchegoleva-Barovskaya: 176 (revision: key, descriptions & catalog in Russian) >> as valid species
- 1937 Wu (catalog)
- 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian)
- 1961 Székessy: 333 (description of variation in German) >> description of variation; 1 unavailable name
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1989 Lafer: 337 (key, descriptions, description of variation in Russian)
- 1992 Cho & Lee: 28 (revision: key, descriptions & catalog) >> new record for Korea
- 1992 Kozminykh: 64 (checklist in Russian)
- 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> ungrouped; incertae sedis
- 2002 Nikolajev & Kozminykh: 130 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= inclusus Reitter, 1913 CONFIRMED as SYNONYM of *N. quadraticollis* Portevin

Type locality: “Ost-Sibirien: Chitaizki-Sterana” [=China, Heilongjiang Prov., Kitaiskaya starana – Chinese side of the Amur River; label]

Type depository: HNHM: Budapest [!] holotype

- 1913 Reitter: 651 (descriptions in German) >> Orig. comb.: *Nicrophorus inclusus* [!N, S]
- 1915 Bodemeyer: 444 (checklist in German)
- 1925 Winkler: 265 (catalog) >> as valid species
- 1926a Portevin: 254 (revision: key, descriptions & catalog in French) >> as syn. of *N. quadraticollis*
- 1928 Hatch: 146 (catalog) >> as syn. of *N. quadraticollis*
- 1930 Kieseritzky: 61 (descriptions in Russian (German summary)) >> as syn. of *N. quadraticollis*
- 1933a Shchegoleva-Barovskaya: 176 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. quadraticollis*

- 1933b Kozminykh: 67 (key, descriptions, regional in Russian) >> as syn. of *N. quadraticollis*
 2002 Nikolajev & Kozminykh: 130 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. quadraticollis*

= *quadraticollis* Hatch, 1928 (unec. nomen novum for *N. quadraticollis* Portevin & junior primary homonym, not Gistel 1848)

Type locality: see *N. quadraticollis* Portevin

Type depository: see *N. quadraticollis* Portevin

- 1928 Hatch: 146 (catalog) >> Orig. comb.: *Nicrophorus quadraticollis*; New junior primary homonym, not *N. quadraticollis* Gistel 1848; unec. replacement name [!N, S]
 1933a Shchegoleva-Barovskaya: 176 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. quadraticollis*
 1933b Kozminykh: 67 (key, descriptions, regional in Russian) >> as syn. of *N. quadraticollis*
 2002 Nikolajev & Kozminykh: 130 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. quadraticollis*

Comments: Lectotype data for *Nicrophorus quadraticollis* Portevin, 1903: 330 "Nicrophorus quadraticollis Type Bull. Mus. 1903, p.330 Prt."/ label: "TYPE" / printed red ink. "MUSEUM PARIS"/ "401" small, round label with same data as printed on larger rectangular label;/ [CHINA]: Mou-Pin Thibet, 1-31 March 1869 (coll. A. David) / red rectangular label with double black border "LECTOTYPE *Nicrophorus quadraticollis* (Portevin1903) det. Sikes 1997" - male (Paris [MNHN]); pronotal width: 6.24 mm.

Paralectotype data "Nicrophorus quadraticollis Type -Prt. Bull. Mus. 1903, p.330" / label: "TYPE" printed red ink. "MUSEUM PARIS" small, round label with same data as printed on larger rectangular label. / [CHINA]: [Sichuan prov.], Mou-Pin Thibet [=Pao Hsing?], [30° 23' N, 102° 50' E,]1-31 March 1869 (coll. A. David) red rectangular label with double black border "PARALECTOTYPE *Nicrophorus quadraticollis* (Portevin1903) det. Sikes 1997"- female (Paris [MNHN]).

***Nicrophorus quadrimaculatus* Matthews, 1888**

Type locality: "Guatemala" [label]

Type depository: BMNH: London [!] holotype male

Distribution: Neotropical: Mexico: Chiapas, through Panama

- 1888 Matthews: 93 (description) >> Orig. comb.: *Nicrophorus quadrimaculatus* [!N, S]
 1903 Portevin: 331 (descriptions in French)
 1924 Portevin: 189 (key, descriptions in French)
 1926a Portevin: 240 (revision: key, descriptions & catalog in French)
 1927b Hatch: 353 (revision: key, descriptions & catalog)
 1928 Hatch: 129 (catalog)

- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1944 Blackwelder: 100 (catalog)
 1972 Howden & Peck: 71 (biology, ecology)
 1973 Blackwelder: 6 (checklist, synonymy)
 1985 Peck & Anderson: 268 (key, descriptions, phylogenetics)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1995 Navarrete-Heredia: 14 (biology, ecology, key in Spanish)
 2000 Navarrete-Heredia & Fierros-López: 407 (checklist, distribution in Spanish (English summary))
 2000 Sikes & Peck: 395 (descriptions, phylogenetics)
 2001 Navarrete-Heredia: 170 (checklist, distribution in Spanish)
 2002 Maes & Navarrete-Heredia: 2 (distribution note in Spanish) >> first record in Nicaragua

***Nicrophorus quadripunctatus* Kraatz, 1877**

Type locality: "Japan" [from title of paper]

Type depository: unknown; not DEIC: Eberswalde [L. Zerche, in litt.] 3 syntypes?

Distribution: Palearctic: nChina, Japan, Korea, Russia: Ussuri reg. & Amur, Taiwan*

- 1877 Kraatz: 101 (descriptions in German) >> Orig. comb.: *Nicrophorus maculifrons* var. *quadripunctatus* [!N, S]
 1877 Harold: 346 (descriptions in German) >> as *N. maculifrons* var. *quadripunctatus*
 1878 Deyrolle & Fairmaire: 91 (descriptions in French) >> as *N. maculifrons* var. *quadripunctatus*; compared to *N. ocellatus*
 1887 Lewis: 342 (description) >> as valid species
 1891 Fairmaire: 191 (checklist in French) >> as *N. maculifrons* var. *quadripunctatus*
 1895b Reitter: 325 (description of variation in German) >> as *N. maculifrons* var. *quadripunctatus*
 1897 Reitter: 48 (description of variation in German) >> comments on (agrees with) status as valid species
 1903 Portevin: 331 (descriptions in French) >> as valid species
 1908 Heyne & Taschenberg: 38 (descriptions in German) >> as var. of *N. nepalensis*
 1910 Jakobson: 612 (checklist in Russian) >> as valid species
 1914b Portevin: 224 (description of variation in French) >> as valid species
 1923 Portevin: 307 (key, descriptions in French) >> description of variation: 1 unavailable name
 1923 Portevin: 67 (key, descriptions in French) >> comment that this sp. can be found on mushrooms
 1925 Winkler: 263 (catalog) >> as valid species
 1926a Portevin: 207 (revision: key, descriptions & catalog in French)
 1927b Hatch: 354 (revision: key, descriptions & catalog) >> lapsus calami, as *N. quadrimaculatus*
 1928 Hatch: 130 (catalog)
 1929 Kôno: 164 (checklist, annotated)
 1930 Kieseritzky: 61 (descriptions in Russian (German summary))
 1930 Yokoyama: 121 (descriptions in Japanese)
 1932 Hlisnikovsky: 27 (key, descriptions in German)

- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1933a Shchegoleva-Barovskaya: 178 (revision: key, descriptions & catalog in Russian)
- 1936 Cho: 155 (checklist in Korean)
- 1936 Mochizuki (checklist)
- 1936 Takagi: 192 (checklist in Japanese)
- 1937 Mochizuki & Tsunekawa (checklist)
- 1938 Mori & Cho (checklist)
- 1939 Masui (checklist)
- 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian)
- 1955a Nakane: 48 (checklist, brief descriptions)
- 1955b Nakane: 54 (key, descriptions in Japanese)
- 1956 Esaki et al.: 1029 (checklist, descriptions in Japanese)
- 1957 Cho (catalog in Korean)
- 1963 Nakane: 75 (checklist, brief descriptions in Japanese)
- 1964b Hlisenkovsky: 244 (descriptions in German)
- 1964 Kamimura et al.: A20 (biology, ecology)
- 1966c Mroczkowski: 436 (checklist)
- 1969 Hinton: 186 (morphology: diffraction gratings) >> has iridescent morphology
- 1969 Shibata: 53 (catalog)
- 1973 Krivolutskaya: 71 (checklist in Russian (with electronic english translation))
- 1975 Katakura & Fukuda: 78 (biology, ecology)
- 1978 Kim: 63 (catalog, distribution)
- 1979 Nakane & Baba: 10 (checklist, distribution in Japanese)
- 1980 Schawaller: 153 (checklist in German (English summary))
- 1984 Nishikawa: 18 (biology, note in Japanese (English summary))
- 1985 Katakura & Ueno: 463 (biology, ecology) >> “virtually restricted to forest”
- 1985a Kurosawa: 248 (checklist) >> color habitus figure pl. 44
- 1985 Lee et al. (checklist in Korean)
- 1985 Paik: 2-12
- 1986 Cho & Lee: 21 (phylogenetics)
- 1986 Katakura et al.: 43-55 (biology, ecology)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1987 Ôhara & Higashi: 1095 (comment: ecology) >> reported as nocturnal
- 1988 Andreev (biology, symbionts: mites in Russian (English summary))
- 1988 Cho et al.: 9 (phylogenetics)
- 1989 Lafer: 337 (key, descriptions, description of variation in Russian)
- 1989 Martin: 876-879 (biology, ecology)
- 1991 Ohkawara: 463-467 (biology, ecology in Japanese (English summary)) >> focal species
- 1992 Cho & Lee: 22 (revision: key, descriptions & catalog)
- 1992 Kozminykh: 64 (checklist in Russian)
- 1992 Morimoto: 28 (descriptions in Japanese) >> brief description, photo
- 1992 Nomura & Lee: 81 (catalog)
- 1992b Ôhara: 9 (checklist in Japanese (English summary))
- 1992 Ôhara & Yabuki: 57 (checklist in Japanese (English summary))
- 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> ungrouped; incertae sedis

- 1994a Ôhara: 58 (checklist in Japanese)
 1994b Ôhara: 61 (checklist in Japanese) >> misspelled as *Nicropholus quadripunctatus*
 1994 Takaku et al.: 306 (biology, symbionts: mites) >> mite host
 1995a Ôhara: 24 (checklist in Japanese (English summary))
 1995b Ôhara: 6 (checklist in Japanese (English summary))
 1995 Ôhara et al.: 68 (checklist in Japanese (English summary))
 1997 Krivolutskaya: 3 (checklist) >> (translation of Krivolutskaya 1973)
 1998 Harusawa: 35 (key in Japanese)
 1998 Ohkawara et al.: 551-559 (biology, ecology) >> focal species
 1998 Suzuki: 152-153 (biology, behavior in Japanese)
 1999 Suzuki: 207 (biology, ecology, behavior)
 2000 Nomura et al.: 268
 2000 Růžička et al.: 381 (descriptions)
 2000 Satou et al.: 265-268 (biology, symbionts: mites) >> focal species
 2000b Suzuki: 25-28 (biology, behavior) >> focal species
 2000c Suzuki: 38 (biology, ecology, behavior in Japanese with English abstract)
 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics)
 2001 Satou et al.: 975-979 (biology, behavior) >> focal species
 2001 Suzuki: 403-405 (biology, ecology, behavior) >> focal species
 2001 Trumbo et al.: 543-560 (biology, ecology, behavior) >> focal species
 2001 Xu & Suzuki: 217-222 (biology, ecology, behavior) >> focal species
 2002 Nisimura et al.: 220 (biology, behavior) >> focal species
 2002 Nikolajev & Kozminykh: 128 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *immaculatus* Portevin, 1923 NEW STATUS as absolute syn. of *N. quadripunctatus*
 Kraatz

Type locality: "Tokio" [Japan: Tokyo; label]

Type depository: MNHN: Paris [!] holotype male

- 1923 Portevin: 307 (key, descriptions in French) >> Orig. comb.: *Nicrophorus quadripunctatus* var. *immaculatus* [!N, S]
 1925 Winkler: 263 (catalog) >> as *N. quadripunctatus* ab. *immaculatus*
 1926a Portevin: 207 (revision: key, descriptions & catalog in French) >> as *N. quadripunctatus* var. *immaculatus*
 1928 Hatch: 130 (catalog) >> as *N. quadripunctatus* var. *immaculatus*
 1933a Shchegoleva-Barovskaya: 178 (revision: key, descriptions & catalog in Russian) >> as *N. quadripunctatus* ab. *immaculatus*
 1964b Hlisnikovsky: 244 (descriptions in German) >> as *N. quadripunctatus* form *immaculatus*

Nicrophorus reichardti Kieseritzky, 1930 desig. lectotype

Type locality: "Fergana merid.: Sary-tash in valle Alaiensi"[Kyrgyzstan; descrip. & label]

Type depository: ZMAS: St. Petersburg [!] lectotype male, 2 paralectotypes

Distribution: Palearctic: Kyrgyzstan

- 1930 Kieseritzky: 60 (descriptions in Russian (German summary)) >> Orig. comb.:
Necrophorus sepultor var. reichardti [!N, S]
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
- 1933a Shchegoleva-Barovskaya: 187 (revision: key, descriptions & catalog in Russian)
>> as valid species
- 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
- 1992 Kozminykh: 64 (checklist in Russian) >> as valid species
- 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as valid species
- 2002 Nikolajev & Kozminykh: 122 (catalog, distribution, descriptions, keys, figures in
Russian (English summary))

Comments: Lectotype data for *Necrophorus reichardti* Kieseritzky, 1930: 60 "Syntypus ?
Necrophorus reichardti Kieser. [red label]";/ "Necrophorus reichardti";/ "ZOOLOGICAL
INSTITUTE Russian Academy of Sciences, ST. PETERSBURG, RUSSIA";/ "collection
the Zoological Institute Academy of Sciences, St. Petersburg, Russia";/ [KYR-
GYZSTAN]: [Alajskaja (Alaiskaya) Dol. ur. Sary-tasz], 28 June 1928 (coll. [Rejhardt]) /
white label with black border "Nicrophorus reichardti Kieseritzky, 1930: 60 Det. D. S.
Sikes 1997 ZMAS004984Nic" / red rectangular label with double black border "LECTO-
TYPE Nicrophorus reichardti (Kieseritzky, 1930) det. Sikes 1997" - male (St. Petersburg
[ZMAS]); pronotal width: 4.71 mm.

Paralectotype data "Necrophorus sepultor Charp. v. reichardti n. V. Kieseritzkij det.
[red label] / Syntypus ? Necrophorus reichardti Kieser. / Necrophorus reichardti / "ZOO-
LOGICAL INSTITUTE Russian Academy of Sciences, ST. PETERSBURG, RUSSIA";
"collection the Zoological Institute Academy of Sciences, St. Petersburg, Russia" / [KYR-
GYZSTAN]: Alaiskaya dol. , elev. 3000 m, 2 August 1928 (coll. Gordukow) / red rectan-
gular label with double black border "PARALECTOTYPE Nicrophorus reichardti
(Kieseritzky, 1930) det. Sikes 1997"- male (St. Petersburg [ZMAS]); Syntypus ? Necro-
phorus reichardti Kieser. [red label] / Necrophorus reichardti / "ZOOLOGICAL INSTI-
TUTE Russian Academy of Sciences, ST. PETERSBURG, RUSSIA"; "collection the
Zoological Institute Academy of Sciences, St. Petersburg, Russia" / [KYRGYZSTAN]:
[Alajskaja (Alaiskaya) Dol. ur. Sary-tasz], 28 June 1928 (coll. [Rejhardt]) / red rectangular
label with double black border "PARALECTOTYPE Nicrophorus reichardti (Kieseritzky,
1930) det. Sikes 1997"- male (St. Petersburg [ZMAS])

Nicrophorus satanas Reitter, 1893

Type locality: "Sudrussland: Kirguiskaja-steppe östlich bei Astrachan"= Kirgizia
(Astrakhan), Kazakhstan [descrip. & label]

Type depository: HNHM: Budapest [!] holotype female

Distribution: Palearctic: cRussia, Afghanistan, Kazakhstan, Iran*, Pakistan*, Turk-
menistan, Uzbekistan

- 1893 Reitter: 147 (key, descriptions in German) >> Orig. comb.: Necrophorus Satanas
[!N, S]

- 1895b Reitter: 324 (description of variation in German)
 1896 Heyden: 38 (checklist in German)
 1906 Heyden et al.: 247 (checklist)
 1910 Jakobson: 611 (checklist in Russian)
 1923 Portevin: 231 (key, descriptions in French)
 1925 Winkler: 263 (catalog)
 1926a Portevin: 198 (revision: key, descriptions & catalog in French)
 1927b Hatch: 355 (revision: key, descriptions & catalog)
 1932 Hlisnikovsky: 25 (key, descriptions in German)
 1933 Semenov-Tian-Shanskij: 153 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 173 (revision: key, descriptions & catalog in Russian)
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as *N. satana*
 1992 Kozminykh: 64 (checklist in Russian)
 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
 1993b Kozminykh: 64 (key, descriptions, regional in Russian)
 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
 1995 Kozminykh: 109 (key in Russian)
 1995 Kozminykh & Nemkov: 112 (catalog in Russian)
 1998 Pushkin & Sigida: 84 (biology, ecology in Russian)
 2002 Nikolajev & Kozminykh: 108 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

Nicrophorus sausai Růžička, Háva & Schneider, 2000

Type locality: "LAOS c. Bolikhamsai prov. BAN NAPE - Kaew Nua Pass, alt. 600 m, N 18° 22.3' E 105° 09.1' ". [label]

Type depository: SMTD: Dresden, holotype female, allotype male, 4 paratypes [JSC, JHC, JRC]

Distribution: Oriental: Laos, northeastern India

2000 Růžička et al.: 378 (descriptions) >> Orig. comb.: *Nicrophorus sausai* [!S]

Nicrophorus sayi Laporte, 1840

Type locality: "Amérique du Nord"[North America; descrip.]

Type depository: unknown

Distribution: Nearctic: northeastern to northcentral North America

- 1840 Laporte: 2 (descriptions in French) >> Orig. comb.: *Nicrophorus Sayi* [!N, S]
 1854 Lacordaire: 200 (biology, catalog in French)
 1868 Gemminger & Harold: 719 (catalog)
 1870 LeConte: 398 (nomenclature)
 1873 Crotch: 37 (checklist) >> as *Silpha sayi*
 1877 Provancher: 224, 226 (in French)
 1878b Hubbard & Schwarz: 650 (checklist)
 1880 Horn: 231 (revision: key, descriptions & catalog)
 1885 Henshaw: 26 (checklist)
 1902 Dury: 12 (checklist)
 1904 Davis: 18 (checklist)

- 1909 Stevens: 106 (biology, cytology) >> chromosomes figured
 1910 Barkowski: 79 (key, descriptions, regional in German)
 1910 Blatchley: 274 (key, descriptions, regional)
 1910 Smith: 229 (checklist)
 1911 Wickham: 10 (checklist)
 1920 Britton: 224 (checklist)
 1920 Leng: 86 (catalog)
 1922 Sherborn: 5764 (catalog - index)
 1924 Hatch: 560 (checklist)
 1924 Portevin: 148 (key, descriptions in French)
 1926a Portevin: 221 (revision: key, descriptions & catalog in French)
 1927a Hatch: 5, 7, 19 (key, descriptions, description of variation)
 1927b Hatch: 353 (revision: key, descriptions & catalog)
 1928 Hatch: 129 (catalog)
 1928 Leonard: 271 (checklist)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1938 Brimley: 135 (checklist)
 1944 Arnett: 4, 22 (morphology: female genitalia) >> female genitalia figured, pl. 3, fig. 2
 1944 Milne & Milne: 311 (biology, behavior)
 1946 Procter: 121 (checklist, ecology)
 1947 Arnett: 110 (catalog) >> notes that LeConte 1870 missidentified this sp. as *N. melsheimeri*
 1949 Bliss: 200 (morphology: sexual dimorphism)
 1949 Hoffmann et al.: 10 (comment: ecology) >> eliminated from area sprayed with DDT, 1 year later
 1953 Smith: 35 (biology, cytology)
 1958 Madge: 22 (revision: key, descriptions, ecology, distributions)
 1961 Dillon & Dillon: 175 (key, descriptions)
 1963 Arnett: 330 (key) >> figured
 1970 Gersdorf: 368 (morphology: female genitalia in German)
 1970 Kirk: 25 (checklist)
 1973 Blackwelder: 3 (checklist, synonymy)
 1975 Baldwin: 26 (key, description, distribution, ecology)
 1975 Kirk & Balsbaugh: 52 (checklist)
 1977 Headstrom: 105 (description)
 1978 Smith & Virkki: 240 (biology, cytology)
 1979 Uetz et al.: 299 (comment: ecology)
 1982 Abell et al.: 304 (biology, ecology)
 1982a Anderson: 261 (key, descriptions, morphology, larval stages)
 1982c Anderson: 1316 (biology, ecology)
 1982 Peck & Miller: 152 (nomenclature)
 1982 Wilson: 293 (biology, symbionts: mites)
 1983 Wilson: 858 (biology, symbionts: mites)
 1984 Wilson & Fudge: 195-203 (biology, ecology) >> focal species
 1984 Wilson et al.: 205-216 (biology, ecology) >> focal species
 1985 Anderson & Peck: 69 (revision: key, descriptions & catalog)

- 1985 Peck & Anderson: 287 (key, descriptions, phylogenetics)
 1986 Levesque & Levesque: 44 (biology, ecology in French)
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1987 Peck & Kaulbars: 52 (checklist)
 1987 Staines: 16 (key, descriptions) >> not recorded from Maryland
 1987 Wilson & Knollenberg: 139-159 (biology, symbionts: mites) >> focal species
 1988 Scott et al.: 325-331 (biology, ecology) >> focal species
 1989 Scott & Traniello: 32-36 (popular review) >> focal species
 1989 Staines: 69 (key, descriptions, distributions) >> Maryland records
 1990 Peck: 1122 (key)
 1990 Scott & Traniello: 274-283 (biology, ecology, behavior) >> focal species
 1990a Trumbo: 347-355 (biology, ecology) >> focal species
 1991 Campbell: 86 (catalog, distribution)
 1991 Laplante et al.: 29 (checklist in French)
 1991 Newton: 340 (morphology, larval stages) >> larval mandible illustrated
 1992 Beninger & Peck: 79-86 (biology, ecology)
 1992 Brown & Wilson: 466 (biology, symbionts: mites)
 1992 Robertson: 191 (biology, ecology)
 1992 Trumbo: 295 (biology, behavior)
 1993 Creighton et al.: 276 (biology, conservation)
 1993 Peck & Miller: 9 (species-group catalog)
 1994 Beninger: 135-143 (biology, ecology in English (French summary))
 1994 Bertin & Fallaci: 218 (checklist in Italian (English summary))
 1994 Brown & Wilson: 3 (biology, symbionts: mites)
 1994b Scott: 538 (biology, behavior)
 1996 Downie & Arnett: 357 (key, descriptions, regional)
 1996 Lomolino & Creighton: 238 (biology, conservation)
 1997 Klausnitzer: 40 (morphology, larval stages in German)
 1998b Scott: 598+ (biology, review of: ecology, behavior)
 1998 Trumbo & Thomas: 85-95 (biology, ecology) >> focal species
 2000 Eggert & Sakaluk: 263 (biology, behavior)
 2000 Sikes & Peck: 395 (descriptions, phylogenetics)
 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics)
 2000 Werner & Raffa: 144 (comment: ecology)
 2001 Nishikawa: 81 (larval descriptions, phylogenetics in English (Japanese summary)) >> larva compared to *N. maculifrons*

= *lunatus* LeConte, 1853 (junior primary homonym, not Fischer 1842) CONFIRMED as SYNONYM of *N. sayi* Laporte

Type locality: "New York and Georgia" [USA; descrip. no data on label]

Type depository: MCZC: Cambridge [!] lectotype male

- 1853 LeConte: 277 (descriptions) >> Orig. comb.: *Necrophorus lunatus* [not Fischer];
 LeConte described this sp. based on name in Dejean's catalog because it
 lacked a description [!N, S]
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1868 Gemminger & Harold: 718 (catalog) >> as syn. of *N. luniger*

- 1870 LeConte: 398 (nomenclature) >> as syn. of *N. sayi*
 1873 Crotch: 37 (checklist) >> as syn. of *Silpha sayi*
 1877 Provancher: 225 (in French)
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. sayi*
 1920 Leng: 86 (catalog) >> as syn. of *N. sayi*
 1926a Portevin: 256 (revision: key, descriptions & catalog in French) >> as syn. of *N. sayi*
 1928 Hatch: 129 (catalog) >> as syn. of *N. sayi*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. sayi*
 1982 Peck & Miller: 152 (nomenclature) >> desig. lectotype; as syn. of *N. sayi*; as homonym of *N. lunatus* Fisch.
 1985 Anderson & Peck: 69 (revision: key, descriptions & catalog) >> as syn. of *N. sayi*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. sayi*

= *luniger* Harold, 1868 (nomen novum for *lunatus* LeConte)

Type locality: see *N. lunatus* LeConte

Type depository: see *N. lunatus* LeConte

- 1868 Harold: 104 (descriptions in German) >> Orig. comb.: *Necrophorus luniger*; (new name (nomen novum) (replacement name) for preoccupied *lunatus* LeConte) [!M]
 1868 Gemminger & Harold: 718 (catalog) >> as valid species
 1920 Leng: 86 (catalog) >> as syn. of *N. sayi*
 1926a Portevin: 256 (revision: key, descriptions & catalog in French) >> as syn. of *N. sayi*
 1928 Hatch: 129 (catalog) >> as syn. of *N. sayi*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. sayi*
 1982 Peck & Miller: 152 (nomenclature) >> as syn. of *N. sayi*
 1985 Anderson & Peck: 69 (revision: key, descriptions & catalog) >> as syn. of *N. sayi*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. sayi*

= *pulsator* Gistel, 1848 NEW SYNONYM of *N. sayi* Laporte

Type locality: "America borealis" [Canada; descrip.]

Type depository: ZSMC: München?

- 1848 Gistel: 190 (descriptions in German) >> Orig. comb.: *Necrophorus pulsator*
 1857b Gistel: 564 (in German) >> indicated as new; with "*N. americanus*? Melsheimer" as synonym
 1917 Strand: 83 (descriptions in German)
 1928 Hatch: 153 (catalog) >> *Incertae sedis*
 1993 Peck & Miller: 9 (species-group catalog) >> as unplaced species / *incertae sedis*

Comments: See comments for *N. germanicus* and *N. interruptus* regarding the names of Gistel. We herein move *N. pulsator* Gistel, previously considered a *nomen dubium*, to synonymy under *N. sayi*. Gistel's description indicates *N. pulsator* is similar to *N. vespillo*, suggesting the metatibiae are curved, which would limit this species to either *N. marginatus* or *N. sayi*; the description also indicates that the posterior fascia are round spots which excludes *N. marginatus* but matches *N. sayi*.

Nicrophorus scrutator Blanchard, 1842 desig. lectotype

Type locality: "Chuquisaca" [Bolivia:19.083°S, 65.250°W; label]

Type depository: MNHN: Paris [!] lectotype male, 1 paralectotype female

Distribution: Neotropical: Peru, Bolivia, n Argentina

- 1842 Blanchard: 74 (descriptions in French) >> Orig. comb.: *Nicrophorus scrutator* [!N]
- 1854 Lacordaire: 200 (biology, catalog in French)
- 1868 Gemminger & Harold: 719 (catalog)
- 1922 Portevin: 57 (descriptions in French) >> description of variation: 1 unavailable name
- 1922 Sherborn: 5823 (catalog - index)
- 1924 Portevin: 190 (key, descriptions in French)
- 1926a Portevin: 237 (revision: key, descriptions & catalog in French) >> year of Blanchard 1842 given as 1840
- 1927b Hatch: 353 (revision: key, descriptions & catalog)
- 1928 Hatch: 128 (catalog) >> year of Blanchard 1842 given as 1840
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1944 Blackwelder: 100 (catalog)
- 1985 Peck & Anderson: 270 (key, descriptions, phylogenetics)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 2000 Sikes & Peck: 395 (descriptions, phylogenetics)

Comments: Lectotype data for *Nicrophorus scrutator* Blanchard, 1842: 74 "N. srutator Blanch.Nicrophorus scrutator Blanch. Type label upside down";/ " Type" handwritten, black ink.;/"6316 34"-on round label; / label: "TYPE" printed red ink."/ MUSEUM PARIS"; / [BOLIVIA]: Chuquisaca, 1834 [19.083°S, 65.250°W](coll. d'Orbigny) / red rectangular label with double black border "LECTOTYPE *Nicrophorus scrutator* (Blanchard 1842) det. Sikes 1997"- male (Paris [MNHN]); pronotal width: 6.81 mm.

Paralectotype data "N. srutator Blanch. / *Nicrophorus scrutator* Blanch. Type / label upside down" Type" handwritten, black ink. label: "TYPE" printed red ink." MUSEUM PARIS" / de La Laguna Prov., 1834 (coll. d'Orbigny) / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus scrutator* (Blanchard 1842) det. Sikes 1997"- female (Paris [MNHN]).

Nicrophorus semenowi (Reitter, 1887)

Type locality: "Centr. Asien, Zuflüsse des Blauen Flusses" [=“tributaries of the Blue Riv”. China?; label]

Type depository: HNHM: Budapest [!] holotype female

Distribution: Palearctic: China: Gansu & Qinghai prov.*, Tibet*

- 1887 Reitter: 216 (descriptions in German) >> Orig. comb.: *Silpha* (*Nicrophorus*) *Semenowi* [!N, S]
- 1893 Heyden: 51 (checklist in German)
- 1895b Reitter: 327 (description of variation in German) >> as *Nicrophorus Semenowi*
- 1896 Heyden: 38 (checklist in German)

- 1910 Jakobson: 612 (checklist in Russian)
 1924 Portevin: 186 (key, descriptions in French)
 1925 Winkler: 264 (catalog)
 1926a Portevin: 224 (revision: key, descriptions & catalog in French)
 1927b Hatch: 357 (revision: key, descriptions & catalog)
 1928 Hatch: 145 (catalog)
 1930 Kieseritzky: 63 (descriptions in Russian (German summary))
 1932 Hlisnikovsky: 29 (key, descriptions in German)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 190 (revision: key, descriptions & catalog in Russian)
 1933b Shchegoleva-Barovskaya: 251 (descriptions in Russian)
 1937 Wu (catalog)
 1964b Hlisnikovsky: 242 (descriptions in German) >> compared to *N. tibetanus*
 1982 Schawaller: 255 (checklist in German (English summary))
 1986 Nishikawa: 98 (catalog in Japanese (English summary))
 1993b Kozminykh: 67 (key, descriptions, regional in Russian)
 1996 Růžička & Schneider: 81 (checklist in English (Czech summary))

= *temporalis* Shchegoleva-Barovskaya, 1933 NEW SYNONYM of *N. semenowi*
 (Reitter)

Type locality: "Tibet or.: system fluvii Yan-Tse-Kiang; monasterium Surman; lit. mer.-orient. lacus Kuku-nor"[China: Qinghai Prov.; label]

Type depository: ZMAS: St. Petersburg [!] 3 syntypes

- 1933b Shchegoleva-Barovskaya: 251 (descriptions in Russian) >> Orig. comb.: *Necrophorus (Necropter) temporalis* [!N, S]
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
 1964b Hlisnikovsky: 242 (descriptions in German) >> as valid species, compared to *N. tibetanus*
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species

Comments: DSS has studied the type specimens of *N. temporalis* from the St. Petersburg collection and they show all the diagnostic traits of *N. semenowi* (dense brown metasternal setae, slender metafemora, setose metepimeral lobe, long setae behind mesocoxae) and no differentiating traits, so we herein synonymize this name.

Nicrophorus sepulchralis Heer, 1841 NEW STATUS as valid species

Type locality: "in alpinis (St. Bernhard)." [=border of Italy/France or France/Switzerland?, descrip.]

Type depository: ETHZ: Zürich

Distribution: Palearctic: mountains of southern Europe

- 1841a Heer: 388 (descriptions in German) >> Orig. comb.: *Nicrophorus sepulchralis* [!N, S]
 1841b Heer: 9 (checklist in German)
 1849 Gaubil: 55 (catalog in French) >> as valid species
 1854 Lacordaire: 199 (biology, catalog in French) >> as valid species

- 1859 Schaum: 36 (catalog in German)
- 1862 Schaum: 38 (catalog in German) >> as valid species
- 1863 Marseul: 88 (catalog in French)
- 1866 Marseul: 38 (catalog in French)
- 1868 Stein: 42 (catalog in Latin) >> as valid species
- 1869 Stierlin & Gautard: 116 (checklist in German) >> as valid species
- 1872 Stierlin: 475 (in German)
- 1874 Seidlitz: 216 (key in German) >> as valid species
- 1876d Kraatz: 396 (comment in German)
- 1877 Stein & Weise: 61 (catalog in Latin) >> as valid species
- 1877 Stierlin: 288 (in German)
- 1883 Reitter: 60 (comment in German) >> probable missidentification as *N. nigricornis* (record from Germany)
- 1884 Marseul: 188 (key, descriptions in French) >> as valid species
- 1884 Reitter: 88 (descriptions in German) >> as *Silpha sepulchralis*; as syn. of *N. nigricornis*
- 1885 Marseul: 169 (catalog in French) >> as valid species
- 1888 Seidlitz: 312 (key in German) >> as syn. of *N. nigricornis*; misspelled as *Necrophagus sepulchralis*
- 1889 Seidlitz: 329 (key in German) >> as syn. of *N. nigricornis*; misspelled as *Necrophagus*
- 1891 Heyden et al.: 139 (checklist) >> as *Necrophorus sepulchralis*; as syn. of *N. nigricornis*
- 1895b Reitter: 329 (description of variation in German) >> as syn. of *N. nigricornis*
- 1901 Carret: 328 (description of variation in French) >> missidentified as *N. nigricornis*, compared with *N. nigricornis*
- 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. nigricornis*
- 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. nigricornis*
- 1916 Pasquet: 179 (description of variation in French)
- 1922 Sherborn: 5890 (catalog - index)
- 1926a Portevin: 260 (revision: key, descriptions & catalog in French) >> as syn. of *N. nigricornis*
- 1927b Hatch: 363 (revision: key, descriptions & catalog) >> missidentified as *N. nigricornis*
- 1927 Marié: 70, 72 (biology, ecology in French) >> Missidentified as *N. nigricornis*, "Biology" - Hatch 1928
- 1928 Hatch: 153 (catalog) >> as syn. of *N. nigricornis*
- 1932 Hlisnikovsky: 30 (key, descriptions in German) >> missidentified as *N. nigricornis*, in part
- 1933a Shchegoleva-Barovskaya: 179 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. nigricornis*
- 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. nigricornis*
- 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary)) >> missidentified as *N. nigricornis*
- 1985 Zahradník: 122 (catalog, annotated & figured in German) >> as syn. of *N. nigricornis* (Alps populations)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as syn. of *N. nigricornis* (pop in Europe)

- 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. nigricornis*
- 1996 Bertin & Lebboroni: 154 (checklist in Italian (English summary)) >> Missidentified as *N. nigricornis*
- 1999 Háva et al.: 78 (key, descriptions) >> missidentified as *N. nigricornis*, in part
- 2002 Nikolajev & Kozminykh: 114 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. nigricornis*

Comments: Reitter (1884) was the first author we have found who treated *N. sepulchralis* as a synonym of *N. nigricornis*. All subsequent authors have also treated this name as a synonym. With the exception of Carret (1901), who studied both forms and concluded *N. sepulchralis* should remain in synonymy with *N. nigricornis*, these subsequent treatments include no commentary on this synonymy. This case is unusual because there are at least three easily observed morphological characters that differ between these species and their distributions are quite allopatric. DSS has seen 70 specimens of this relatively rare and montane species and all the locality records fall between 5° and 26° east longitude in the Alps and mountains of southeastern Europe (Italy, southeast France, Austria, Bosnia, Albania, Bulgaria, Croatia, Greece) whereas all the 72 specimens of *N. nigricornis* seen are from the Caucasus Mountains (between 38° and 48° east longitude). Because both of these species are montane, with no records from regions of lower elevations between their distributions, they are clearly separated geographically.

These species differ in the color of their clypeal membranes with that of *N. nigricornis* being usually black or very dark while that of *N. sepulchralis* is usually orange. A few rare exceptions to this pattern have been collected, but if the clypeal membrane doesn't fit the pattern then the hairs of the femoral apices and/or the prosternum will diagnose these species. The femoral apices of *N. nigricornis* have predominately brown hairs while those of *N. sepulchralis* are predominately golden. The prosternum has mostly brown hairs in *N. nigricornis* but mostly golden hairs in *N. sepulchralis* and there is a pattern of golden and brown hairs on the visible abdominal tergites that also differs between these species. These species are clearly sisters and it would be very interesting to compare samples of their mtDNA sequences to determine their genetic similarity.

Nicrophorus sepultor Charpentier, 1825

Type locality: "Germania"[descrip.]

Type depository: ZMHB: Berlin?

Distribution: Palearctic: Europe, (Mongolia?), Kazakhstan, Kyrgyzstan, Transcaucasia, Iran, Russia: Siberia?

1825 Charpentier: 200 (descriptions) >> Orig. comb.: *Nicrophorus sepultor* [!M, S]

1841a Heer: 387 (descriptions in German)

1841b Heer: 9 (checklist in German)

1846b Küster: nr. 39 (catalog in German (English summary))

1847a Gebler: 439

- 1849 Bach: 153 (checklist, brief descriptions in German)
 1849 Gaubil: 55 (catalog in French) >> as valid species
 1849 Redtenbacher: 140 (catalog in German)
 1855 Fairmaire & : 292
 1858 Calwer: 106 (checklist, brief descriptions in German) >> attrib. Gyll., as syn. of
 vestigator
 1858 Redtenbacher: 289 (catalog in German)
 1859 Gebler (checklist)
 1859 Gutfleisch & Bose: 202 (key, descriptions in German) >> as valid species
 1859 Schaum: 36 (catalog in German)
 1860 Motschulsky: 126 (descriptions in French) >> compared with *N. orientalis*
 1862 Schaum: 38 (catalog in German)
 1863 Grenier: 13 (checklist in French)
 1863 Marseul: 88 (catalog in French)
 1866 Marseul: 38 (catalog in French)
 1866 Michow: 411 (description of variation in German)
 1868 Gemminger & Harold: 719 (catalog) >> lapsus calami, misspelled as *N. sepul-*
chralis Charpentier
 1868 Stein: 42 (catalog in Latin)
 1869 Stierlin & Gautard: 116 (checklist in German) >> attrib. Heer
 1870 Rye: 182 (comment [translation of Michow 1866]) >> translation of Michow
 (1866)
 1870 Vollenhoven et al.: 54 (checklist in Dutch)
 1873 Klika: 127 (checklist in Czech)
 1873 Michow: 10 (in German)
 1874 Seidlitz: 217 (key in German)
 1876b Kraatz: 395 (morphology: clypeus in German)
 1876d Kraatz: 397 (comment in German)
 1877 Hickel & Dragicsevics: 27 (checklist in French)
 1877 Stein & Weise: 61 (catalog in Latin)
 1880 Heyden: 87 (checklist in German)
 1883 Heyden et al.: 73 (checklist)
 1884 Marseul: 191 (key, descriptions in French)
 1884 Reitter: 87 (descriptions in German) >> as *Silpha sepultor*
 1885 Marseul: 169 (catalog in French)
 1885 Reitter: 321 (in German)
 1887 Jakovlev: 154 (descriptions) >> compared to *Silpha* (*N.*) *maculiceps*
 1887 Reitter: 216 (descriptions in German) >> as *Silpha sepultor*; compared to *N.*
semenowi
 1888 Seidlitz: 313 (key in German) >> misspelled as *Necrophagus sepultor*
 1889 Seidlitz: 329 (key in German) >> misspelled as *Necrophagus sepultor*
 1891 Heyden et al.: 139 (checklist)
 1895b Reitter: 327 (description of variation in German) >> as *Necrophorus sepultor*
 1896 Acloque: 241 (key in French)
 1896 Heyden: 38 (checklist in German)
 1898 Everts: 413
 1899 Ganglbauer: 164 (key, descriptions, in German)

- 1901 Carret: 331 (description of variation in French)
 1906 Heyden et al.: 247 (checklist)
 1909 Reitter: 240 (in German)
 1910 Jakobson: 612 (checklist in Russian)
 1913 Kniephof: 187 (in German)
 1913 Kuhnt: 335 (in German)
 1913 Roubal (biology, ecology in Czech & German)
 1916 Pasquet: 155 (description of variation in French)
 1916 Schaufuss: 273 (checklist in German)
 1922 Hansen: 114 (key, descriptions, morphology, larval stages in Danish)
 1922 Sherborn: 5890 (catalog - index)
 1924 Portevin: 145 (key, descriptions in French) >> description of variation: 3 unavailable names
 1925 Fuente y Morales: 119 (checklist in Spanish)
 1925 Winkler: 263 (catalog)
 1926 Porta: 333 (key, checklist in Italian)
 1926a Portevin: 218 (revision: key, descriptions & catalog in French)
 1927b Hatch: 359 (revision: key, descriptions & catalog)
 1928 Hatch: 145 (catalog)
 1929 Portevin: 538 (key, intraspecific variation in French)
 1930 Kieseritzky: 60 (descriptions in Russian (German summary))
 1930 Roubal: 240 (catalog in Czech)
 1932 Hlisnikovsky: 28 (key, descriptions in German)
 1933 Rapp: 537 (biology, ecology, distribution in German)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 189 (revision: key, descriptions & catalog in Russian)
 1942 Roubal: 17 (description of variation in Czech) >> fig. of elytral variant
 1949 Horion: 76 (biology, ecology, distribution in German)
 1952 Benick: 33 (biology, ecology in German)
 1952 Novak: 62 (checklist in Croatian)
 1955 Mroczkowski: 23 (key, descriptions in Polish)
 1959 Hicks: 93 (biology, ecology)
 1960 Hansen et al.: 72 (checklist in Danish)
 1965 Báguena: 52 (checklist in Spanish)
 1966a Mroczkowski: 334 (checklist)
 1968 Hansen: 19 (key, descriptions in Danish)
 1968 Petruška: 168 (biology, ecology in Czech (English summary))
 1970 Franz: 214 (checklist, distribution in German)
 1971 Freude: 194 (key in German)
 1973 Audisio (checklist) >> 1972 record of this sp. in Trentino, Italy
 1975b Emetz: 105 (checklist in Russian)
 1976 Petruška: 162 (biology, ecology in Czech (English summary))
 1978 Burakowski et al.: 202 (catalog, distribution, synonymy in Polish)
 1978 Mroczkowski: 239 (biology, ecology in Polish (Russian & German summary))
 1978 Schneider: 199 (morphology: wing folding in German)
 1979 Salgado & Régil: 86 (catalog, annotated & figured in Spanish)
 1979 Silfverberg: 12 (checklist, distribution)

- 1980 Franssen: 46 (morphology: female genitalia in French) >> female genitalia figured
- 1981 Šustek: 40 (key, descriptions, regional in Czech)
- 1982 Wisiniewski (biology, symbionts: mites in German)
- 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary))
- 1985 Zahradník: 123 (catalog, annotated & figured in German)
- 1986 Nishikawa: 98 (catalog in Japanese (English summary))
- 1987 Lucht: 67 (catalog in German)
- 1989 Koch: 164 (biology, ecology in German)
- 1990 Erbeling: 116 (biology, ecology in German (English summary))
- 1990 Zahradník: 123 (key in Spanish)
- 1992 Kozminykh: 64 (checklist in Russian)
- 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
- 1992 Silfverberg: 14 (checklist, distribution in English (Finnish & Swedish summaries))
- 1993b Kozminykh: 66 (key, descriptions, regional in Russian)
- 1993 Růžička: 34 (checklist, distribution in English & Czech)
- 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
- 1994 Růžička: 69 (biology, ecology)
- 1995 Angelini et al.: 10 (checklist, distribution in Italian)
- 1995 Kozminykh: 111 (key in Russian)
- 1995 Kozminykh & Nemkov: 113 (catalog in Russian)
- 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English)
- 1996 Bertin & Lebboroni: 150 (checklist in Italian (English summary))
- 1996 Hansen: 93 (checklist, distribution in Danish & English)
- 1997 Kozminykh: 65 (checklist in Russian)
- 1997 Telnov et al. (checklist)
- 1999 Tamutis (comment, distribution in Lithuanian (English summary))
- 2000a Parkhomenko: 89-92 (morphology, larval stages in Ukrainian (English summary)) >> focal species; larval stages descriptions
- 2000b Parkhomenko: 164 (morphology, larval stages in Ukrainian (English summary))
- 2002 Nikolajev & Kozminykh: 121 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= obrutor Erichson, 1837

Type locality: Mark Brandenburg, Germany [from title]

Type depository: ZMHB: Berlin?

- 1837 Erichson: 225 (species-group catalog in German) >> Orig. comb.: *Necrophorus obrutor* [!N, S]
- 1838 Sturm: 267 (in German)
- 1839 Stephens: 114 (descriptions) >> as valid species
- 1841a Heer: 388 (descriptions in German) >> as syn. of *N. sepultor* Charpentier
- 1849 Bach: 153 (checklist, brief descriptions in German) >> as syn. of *N. sepultor* Charpentier
- 1849 Gaubil: 55 (catalog in French) >> misspelled *N. Abruptor*, as syn. of *N. sepultor* Charpentier

- 1854 Lacordaire: 199 (biology, catalog in French) >> as valid species
 1863 Marseul: 88 (catalog in French) >> as syn. of *N. sepultor* Charpentier
 1868 Gemminger & Harold: 719 (catalog) >> as syn. of *N. sepultor* (misspelled as *N. sepulchralis*)
 1874 Seidlitz: 215 (key in German) >> as syn. of *N. sepultor* Charpentier
 1876d Kraatz: 397 (comment in German) >> as syn. of *N. sepultor*
 1877 Stein & Weise: 61 (catalog in Latin) >> as syn. of *N. sepultor* Charpentier
 1883 Heyden et al.: 73 (checklist) >> as syn. of *N. sepultor*
 1884 Marseul: 191 (key, descriptions in French) >> as syn. of *N. sepultor*
 1884 Reitter: 87 (descriptions in German) >> as syn. of *Silpha sepultor*
 1885 Marseul: 169 (catalog in French) >> as syn. of *N. sepultor* Charpentier
 1888 Seidlitz: 312 (key in German) >> as syn. of *N. sepultor*; misspelled as *Necrophagus obrutor*
 1889 Seidlitz: 328 (key in German) >> as syn. of *N. sepultor*; misspelled as *Necrophagus obrutor*
 1891 Heyden et al.: 139 (checklist) >> as syn. of *N. sepultor*
 1895b Reitter: 327 (description of variation in German) >> as syn. of *N. sepultor*
 1901 Carret: 331 (description of variation in French) >> as syn. of *N. sepultor*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. sepultor*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. sepultor*
 1926a Portevin: 254 (revision: key, descriptions & catalog in French) >> as syn. of *N. sepultor*
 1928 Hatch: 145 (catalog) >> as syn. of *N. sepultor*
 1930 Kieseritzky: 62 (descriptions in Russian (German summary)) >> as syn. of *N. sepultor*
 1933a Shchegoleva-Barovskaya: 189 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. sepultor*
 1965 Báguena: 52 (checklist in Spanish) >> as syn. of *N. sepultor*
 1993b Kozminykh: 66 (key, descriptions, regional in Russian) >> as syn. of *N. sepultor*
 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. sepultor*; misspelled as *N. obirutor*
 2002 Nikolajev & Kozminykh: 121 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. sepultor*

***Nicrophorus smefarka* Háva, Schneider & Růžička, 1999**

Type locality: “China: Sichuan, Gongga Shan, Hailuogou, above camp 3, 3200m 29° 35N 102° 00E” [label]

Type depository: JSC: Praha [!] holotype female

Distribution: Oriental: China: Sichuan, Shaanxi* & Hubei*

1999 Háva et al.: 74 (key, descriptions) >> Orig. comb.: *Nicrophorus smefarka* [!S]

***Nicrophorus tenuipes* Lewis, 1887** desig. lectotype

Type locality: “JAPAN: Chiuzenji”, [36.73°N, 139.48°E, label]

Type depository: BMNH: London [!] lectotype male, 2 paralectotypes

Distribution: Palearctic: northeastern China, Japan, Korea, Russia- Amur, Ussuri reg., Kuriles, Sakhalin

- 1887 Lewis: 341 (description) >> Orig. comb.: *Necrophorus tenuipes* [!N, S]
 1910 Jakobson: 612 (checklist in Russian) >> as valid species
 1914b Portevin: 224 (description of variation in French) >> as valid species
 1922 Portevin: 55 (descriptions in French) >> as valid species
 1923 Portevin: 304 (key, descriptions in French) >> as valid species
 1925 Winkler: 263 (catalog) >> as valid species
 1926a Portevin: 203 (revision: key, descriptions & catalog in French) >> as valid species
 1927b Hatch: 354 (revision: key, descriptions & catalog) >> as *N. humator* subsp. *tenuipes*
 1928 Hatch: 132 (catalog) >> as *N. humator* subsp. *tenuipes*
 1929 Kizeritsky (in Russian)
 1929 Kôno: 161, 164 (checklist, annotated) >> as *N. humator* subsp. *tenuipes*
 1932 Hlisenkovsky: 26 (key, descriptions in German) >> as valid species
 1933 Semenov-Tian-Shanskij: 151 (catalog in Russian & Latin) >> as valid species
 1933a Shchegoleva-Barovskaya: 172 (revision: key, descriptions & catalog in Russian) >> as valid species
 1936 Cho: 155 (checklist in Korean) >> as *N. humator* subsp. *tenuipes*
 1937 Mochizuki & Tsunekawa (checklist)
 1939 Masui (checklist)
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. humator* subsp. *tenuipes*
 1953 Mazokhin-Porshnyakov: 235 (descriptions, catalog in Russian) >> as valid species
 1955a Nakane: 48 (checklist, brief descriptions)
 1955b Nakane: 53 (key, descriptions in Japanese)
 1957 Cho (catalog in Korean)
 1963 Nakane: 75 (checklist, brief descriptions in Japanese)
 1964 Kamimura et al.: A19 (biology, ecology) >> as valid species
 1966c Mroczkowski: 436 (checklist) >> as valid species
 1970 Gersdorf: 368 (morphology: female genitalia in German) >> as possible syn. of *N. humator*
 1971 Kryzhanovskiy: 212 (in Russian (English summary)) >> as valid species
 1973 Krivolutskaya: 70 (checklist in Russian (with electronic english translation)) >> as valid species
 1975 Katakura & Fukuda: 78 (biology, ecology) >> as valid species
 1980 Schawaller: 153 (checklist in German (English summary)) >> as valid species
 1985a Kurosawa: 247 (checklist) >> color habitus figure pl. 44
 1986 Cho & Lee: 20 (phylogenetics) >> as valid species
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as valid species
 1988 Cho et al.: 9 (phylogenetics) >> as valid species
 1989 Lafer: 336 (key, descriptions, description of variation in Russian) >> as valid species
 1989 Martin: 876-879 (biology, ecology) >> as valid species
 1991 Ohkawara: 463-467 (biology, ecology in Japanese (English summary)) >> as valid species; focal species
 1992 Cho & Lee: 21 (revision: key, descriptions & catalog) >> as valid species
 1992 Kozminykh: 64 (checklist in Russian) >> as valid species

- 1992 Ôhara & Yabuki: 57 (checklist in Japanese (English summary)) >> as valid species
- 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as valid species
- 1994a Ôhara: 58 (checklist in Japanese) >> as valid species
- 1995 Ôhara et al.: 68 (checklist in Japanese (English summary)) >> as valid species
- 1997 Krivolutskaya: 2 (checklist) >> as valid species; (translation of Krivolutskaya 1973)
- 1997 Ôhara: 105 (checklist in Japanese (English summary)) >> as valid species
- 1998 Harusawa: 34 (key in Japanese)
- 1998 Ohkawara et al.: 553 (biology, ecology) >> as valid species
- 1999 Háva et al.: 77 (key, descriptions) >> as valid species
- 1999 Suzuki: 207 (biology, ecology, behavior) >> as valid species
- 2000c Suzuki: 38 (biology, ecology, behavior in Japanese with English abstract)
- 2002 Nikolajev & Kozminykh: 109 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= fasciatus Hlisenkovsky, 1932 NEW SYNONYM of *N. tenuipes* Lewis

Type locality: "Japan: Kamaishi", [Japan: Honshu, descrip.]

Type depository: NMPC: Praha [not found; lost?]

- 1932 Hlisenkovsky: 22 (key, descriptions in German) >> Orig. comb.: *Necrophorus fasciatus* [!N, S]
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
- 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as doubtfully valid species

= vicinus Shchegoleva-Barovskaya, 1933 CONFIRMED as SYNONYM of *N. tenuipes* Lewis

Type locality: "South Ussuri Territory: Mt. of St. Ilya, Spassky distr." [Russia; descr.]

Type depository: ZMAS: St. Petersburg [!] holotype female

- 1933a Shchegoleva-Barovskaya: 172 (revision: key, descriptions & catalog in Russian) >> Orig. comb.: *Necrophorus (Necrocleptes) vicinus* [!N, S]
- 1933 Semenov-Tian-Shanskij: 155 (catalog in Russian & Latin) >> as valid species
- 1953 Mazokhin-Porshnyakov: 235 (descriptions, catalog in Russian) >> as valid species
- 1971 Kryzhanovskiy: 212 (in Russian (English summary)) >> as syn. of *N. tenuipes*
- 1973 Krivolutskaya: 70 (checklist in Russian (with electronic english translation)) >> as syn. of *N. tenuipes*
- 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as probable syn. of *N. tenuipes*
- 1992 Kozminykh: 64 (checklist in Russian) >> as syn. of *N. tenuipes*
- 1993b Kozminykh: 63 (key, descriptions, regional in Russian) >> as syn. of *N. tenuipes*
- 2002 Nikolajev & Kozminykh: 109 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. tenuipes*

Comments: Lectotype data for *Necrophorus tenuipes* Lewis, 1887: 341 "Necrophorus tenuipes Type (male symbol) Lewis"; /"Type"; / JAPAN: Chiuzenji, [36.73°N,

139.48°E,]19-24 August 1881 (coll. G. Lewis) / red rectangular label with double black border "LECTOTYPE *Nicrophorus tenuipes* (Lewis 1887) det. Sikes 1997"- male (London [BMNH]); pronotal width: 5.75 mm.

Paralectotype data "Nicrophorus tenuipes Type (female symbol) Lewis" / "Co-Type" / JAPAN: Chiuzenji, [36.73° ' N, 139.48° ' E,]19-24 August 1881 (coll. G. Lewis) / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus tenuipes* (Lewis 1887) det. Sikes 1997"- male (London [BMNH]); *Nicrophorus tenuipes* Type (female symbol) Lewis / "Type" on card / JAPAN: Nikko., [36.75° ' N, 139.6° ' E,]10-18 August 1881 (coll. G. Lewis) / red rectangular label with double black border "PARALECTOTYPE *Nicrophorus tenuipes* (Lewis 1887) det. Sikes 1997"- male (London [BMNH]).

Hlisnikovsky (1932) described a new species, *N. fasciatus*, from Japan. Although the types could not be found in the Praha collection, where the rest of Hlisnikovsky's types are stored, the description of this species suggests it is a fasciate example of *N. tenuipes* which is only known to have all black elytra.

***Nicrophorus tomentosus* Weber, 1801**

Type locality: "America" [descrip.]

Type depository: ZMUC: Kiel?

Distribution: Nearctic: northeastern & northcentral North America

- 1792 Frölich: 126 (descriptions in German) >> description of variation: 1 unavailable name
- 1801 Weber: 47 (descriptions) >> Orig. comb.: *Nicrophorus tomentosus* [!S]
- 1837 Kirby: 96 (descriptions) >> as syn. of *N. velutinus*
- 1840 Laporte: 2 (descriptions in French) >> as syn. of *N. velutinus*
- 1853 LeConte: 277 (descriptions) >> as syn. of *N. velutinus*
- 1853 Melsheimer: 39 (catalog) >> as syn. of *N. velutinus*
- 1854 Emmons: 57 (descriptions)
- 1859c LeConte: 37 (checklist) >> as syn. of *N. velutinus*
- 1866 Bracket: 23-24 >> "Biology" - Hatch 1928
- 1868 Gemminger & Harold: 719 (catalog) >> as syn. of *N. velutinus*
- 1873 Crotch: 37 (checklist) >> as *Silpha tomentosa*
- 1878b Hubbard & Schwarz: 650 (checklist)
- 1880 Horn: 234 (revision: key, descriptions & catalog) >> as valid species
- 1881 Schaupp: 37-38 (morphology, larval stages) >> as valid species (in title) "Larva" - Hatch 1928
- 1882 Fletcher: 72 (biology) >> "Biology" - Hatch 1928
- 1885 Henshaw: 26 (checklist)
- 1886 Lintner: 118 >> "Biology; (parasite of)" - Hatch 1928
- 1895 Clark: 61 (biology, behavior) >> feeding on maggots
- 1895 Hamilton: 324 (checklist)
- 1902 Dury: 12 (checklist)
- 1904 Davis: 18 (checklist) >> as valid species
- 1910 Barkowski: 80 (key, descriptions, regional in German) >> as valid species
- 1910 Blatchley: 275 (key, descriptions, regional) >> as valid species

- 1910 Smith: 229 (checklist)
 1911 Wickham: 11 (checklist)
 1915 Jaques: 526 (biology, ecology) >> as valid species
 1920 Britton: 224 (checklist)
 1920 Leng: 86 (catalog) >> as valid species
 1922 Sherborn: 6536 (catalog - index)
 1924 Hatch: 560 (checklist)
 1926a Portevin: 245 (revision: key, descriptions & catalog in French) >> as syn. of *N. velutinus*
 1927a Abbott: 39 (description of variation) >> as valid species; note on elytral color variant
 1927b Abbott: 208-216 (biology, behavior) >> as valid species
 1927c Abbott: 552 (biology, behavior) >> as valid species
 1927a Hatch: 5, 7, 19 (key, descriptions, description of variation) >> as valid species
 1927b Hatch: 363 (revision: key, descriptions & catalog) >> as valid species; descr. of variation: 4 unavailable names
 1927 Steele: 77-81 (biology, behavior) >> "Biology" - Hatch 1928
 1928 Hatch: 149 (catalog) >> as valid species
 1928 Leonard: 271 (checklist)
 1930 Johnson: 44 (checklist)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
 1933 Wolcott & Montgomery: 131 (comment: ecology) >> as valid species; attracted with snake carrion
 1934b Pukowski: 54 (morphology, larval stages in German) >> as valid species; cites Schaupp (1882)
 1935 Balduf: 70 (biology, ecology, behavior) >> as valid species
 1936 Meserve: 133 (checklist, distribution)
 1938 Brimley: 135 (checklist)
 1944 Arnett: 5, 24 (morphology: female genitalia) >> as valid species; female genitalia figured, pl. 4, fig. 2
 1944 Blackwelder: 100 (catalog)
 1944 Milne & Milne: 311 (biology, behavior) >> as valid species
 1945 Löding: 32 (checklist) >> as valid species
 1946 Procter: 121 (checklist, ecology)
 1947 Dethier: 287 (biology, behavior) >> as valid species
 1948 Scheerpeltz & Höfler: 247 (biology, ecology in German)
 1949 Bliss: 201 (morphology: sexual dimorphism) >> as valid species
 1949 Hoffmann et al.: 10 (comment: ecology) >> as valid species
 1951 Jaques: 83 (key, descriptions)
 1957 Walker: 273 (biology, ecology) >> as valid species
 1958 Madge: 43 (revision: key, descriptions, ecology, distributions)
 1958 Reed: 232 (biology, ecology)
 1961 Dillon & Dillon: 176 (key, descriptions)
 1966 Payne & Crossley: 56 (biology, ecology)
 1968a Shubeck: 565 (methods) >> as valid species
 1968b Shubeck: 256 (biology, behavior) >> as valid species
 1969 Shubeck: 143 (biology, ecology)

- 1970 Gersdorf: 366 (morphology: female genitalia in German) >> as syn. of *N. velutinus*
- 1970 Kirk: 25 (checklist)
- 1970 Payne & King: 230 (biology, ecology)
- 1970 Shubeck: 67 (biology, ecology)
- 1971 Shubeck: 43 (biology, behavior) >> as valid species
- 1972 Swan & Papp: 356 (description)
- 1973 Blackwelder: 5 (checklist, synonymy)
- 1974 Pirone: 661 (biology, ecology)
- 1975 Baldwin: 21 (key, description, distribution, ecology)
- 1975 Kirk & Balsbaugh: 52 (checklist)
- 1975 Shubeck: 37 (biology, behavior) >> as valid species
- 1976 Milne & Milne: 88 (popular review) >> as valid species
- 1976 Shubeck: 267 (biology, ecology) >> as valid species
- 1977 Headstrom: 106 (description)
- 1977 Shubeck et al.: 13 (biology, ecology)
- 1979 Miller & Peck: 98 (fossils) >> as valid species
- 1980 Arnett et al.: 128 (key, descriptions)
- 1980 Davis: 247 (biology, conservation) >> as valid species
- 1980 Milne & Milne: 550 (field guide, brief descriptions, ecology)
- 1981 Kozol: 20 (biology, conservation, genetics) >> as valid species
- 1981 Shubeck et al.: 14 (biology, ecology) >> as valid species
- 1982a Anderson: 262 (key, descriptions, morphology, larval stages) >> as valid species
- 1982c Anderson: 1316 (biology, ecology) >> as valid species
- 1982 Shubeck & Blank (biology, ecology) >> as valid species
- 1982 Wilson: 293-296 (biology, symbionts: mites) >> as valid species; focal species
- 1983 White: 121 (field guide) >> descriptive note
- 1983 Wilson: 858-870 (biology, symbionts: mites) >> as valid species; focal species
- 1984 Lord & Burger (biology, ecology)
- 1984 Papp: 70 (descriptions) >> brief description
- 1984 Shubeck (biology, ecology) >> as valid species
- 1984 Wilson & Fudge: 195-203 (biology, ecology) >> as valid species; focal species
- 1984 Wilson & Knollenberg: 165-170 (biology, behavior, physiology) >> as valid species; focal species
- 1984 Wilson et al.: 205-216 (biology, ecology) >> as valid species; focal species
- 1985 Anderson & Peck: 70 (revision: key, descriptions & catalog) >> as valid species
- 1985 Peck & Anderson: 287 (key, descriptions, phylogenetics) >> as valid species
- 1985 Shubeck: 164 (biology, ecology) >> as valid species
- 1986 Fisher & Tuckerman: 22 (morphology: mimicry) >> as valid species
- 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
- 1987 Peck & Kaulbars: 53 (checklist) >> as valid species
- 1987 Scott & Traniello: 693-696 (biology, behavior, physiology) >> as valid species; focal species
- 1987 Staines: 16 (key, descriptions) >> Maryland records
- 1987 Wilson & Knollenberg: 139-159 (biology, symbionts: mites) >> as valid species; focal species
- 1988 Scott et al.: 325-331 (biology, ecology) >> as valid species; focal species

- 1989 Scott & Traniello: 32-36 (popular review) >> as valid species; focal species
- 1989 Solter et al.: 354-359 (biology, symbionts: bacteria) >> as valid species; gut bacteria
- 1989 Staines: 69 (key, descriptions, distributions) >> Maryland records
- 1990 Peck: 1121 (key) >> as valid species
- 1990 Scott & Traniello: 274-283 (biology, ecology, behavior) >> as valid species; focal species
- 1990c Trumbo: 1-11 (biology, behavior) >> as valid species; focal species
- 1990d Trumbo: 491-500 (biology, behavior) >> as valid species; focal species
- 1991 Campbell: 86 (catalog, distribution)
- 1991 Laplante et al.: 29 (checklist in French)
- 1991 Raithel: 2 (biology, conservation) >> as valid species
- 1992 Beninger & Peck: 79-86 (biology, ecology) >> as valid species
- 1992 Brown & Wilson: 463-478 (biology, symbionts: mites) >> as valid species; focal species
- 1992 Robertson: 191 (biology, ecology) >> as valid species
- 1992 Trumbo: 289-298 (biology, behavior) >> as valid species; focal species
- 1993 Creighton et al.: 276 (biology, conservation) >> as valid species
- 1993 May: 22 (biology, behavior)
- 1993 Peck & Miller: 9 (species-group catalog) >> as valid species
- 1993 Scott & Williams (biology, behavior) >> as valid species
- 1993 Shubeck: 89 (biology, ecology) >> as valid species
- 1993 Trumbo & Wilson: 332-339 (biology, behavior) >> as valid species; focal species
- 1994 Beninger: 135-143 (biology, ecology in English (French summary)) >> as valid species
- 1994 Berdela et al.: 49 (biology, symbionts: bacteria) >> as valid species; gut bacteria
- 1994 Brown & Wilson: 3 (biology, symbionts: mites) >> as valid species; focal species
- 1994 Neal et al.: 128 (checklist) >> as valid species
- 1994a Scott: 367-373 (biology, ecology, behavior) >> as valid species; focal species
- 1994b Scott: 538 (biology, behavior) >> as valid species
- 1995 Lingafelter: 221 (biology, ecology) >> as valid species
- 1995 Lomolino et al.: 609 (biology, conservation in English (Spanish summary)) >> as valid species
- 1996 Downie & Arnett: 357 (key, descriptions, regional) >> as valid species
- 1996 Dunn: 169 (catalog) >> as valid species
- 1996 Lomolino & Creighton: 238 (biology, conservation) >> as valid species
- 1996 Palestini et al.: 435 (larval descriptions, phylogenetics) >> as valid species
- 1996 Ratcliffe: 82 (revision: key, descriptions & catalog) >> as valid species
- 1996 Scott: 376-382 (popular review) >> as valid species; focal species
- 1996b Trumbo: 118 (methods, biology, behavior) >> as valid species
- 1997 Backlund & Marrone: 56 (biology, conservation) >> as valid species
- 1997 Eggert & Müller: 218 (biology, review of: ecology, behavior) >> as valid species
- 1997 Scott (biology, behavior) >> as valid species
- 1997 Shubeck: 289 (biology, ecology) >> as valid species
- 1998 Carlton & Rothwein: 183 (biology, conservation) >> as valid species
- 1998 Coyle & Larsen: 163 (biology, ecology)
- 1998 Peck & Thomas: 37 (checklist, distribution)

- 1998b Scott: 598+ (biology, review of: ecology, behavior) >> as valid species
 1998 Trumbo & Thomas: 85-95 (biology, ecology) >> as valid species; focal species
 1999 Bedick et al.: 177 (biology, conservation) >> as valid species
 1999 De Jong & Chadwick: 836 (biology, ecology)
 1999 Háva et al.: 78 (key, descriptions) >> as valid species
 2000 Eggert & Sakaluk: 263 (biology, behavior) >> as valid species
 2000 Sikes & Peck: 393 (descriptions, phylogenetics) >> as valid species
 2000 Sikes & Peck: 395 (descriptions, phylogenetics) >> as valid species
 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics) >> as valid species
 2000 Trumbo & Bloch: 247 (biology, ecology, conservation) >> as valid species
 2000 Werner & Raffa: 145 (comment: ecology) >> as valid species
 2001 Trumbo et al.: 554 (biology, ecology, behavior) >> in lab *P. morio* was a successful parasite of this sp.

= *aurigaster* Portevin, 1925

Type locality: "États-Unis" [descrip.]

Type depository: MNHN: Paris [not found]

- 1925 Portevin: 170 (description of variation in French) >> Orig. comb.: *Necrophorus velutinus* var. *aurigaster* [!N, S]
 1926a Portevin: 245 (revision: key, descriptions & catalog in French) >> as *N. velutinus* var. *aurigaster*
 1928 Hatch: 150 (catalog) >> as *N. velutinus* ab. *aurigaster*
 1944 Arnett: 5 (morphology: female genitalia) >> as *N. tomentosus* var. *aurigaster*
 1985 Anderson & Peck: 70 (revision: key, descriptions & catalog) >> as syn. of *N. tomentosus*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. tomentosus*
 1996 Ratcliffe: 82 (revision: key, descriptions & catalog) >> as syn. of *N. tomentosus*

= *marginatus* Gistel, 1857 (junior primary homonym, not Fabricius 1801) NEW

SYNONYM of *N. tomentosus*

Type locality: "America borealis" [descrip.]

Type depository: ZSMC: München?

- 1833 Dejean: 117 (catalog in French) >> nomen nudem; *N. velutinus* var. *marginatus* Dejean
 1857b Gistel: 565 (in German) >> Orig. comb.: *Necrophorus marginatus*; (ex. Dejean catalog); New junior primary homonym, not *N. marginatus* Fabricius 1801 [!N]

= *requiescator* Gistel, 1848 REVISED SYNONYM of *N. tomentosus*

Type locality: "North America" [descrip.]

Type depository: ZSMC: München?

- 1848 Gistel: 190 (descriptions in German) >> Orig. comb.: *Necrophorus Requiescator*
 1857b Gistel: 565 (in German) >> as syn. of *N. marginatus*
 1917 Strand: 84 (descriptions in German) >> as syn. of *N. marginatus*

- 1928 Hatch: 147 (catalog) >> as syn. of *N. marginatus*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. marginatus*
 1985 Anderson & Peck: 63 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*
 1993 Peck & Miller: 8 (species-group catalog) >> as syn. of *N. marginatus* (cited as “syn. following Hatch 1928”)
 1996 Ratcliffe: 72 (revision: key, descriptions & catalog) >> as syn. of *N. marginatus*

= *velutinus* Fabricius, 1801 CONFIRMED as SYNONYM of *N. tomentosus* Weber

Type locality: “in Carolina”, [USA, label]

Type depository: ZMUC: Kiel; syntype- MNHN: Paris [!] 2 (or more) syntypes

- 1801 Fabricius: 334 (descriptions) >> Orig. comb.: *Necrophorus velutinus* [!N, S]
 1806 Melsheimer: 16 (catalog) >> misspelled as *Microphorus velutinus*
 1807 Herschel: 271 (descriptions in German) >> as valid species
 1821 Dejean: 42 (catalog) >> auth. attrib. P. B. as syn. of *N. marginatus*, auth. attrib. F. as valid species
 1833 Dejean: 117 (catalog in French) >> as valid species
 1836 Dejean: 131 (catalog in French) >> as valid species
 1837 Kirby: 96 (descriptions) >> as valid species & senior syn. of *N. tomentosus* [first reviser]
 1839 Matzek: 23 (morphology: internal & external anatomy in Latin) >> as *N. velutinum*
 1840 Laporte: 2 (descriptions in French) >> as valid species & senior syn of *N. tomentosus*
 1853 LeConte: 277 (descriptions) >> as valid species & senior syn of *N. tomentosus*; with note discussing priority of *N. velutinus* F. vs. *N. tomentosus* Web.
 1853 Melsheimer: 39 (catalog) >> as senior syn. of *N. tomentosus*
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1859c LeConte: 37 (checklist) >> as valid species
 1862 Osten-Sacken: 409 (biology, behavior in German) >> as valid species
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1873 Crotch: 37 (checklist) >> as *Silpha velutina*, as syn. of *Silpha tomentosa*
 1877 Provancher: 224 (in French)
 1880 Horn: 315 (revision: key, descriptions & catalog) >> as syn. of *N. tomentosus*
 1881 Schaupp: 38 (morphology, larval stages) >> as valid species (although *N. tomentosus* is name used in title)
 1903 Portevin: 331 (descriptions in French) >> as valid species
 1908 Heyne & Taschenberg: 38 (descriptions in German) >> as valid species, with *N. tomentosus* as syn.
 1920 Leng: 86 (catalog) >> as syn. of *N. tomentosus*
 1922 Sherborn: 6835 (catalog - index)
 1925 Portevin: 170 (description of variation in French) >> as valid species & senior syn. of *N. tomentosus*; description of variation: 1 unavailable name
 1926a Portevin: 245 (revision: key, descriptions & catalog in French) >> as valid species, as senior syn. of *N. tomentosus*
 1928 Hatch: 150 (catalog) >> as syn. of *N. tomentosus*

- 1944 Arnett: 5 (morphology: female genitalia) >> as syn. of *N. tomentosus*
 1970 Gersdorf: 366 (morphology: female genitalia in German) >> as valid species & senior of *N. tomentosus*
 1985 Anderson & Peck: 70 (revision: key, descriptions & catalog) >> as syn. of *N. tomentosus*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. tomentosus*
 1996 Ratcliffe: 82 (revision: key, descriptions & catalog) >> as syn. of *N. tomentosus*

Comments: See comments for *N. germanicus* and *N. interruptus* regarding the names of Gistel. We herein move *N. requiescator* Gistel, 1848, previously considered a synonym of *N. marginatus*, to synonymy under *N. tomentosus*. We also synonymize the overlooked, junior homonym *N. marginatus* Gistel under *N. tomentosus*. Gistel described *N. requiescator* as having a pronotum with “silky hair”, black antennal clubs, and the posterior elytral fascia narrow; all traits which unambiguously fit the description of *N. tomentosus*.

The names *N. tomentosus* Weber 1801 and *N. velutinus* Fabricius 1801 were described in the same year for the same species. The name *N. tomentosus* has been considered the valid name for the species since Hatch (1927) stated that Sherborn (1922) indicated the Weber 1801 publication “probably antedates” Fabricius 1801. As a result the Weber name has been considered valid since 1927 and has appeared in dozens of publications. Sherborn’s (1922) statement of “probably” is opinion and is insufficient to resolve this case. Article 24 of the ICZN 4 specifies how to determine precedence between simultaneously published names. If the month (or day within the same month) of the two publications cannot be established, ICZN 24.2 states that precedence is determined by the first reviser. The first reviser is the first author who cites and selects from both names. In this case the first reviser is Kirby (1837) who selected *N. velutinus* as the valid name. Unfortunately the name *N. velutinus* cannot be made a *nomen oblitum* as it fails to meet the criteria of ICZN 23.9.1.1. because this name was used as valid after 1899 (by Portevin 1925, 1926a). We are currently attempting to determine the month of publication for these two works, which might show that Weber's name is the older, and thus valid name; however, if this is not true then we will put this case before the Commission of the ICZN for a ruling under the plenary power to preserve stability and retain *N. tomentosus* as the valid name, which it currently is not. The ICZN (23.9.3) states that while such a case is under consideration “use of the junior name is to be maintained.”

Nicrophorus ussuriensis Portevin, 1923

Type locality: “Ussuri” [Russian far east: S. Maritime territory; Ussuri River? border of ne China & Russia; label]

Type depository: MNHN: Paris [!] holotype female

Distribution: Oriental & Palearctic: China, Korea, Russia: Ussuri

- 1923 Portevin: 233 (key, descriptions in French) >> Orig. comb.: *Nicrophorus ussuriensis* [!N, S]

- 1925 Winkler: 263 (catalog)
 1926a Portevin: 201 (revision: key, descriptions & catalog in French)
 1927b Hatch: 354 (revision: key, descriptions & catalog)
 1928 Hatch: 132 (catalog)
 1932 Hlisnikovsky: 26 (key, descriptions in German)
 1932 Portevin: 59 (morphology in French)
 1933 Semenov-Tian-Shanskij: 150 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 175 (revision: key, descriptions & catalog in Russian)
 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian)
 1986 Nishikawa: 99 (catalog in Japanese (English summary))
 1989 Lafer: 336 (key, descriptions, description of variation in Russian)
 1992 Kozminykh: 64 (checklist in Russian)
 1993b Kozminykh: 67 (key, descriptions, regional in Russian) >> ungrouped; incertae sedis
 1999 Cho & Kwon: 223 (distribution note) >> first record from Korea
 2002 Nikolajev & Kozminykh: 127 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

Nicrophorus validus Portevin, 1920

Type locality: “Inde” [n India; label]

Type depository: MNHN: Paris [!] holotype male

Distribution: Oriental: Himalayas: India: Sikkim*, Nepal*, Tibet*

- 1920 Portevin: 401 (descriptions in French) >> Orig. comb.: *Nicrophorus validus* [!N, S]
 1922 Portevin: 54 (descriptions in French) >> compared to *N. armeniacus*
 1924 Portevin: 291 (key, descriptions in French)
 1926a Portevin: 232 (revision: key, descriptions & catalog in French)
 1928 Hatch: 136 (catalog)
 1933 Semenov-Tian-Shanskij: 153 (catalog in Russian & Latin) >> as type sp. of new subgenus *Nicrophorindus*
 1933a Shchegoleva-Barovskaya: 165 (revision: key, descriptions & catalog in Russian) >> as *Nicrophorus (Nicrophorindus) validus*, in key
 1964c Hlisnikovsky: 132 (descriptions in German) >> compared to *N. ornatus*
 1980 Madge: 356 (catalog)
 1986 Nishikawa: 99 (catalog in Japanese (English summary))
 1999 Háva et al.: 78 (key, descriptions)

Nicrophorus vespillo (Linnaeus, 1758)

Type locality: “in Europae, Americae Cadaveribus” [descrip.]

Type depository: LSUK: London

Distribution: Palearctic: Europe, Mongolia, Russian plain, Kazakhstan, Caucasus, Turkey, Iran, Kyrgyzstan

- 1752 Gleditsch: 29-53 (biology in German) >> “Larva” - Hatch 1928
 1758 Linnaeus: 359 (descriptions in Latin) >> Orig. comb.: *Silpha Vespillo* [!N, S]
 1761 Linnaeus: 147 (catalog in Latin)
 1761 Poda: 23 (catalog)

- 1761 Rösel von Rosenhof: 20 (biology, behavior in German) >> "Larva" -Hatch 1928
 1761 Sulzer: 51, pl. 2, fig. 11 (in German)
 1763 Scopoli: 13 (checklist) >> as *Dermestes vespillo*
 1764 Geoffroy: 98 (in French) >> as *Dermestes vespillo*
 1764 Müller: 4 >> as *Nicrophorus Vespillo*
 1765 Gleditsch: 200-227 (in German) >> "Larva" - Hatch 1928
 1765 Pontoppidan: 200 (in German)
 1767 Linnaeus: 562 (catalog in Latin)
 1769 Schaeffer: 9 (catalog)
 1774 DeGeer: 174 (biology in French) >> "Larva" - Hatch 1928
 1776 Müller: 96 (catalog)
 1778 Bergsträsser: 10 (catalog in German)
 1781 Fabricius: 84 (catalog in Latin)
 1781 Laicharting: 87 (catalog)
 1781 Schrank: 41 (checklist)
 1783 Herbst: 32 (descriptions in German) >> as *Nicrophorus Vespillo*
 1785 Fourcroy: 17 (descriptions)
 1787 Fabricius: 48 (catalog)
 1789 Roemer: 34 (catalog)
 1789 Villers: 73 (catalog)
 1790 Brahm: 66
 1790 Linnaeus: 1616 (catalog in Latin)
 1790 Olivier: no.10, p. 5 (descriptions in French) >> habitus figured
 1790 Rossi: 168
 1790 Scriba: 168 (in German)
 1792 Fabricius: 247 (descriptions)
 1792 Frölich: 125 (descriptions in German)
 1793 Herbst: 157 (catalog in German)
 1793 Panzer: 21 (catalog in German)
 1793 Schwarz: 41 (in German)
 1795 Panzer: 118 (catalog in German)
 1798 Cederhielm: 45 (catalog)
 1798 Illiger: 354 (catalog in German)
 1798 Paykull: 324
 1798 Schrank: 420 (in German)
 1799 Hausmann: 33 (descriptions in German) >> compared to *N. bifasciatus*
 1801 Fabricius: 335 (descriptions)
 1802 Marsham: 114 >> as *Silpha vespillo*
 1803 Blumenbach: 324
 1804 Latreille: 270
 1807 Herschel: 274 (descriptions in German)
 1807 Latreille: 4 (catalog)
 1808 Gyllenhal: 259 (descriptions, catalog)
 1808 Schönherr: 119 (in German)
 1815 Leach: 88 (descriptions)
 1817 Gebler: 319 (descriptions in Latin) >> compared to *N. morio*
 1821 Dejean: 42 (catalog)

- 1824 Zetterstedt: 151 (descriptions) >> compared with *N. investigator*
 1825 Charpentier: 201 (descriptions) >> compared to *N. sepultor*
 1825 Curtis: pl. 71 (checklist) >> text accompanying Plate 71.
 1825 Duftschmid: 111 (descriptions in German)
 1825 Say: 178 (description) >> compared to *N. orbicollis*
 1827 Gyllenhal: 307 (descriptions)
 1829b Stephens: 75 (catalog)
 1830 Stephens: 20 (biology, descriptions)
 1833 Dejean: 117 (catalog in French) >> auth. attrib. Fabricius
 1833 Samouelle: 4-2 (descriptions) >> compared to *N. anglicus*
 1835a Faldermann: 217 (descriptions) >> compared to *N. nigricornis*
 1836 Dejean: 131 (catalog in French)
 1837 Erichson: 224 (species-group catalog in German)
 1838 Sturm: 60 (in German) >> "Larva" - Hatch 1928
 1838 Zetterstedt: 109 (description)
 1839 Matzek: 15 (morphology: internal & external anatomy in Latin) >> as *N. Vespillonis* and *N. Vespillonem*
 1839 Stephens: 114 (descriptions)
 1839 Westwood: 137 (biology)
 1840 Laporte: 2 (descriptions in French)
 1840 Mareuse: 39 (description of variation in French) >> "Biology" - Hatch 1928
 1841a Heer: 386 (descriptions in German)
 1841b Heer: 9 (checklist in German)
 1845a Motschulsky: 53 (descriptions in French) >> compared to *N. guttula*
 1846a Küster: nr. 52 (catalog in German)
 1847 Rosenhauer: 105 (checklist in German)
 1849 Bach: 153 (checklist, brief descriptions in German)
 1849 Gaubil: 55 (catalog in French)
 1849 Redtenbacher: 140 (catalog in German)
 1855 Fairmaire & : 291
 1858 Calwer: 106 (checklist, brief descriptions in German)
 1858 Redtenbacher: 289 (catalog in German)
 1859 Gutfleisch & Bose: 202 (key, descriptions in German)
 1859 Kirby & Spence (biology, morphology; stridulation)
 1859 Schaum: 36 (catalog in German)
 1862 Schaum: 38 (catalog in German)
 1862 Schiødte: 225 (morphology, larval stages in Danish) >> "Larva" - Hatch 1928
 1862 Thomson: 8 (descriptions)
 1863 Grenier: 13 (checklist in French)
 1863 Marseul: 88 (catalog in French)
 1864 Ranson (biology, ecology)
 1865 Power: 198 (revision: key, descriptions & catalog)
 1866 Marseul: 38 (catalog in French)
 1868 Gemminger & Harold: 719 (catalog)
 1868 Stein: 42 (catalog in Latin)
 1869 Stierlin & Gautard: 116 (checklist in German)
 1870 Vollenhoven et al.: 54 (checklist in Dutch)

- 1873 Klika: 127 (checklist in Czech)
 1873 Michow: 15, 20 (in German)
 1873 Wood: 90 (biology, ecology)
 1874 Cox: 407 (key, descriptions (brief))
 1876b Kraatz: 395 (morphology: clypeus in German)
 1876d Kraatz: 397 (comment in German)
 1877 Harold: 345 (descriptions in German) >> compared to *N. japonicus*
 1877 Hickel & Dragicsevics: 27 (checklist in French)
 1877 M. de T.: 179 (biology in French) >> "Biology" - Hatch 1928
 1878 Deyrolle & Fairmaire: 90 (descriptions in French) >> compared to *N. japonicus*
 1880 Heyden: 86 (checklist in German)
 1881 Westhoff: 108 (description of variation in German)
 1883 Heyden et al.: 73 (checklist)
 1883 Reitter: 60 (comment in German) >> compared to *N. nigricornis*
 1884 Marseul: 186 (key, descriptions in French)
 1884 Reitter: 88 (descriptions in German) >> as *Silpha vespillo*
 1884 Schmidt (biology in French)
 1885 Marseul: 169 (catalog in French)
 1885 Reitter: 322 (in German)
 1888 Fairmaire: 115 (checklist, annotated in French) >> as *Necrophorus vespillo*
 1888 Seidlitz: 312 (key in German) >> misspelled as *Necrophagus vespillo*
 1889 Fowler: 45 (descriptions, catalog)
 1889 Sahlberg: 19 (checklist in Swedish)
 1889 Seidlitz: 329 (key in German) >> misspelled as *Necrophagus vespillo*
 1891 Heyden et al.: 139 (checklist)
 1893 Fauconnet: 255 (description of variation) >> description of variation: entirely black form
 1895b Reitter: 329 (description of variation in German)
 1896 Acloque: 241 (key in French)
 1896 Heyden: 38 (checklist in German)
 1898 Everts: 413
 1899 Ganglbauer: 160 (key, descriptions, morphology, larval stages in German)
 1899 Poppius: 58 (checklist in Swedish)
 1900 Bordas: 268 (morphology: testes in French) >> "Morphology- testes" - Hatch 1928
 1901 Carret: 330 (description of variation in French)
 1902 Johnson & Halbert: 690 (checklist)
 1905 Voigts & Oudemans (biology, symbionts: mites in German)
 1905 Weber: 31 (biology, ecology, behavior in German) >> "Biology" - Hatch 1928
 1906 Heyden et al.: 247 (checklist)
 1909 Auel: 110 (biology in German) >> "Biology" - Hatch 1928
 1909 Reitter: 240 (in German) >> "Larva" - Hatch 1928
 1910 Jakobson: 612 (checklist in Russian)
 1912 Fowler: 84 (comment) >> "Larva" - Hatch 1928, figured
 1913 Bandermann: 20 (comment in German) >> "Biology" - Hatch 1928
 1913 Kuhnt: 337 (in German) >> "Larva" - Hatch 1928
 1914 Gorka: 235 (morphology: malpighian tubules in German)

- 1916 Labitte: 9 (biology in French) >> "Biology, longevity" - Hatch 1928
 1916 Pasquet: 165 (description of variation in French)
 1916 Schaufuss: 274 (checklist in German)
 1918 Weber: 2 (biology, behavior in German) >> "Biology" - Hatch 1928
 1920 Orchymont: 22, 50, pl. 3, fig 15. (morphology, wing venation in French) >>
 "Morphology, venation" - Hatch 1928
 1922 Everts: 182
 1922 Hansen: 114, 117 (key, descriptions, morphology, larval stages in Danish)
 1922 Henriksen: 256 (key) >> "Larva" - Hatch 1928
 1922 Houlbert: 6 (in French)
 1922 Portevin: 57 (descriptions in French) >> compared to *N. basalis*
 1923 Mueller: 2 (comment in German) >> "Morphology, sense organs" - Hatch 1928
 1924 Imms: fig. 482 (comment)
 1924 Schleicher: 57 (description of variation in German) >> description of variation:
 1 unavailable name
 1925 Fuente y Morales: 120 (checklist in Spanish)
 1925 Portevin: 166 (description of variation in French)
 1925 Weber: 124 >> "Biology" - Hatch 1928
 1925 Winkler: 265 (catalog)
 1926 Porta: 333 (key, checklist in Italian)
 1926a Portevin: 244 (revision: key, descriptions & catalog in French)
 1927b Hatch: 363 (revision: key, descriptions & catalog) >> description of variation: 1
 unavailable name
 1928 Hatch: 150 (catalog)
 1929 Portevin: 540 (key, intraspecific variation in French)
 1930 Roubal: 241 (catalog in Czech)
 1930 Vitzthum: 390 (biology, symbionts: mites in German) >> mite host, as valid spe-
 cies
 1931 Corset: 106 (morphology: elytral locking in French)
 1932 Hlisnikovsky: 30 (key, descriptions in German)
 1932 Joy: 466 (key)
 1933 Pukowski: 518-586 (biology, ecology in German)
 1933 Rapp: 538 (biology, ecology, distribution in German)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian)
 1933 Walsh: 29 (biology, ecology)
 1934a Pukowski: 4 (biology, ecology in German)
 1934b Pukowski: 53-60 (morphology, larval stages in German) >> description of larva
 1934c Pukowski: 112 (biology, behavior in German)
 1935 Balduf: 69 (biology, ecology, behavior)
 1936 Frankenberg: 220 (biology, behavior, morphology in German)
 1936 Mosebacht: 223 (morphology, larval stages in German)
 1937 Schleicher: 57 (description of variation) >> description of variation: 1 unavail-
 able name
 1938 Osinskii (biology, symbionts: bacteria in Ukrainian)
 1939 Lengerken: 263 (biology in German)
 1939 Roubal: 85 (description of variation in Czech (French summary))

- 1939 Székessy: 943 (morphology in German) >> abdominal tergal fringe described
 1942 Hlisenkovsky: 578 (nomenclature in German)
 1942 Roubal: 17 (description of variation in Czech)
 1943 Cooreman (biology, symbionts: mites in French)
 1944 Arnett: 4, 7, 24 (morphology: female genitalia) >> female genitalia figured, pl. 4, fig. 3
 1945 Kloet & Hincks: 155 (checklist)
 1946 Hatch: 99 (descriptions) >> as type species of *Nicrophorus*
 1947 Cantonnet & Lecordier: 134 (biology, ecology in French)
 1948 Smetana: 34 (description of variation in Czech) >> description of variation: 1 unavailable name
 1949 Horion: 77 (biology, ecology, distribution in German)
 1949 Mroczkowski: 196 (biology, ecology in Polish (English summary))
 1949 Roehrich: 44 (biology, ecology in French)
 1950b Théodoridès: 5 (biology, ecology, morphology in French)
 1953 Akopyan (biology, ecology in Russian)
 1954 Leclercq (biology, ecology, behavior)
 1955 Chapman & Sankey: 396 (biology, ecology)
 1955 Moore: 292 (biology, ecology)
 1955 Mroczkowski: 23 (key, descriptions in Polish)
 1955 Théodoridès (biology, symbionts: mites in French)
 1955 Wachek (biology, parasites in German)
 1958 Madge: 29 (revision: key, descriptions, ecology, distributions) >> distribution doubtful in North America
 1959 Hicks: 94 (biology, ecology)
 1959 Linssen: 162 (catalog)
 1960 Hansen et al.: 72 (checklist in Danish)
 1961 Dollfus (biology, symbionts: mites in French)
 1962 Boeckh: 214 (morphology: antennal in German) >> misspelled as *N. vespillio*
 1962 Schneider & Boeckh (biology, physiology in German)
 1963 Roussel: 671 (biology, ecology, behavior in French) >> focal species
 1964 Herman: 6 (nomenclature) >> as type species of *Nicrophorus* desig. Latreille (1810)
 1964 Petruška: 162 (biology, ecology in Czech (German summary))
 1964a Roussel: 102 (morphology, larval stages in French) >> focal species
 1964b Roussel: 114 (morphology, larval stages in French)
 1965 Báguena: 51 (checklist in Spanish)
 1966 Korbel: 146 (biology, ecology in German (Czech & Russian summary))
 1967 Schweiger: 547 (checklist in German)
 1968 Hansen: 20 (key, descriptions in Danish)
 1968 Petruška: 168 (biology, ecology in Czech (English summary))
 1968 Schneider & Steinbrecht: 286 (morphology: antennal sensillae) >> sensillum morphology
 1969 Ernst: 75 (morphology: antennal sensillae in German (English summary)) >> misspelled as *N. vespillio*
 1969 Osborne: 558 (fossils) >> fossil remains of 3,330 +/- 90 B. P., England.
 1970 Franz: 215 (checklist, distribution in German)

- 1970 Gersdorf: 366 (morphology: female genitalia in German)
- 1970 Sidor (biology, symbionts: bacteria)
- 1971 Freude: 194 (key in German)
- 1971 Niemitz & Krampe: 368-369 (morphology: stridulation, hearing in German) >> focal species
- 1971 Spicarová: 193-197 (biology, genetics) >> focal species
- 1971 Wilson: 129 (comment)
- 1972b Ernst: 96 (morphology: antennal sensillae in German (English summary))
- 1972 Niemitz: 209-230 (morphology in German) >> focal species
- 1972 Niemitz & Krampe: 457 (biology, behavior in German (English summary))
- 1972 Spicarová (biology, behavior)
- 1973 Blackwelder: 4 (checklist, synonymy)
- 1973 Prokopic & Karapcanski (biology, symbionts: cestodes in English (German, Russian summary))
- 1973 Spicarová: 297-321 (biology, behavior in Czech (English summary))
- 1975 Coope & Angus: 371 (fossils) >> 43,000 year old fossils
- 1975b Emetz: 105 (checklist in Russian)
- 1976 Bils: 118 (morphology: female abdominal musculature in German)
- 1976 Milne & Milne: 87 (popular review)
- 1976 Petruška: 164 (biology, ecology in Czech (English summary))
- 1976 Tischler: 27 (biology, ecology in German)
- 1977 Pope: 20 (checklist)
- 1978 Blas: 51 (key, descriptions in Spanish)
- 1978 Burakowski et al.: 203 (catalog, distribution, synonymy in Polish)
- 1978 Mroczkowski: 239 (biology, ecology in Polish (Russian & German summary))
- 1978 Niemitz (biology, behavior in German)
- 1979 Blum: 536 (morphology: wing folding, abdominal structure in German)
- 1979 Salgado & Régil: 88 (catalog, annotated & figured in Spanish)
- 1979 Silfverberg: 12 (checklist, distribution)
- 1980 Franssen: 46 (morphology: female genitalia in French) >> female genitalia figured
- 1980 Madge: 356 (catalog)
- 1981 Rozner: 104 (checklist in Hungarian)
- 1981 Spriggs: 116 (descriptions, ecology)
- 1981 Šustek: 40 (key, descriptions, regional in Czech)
- 1982c Korn: 207 (biology, symbionts: mites in German (English summary)) >> mite host
- 1983 Korn: 251 (biology, symbionts: mites in German (English summary)) >> mite host
- 1983 Putman: 35, 38-42 (biology, ecology)
- 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary))
- 1984 Evans & Forsythe (biology, behavior)
- 1984 Harde: 124 (field guide, brief descriptions, ecology)
- 1985 Zahradník: 123, 372 (catalog, annotated & figured in German) >> figured
- 1986 Erbeling & Erbeling: 234 (biology, ecology in German)
- 1986 Nishikawa: 99 (catalog in Japanese (English summary))
- 1986 Panov: 412 (morphology: cerebral neurosecretory cells)

- 1987 Jensen: 116 (biology, ecology in Danish (English summary))
- 1987 Lucht: 67 (catalog in German)
- 1987 Staines: 16 (key, descriptions) >> not recorded from Maryland
- 1988 Otronen: 191-201 (biology, behavior) >> focal species
- 1988 Palestirini et al.: 543 (biology, behavior)
- 1989 Koch: 165 (biology, ecology in German)
- 1989 Núñez et al.: 441 (checklist in Spanish (English summary))
- 1989 Stresemann et al. (key in German)
- 1990 Břily: 62 (larval descriptions, biology in French) >> adult and larva illustrated in color
- 1990 Erbeling: 116 (biology, ecology in German (English summary))
- 1990 Hyatt: 136 (biology, symbionts: mites)
- 1990 Kentner & Streit: 26 (biology, ecology in English (German summary))
- 1990 Müller & Schwarz: 23-30 (biology, symbionts: mites in English (German summary)) >> focal species
- 1990 Rohner: 453-464 (biology, ecology in German (English summary)) >> focal species
- 1990 Schawaller: 235 (checklist in German)
- 1990 Zahradník: 123 (key in Spanish)
- 1991 Schwarz et al. (biology, symbionts: mites)
- 1992 Kozminykh: 64 (checklist in Russian)
- 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
- 1992 Růžička: 123 (key, descriptions, morphology, larval stages, phylogenetics) >> description of larval instars
- 1992 Silfverberg: 14 (checklist, distribution in English (Finnish & Swedish summaries))
- 1993 Athias-Binche et al.: 76 (biology, symbionts: mites)
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian)
- 1993 Růžička: 34 (checklist, distribution in English & Czech)
- 1993 Sauer: 84 (field guide, brief descriptions, ecology in German) >> photo
- 1994 Bertin & Fallaci: 219 (checklist in Italian (English summary))
- 1994 Blackman & Evans: 223 (biology, symbionts: mites)
- 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
- 1994 Masan: 9 (biology, symbionts: mites in English (French & German summary))
- 1994 Růžička: 69 (biology, ecology)
- 1995 Angelini et al.: 10 (checklist, distribution in Italian)
- 1995 Bocáková: 24 (biology, ecology in Czech (English summary))
- 1995 Dapsio: 120 (checklist in Lithuanian)
- 1995 Kozminykh: 110 (key in Russian)
- 1995 Kozminykh & Nemkov: 112 (catalog in Russian)
- 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English)
- 1996 Bertin & Lebboroni: 154 (checklist in Italian (English summary))
- 1996 Hansen: 93 (checklist, distribution in Danish & English)
- 1996 Pushkin: 33 (biology, ecology in Russian)
- 1996 Růžička & Schneider: 81 (checklist in English (Czech summary))
- 1996 Schwarz: 137 (biology, symbionts: mites)
- 1996 Schwarz & Walzl: 1339 (biology, symbionts: mites)

- 1997 Anderson et al.: 14 (checklist)
 1997 Baker & Schwarz: 180 (biology, symbionts: mites)
 1997 Eggert & Müller: 217 (biology, review of: ecology, behavior)
 1997 Klausnitzer: 44 (morphology, larval stages in German)
 1997 Kozminykh: 65 (checklist in Russian)
 1997 Pushkin: 24 (biology, ecology in Russian)
 1997 Pushkin & Charthenko: 62 (biology, ecology in Russian)
 1997 Telnov et al. (checklist)
 1998 Háva et al.: 179 (distribution note in English (Czech summary))
 1998 Kocárek: 387 (biology, ecology)
 1998 Pushkin & Sigida: 84 (biology, ecology in Russian)
 1998 Schwarz et al.: 164 (biology, symbionts: mites)
 1998 Schwarz & Koulianos: 623 (biology, symbionts: mites)
 1998b Scott: 598+ (biology, review of: ecology, behavior)
 1999 Bertin & Lebboroni: 60 (checklist in Italian)
 1999 Masán: 517 (biology, symbionts: mites)
 1999 Meierhofer et al.: 73-79 (biology, ecology, behavior) >> focal species
 1999 Růžička: 318 (biology, ecology)
 2000 Bahillo de la Puebla & López-Colón: 248 (biology, descriptions, distribution in Spanish)
 2000 Gwiazdowicz: 44 (biology, symbionts: mites) >> mite host
 2000 Koulianos & Schwarz: 836-840 (biology, ecology, behavior)
 2000b Parkhomenko: 164 (morphology, larval stages in Ukrainian (English summary))
 2001 Kocárek: 431-438 (biology, ecology)
 2002 Nikolajev & Kozminykh: 111 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *bifasciatus* Hausmann, 1799 NEW SYNONYM of *N. vespillo* (L.)

Type locality: "in America septentrionali"-[probably erroneous; descrip.]

Type depository: unknown

- 1799 Hausmann: 33 (descriptions in German) >> Orig. comb.: *Necrophorus bifasciatus* [!M, S]

= *bohemicus* Roubal, 1939 NEW STATUS as absolute syn. of *N. vespillo* (L.)

Type locality: "Bohemia: Opatovice u Hradce Králové.." [Czech Republic; descrip.]

Type depository: SNMC: Bratislava

- 1939 Roubal: 85 (description of variation in Czech (French summary)) >> Orig. comb.: *Necrophorus vespillo* var. *bohemicus* [!S]
 1942 Hlisnikovsky: 578 (nomenclature in German) >> as syn. of unavailable name
 1942 Roubal: 17 (description of variation in Czech) >> as *N. vespillo* var. *bohemicus*

= *bolsmanni* Westhoff, 1881 NEW STATUS as absolute syn. of *N. vespillo* (L.)

Type locality: "bei Gimbt"[Germany: Westphalia: near Gimbt, village on Ems River, ca. 7 km n of Münster; descrip.]

Type depository: LNMD: Münster

- 1881 Westhoff: 108 (description of variation in German) >> Orig. comb.: *Necrophorus vespillo* var. *Bolsmanni* [!N]
 1898 Everts: 413
 1910 Jakobson: 612 (checklist in Russian)
 1913 Kuhnt: 336 (in German)
 1925 Winkler: 265 (catalog) >> as *N. vespillo* ab. *bolsmanni*
 1926a Portevin: 264 (revision: key, descriptions & catalog in French) >> as *N. vespillo* ab. *Bolsmanni*
 1928 Hatch: 152 (catalog) >> as *N. vespillo* ab. *Bolsmanni*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespillo* ab. *bolsmanni*
 1965 Báguena: 51 (checklist in Spanish) >> as *N. vespillo* ab. *bolsmanni*

= *cadaverinus* Gravenhorst, 1807

Type locality: unknown

Type depository: UWCP: Wrocław

- 1807 Gravenhorst: 118 (descriptions in German) >> Orig. comb.: *Necrophorus cadaverinus*
 1849 Gaubil: 55 (catalog in French) >> as *N. interruptus* var. *cadaverinus* Gravenhorst
 1912 Schulz: 32
 1928 Hatch: 151 (catalog) >> as syn. of *N. vespillo*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespillo*
 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. vespillo*
 1993b Kozminykh: 64 (key, descriptions, regional in Russian) >> as syn. of *N. vespillo*
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. vespillo*
 2002 Nikolajev & Kozminykh: 111 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. vespillo*; auth. as “Gravenhal”

= *curvipes* Duftschmid, 1825

Type locality: “Österreich” [Austria; descrip.]

Type depository: : Linz

- 1821 Dejean: 42 (catalog) >> as syn. of *N. vespillo*; auth. attrib. Megerle
 1825 Duftschmid: 112 (descriptions in German) >> Orig. comb.: *Necrophorus curvipes*; auth. attrib. Megerle [!M, S]
 1833 Dejean: 117 (catalog in French) >> as syn. of *N. vespillo*; auth. attrib. Megerle
 1858 Calwer: 106 (checklist, brief descriptions in German) >> as syn. of *N. vespillo*
 1926a Portevin: 260 (revision: key, descriptions & catalog in French) >> as syn. of *N. vespillo*; auth. attr. Megerle (ex. Dej. catalog 1837)
 1928 Hatch: 151 (catalog) >> as syn. of *N. vespillo*; auth. attr. Dufts. 1825
 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. vespillo*; auth. attr. Dufts. 1825
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespillo*
 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. vespillo*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespillo*
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. vespillo*
 2002 Nikolajev & Kozminykh: 111 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. vespillo*

- = *faueveli* Fauconnet, 1893 NEW STATUS as absolute syn. of *N. vespillo* (L.)
 Type locality: “Pontarlier” [France: Doubs: 46.9°N, 6.33°E; label]
 Type depository: MNHN: Paris [!] holotype female
- 1893 Fauconnet: 255 (description of variation) >> Orig. comb.: *Necrophorus vespillo*
 var. *faueveli* [!S]
 1898 Everts: 413
 1906 Heyden et al.: 247 (checklist) >> as *N. vespillo* var. *faueveli*
 1910 Jakobson: 612 (checklist in Russian)
 1916 Pasquet: 165 (description of variation in French)
 1925 Portevin: 166 (description of variation in French) >> as *N. vespillo* ab. *Fauveli*
 1925 Winkler: 265 (catalog) >> as *N. vespillo* ab. *faueveli*
 1926a Portevin: 244 (revision: key, descriptions & catalog in French) >> as *N. vespillo*
 ab. *Fauveli*
 1928 Hatch: 152 (catalog) >> as *N. vespillo* ab. *Fauveli*
 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian)
 >> as *N. vespillo* ab. *faueveli*
 1944 Arnett: 4 (morphology: female genitalia) >> misspelled as *N. vespillo* ab. *faureli*
 1965 Báguena: 51 (checklist in Spanish) >> as *N. vespillo* ab. *faueveli*
- = *hadenius* Gistel, 1857 NEW SYNONYM of *N. vespillo* (L.)
 Type locality: “Tirol” [Austria: 47.25°N, 11.33°E; descrip.]
 Type depository: ZSMC: München?
- 1857b Gistel: 575 (in German) >> Orig. comb.: *Necrophorus hadenius* [!N]
 1917 Strand: 84 (descriptions in German)
 1928 Hatch: 153 (catalog) >> *Incertae sedis*
- = *hauseri* Hlisnikovsky, 1932 CONFIRMED as SYNONYM of *N. vespillo* (L.)
 Type locality: “Thian-Shan bei Musart” [Tian Shan, Muzart; village near Muzart Pass
 and source of Muzart, or Musuerh Ho, River flowing east from Mt. Pebody, high-
 est point in the Tian Shan mts, Xinjiang Prov., nw China; label]
 Type depository: NMPC: Praha [!] holotype male
- 1932 Hlisnikovsky: 23 (key, descriptions in German) >> Orig. comb.: *Necrophorus*
 Hauseri [!N, S]
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin) >> as valid species
 1933a Shchegoleva-Barovskaya: 181 (revision: key, descriptions & catalog in Russian)
 >> as valid species
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as doubtfully valid
 species
 1992 Kozminykh: 64 (checklist in Russian) >> as syn. of *N. vespillo*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespillo*
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. vespillo*
 2002 Nikolajev & Kozminykh: 111 (catalog, distribution, descriptions, keys, figures in
 Russian (English summary)) >> as syn. of *N. vespillo*
- = *minor* Westhoff, 1881 NEW STATUS as absolute syn. of *N. vespillo* (L.)
 Type locality: “bei Gimberte” [Germany: Westphalia: near Gimberte, village on Ems
 River, ca. 7 km n of Münster; descrip.]

Type depository: LNMD: Münster

- 1881 Westhoff: 108 (description of variation in German) >> Orig. comb.: *Necrophorus vespillo* var. *minor* [!N]
 1913 Kuhnt: 336 (in German)
 1922 Everts: 182
 1928 Hatch: 152 (catalog) >> as *N. vespillo* ab. *minor*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespillo* ab. *minor*
 1965 Báguena: 51 (checklist in Spanish) >> as *N. vespillo* ab. *minor*

= *spinipes* Leach, 1815

Type locality: unknown

Type depository: unknown

- 1815 Leach: 88 (descriptions) >> Orig. comb.: *Necrophagus spinipes* [!N]
 1829b Stephens: 75 (catalog) >> as syn. of *N. vespillo*

= *varendorffi* Westhoff, 1881:108 NEW STATUS as absolute syn. of *N. vespillo* (L.)

Type locality: “von Mü”, [Münster, Westphalia, Germany; descrip.]

Type depository: LNMD: Münster

- 1881 Westhoff: 108 (description of variation in German) >> Orig. comb.: *Necrophorus vespillo* var. *varendorffi* [!N]
 1898 Everts: 413
 1910 Jakobson: 612 (checklist in Russian)
 1913 Kuhnt: 336 (in German)
 1925 Winkler: 265 (catalog) >> as *N. vespillo* ab. *varendorffi*
 1926a Portevin: 264 (revision: key, descriptions & catalog in French) >> as *N. vespillo* ab. *Varendorffi*
 1928 Hatch: 152 (catalog) >> as *N. vespillo* ab. *Varendorffi*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespillo* ab. *varendorffi*

= *vulgaris* Fabricius, 1775

Type locality: “Habitat in Europae, Americae cadaveribus, quae sepelit” [descrip.]

Type depository: ZMUC: Kobenhavn (Kiel?)

- 1775 Fabricius: 72 (descriptions) >> Orig comb.: *Nicrophorus vulgaris* [sic] [!N, S]
 1790 Preyssl: 12 (in German)
 1868 Gemminger & Harold: 719 (catalog) >> as syn. of *N. vespillo*, auth. attrib. Preyssl.
 1884 Marseul: 186 (key, descriptions in French) >> as syn. of *N. vespillo*
 1885 Marseul: 169 (catalog in French) >> auth. attrib. Preyssl.; as syn. of *N. vespillo*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. vespillo*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. vespillo*
 1926a Portevin: 260 (revision: key, descriptions & catalog in French) >> as syn. of *N. vespillo*
 1928 Hatch: 151 (catalog) >> as syn. of *N. vespillo*
 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. vespillo*

- 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespillo*
 1964 Herman: 5 (nomenclature) >> as syn. of *N. vespillo*
 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. vespillo*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespillo*
 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. vespillo*
 2002 Nikolajev & Kozminykh: 111 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. vespillo*

Comments: The forgotten name *N. bifasciatus* Hausmann (1799) was described as being a "delightful cross of *N. vespillo* and *N. mortuorum*" (= *N. vespilloides*), but with a type locality of North America where *N. vespillo* does not occur. The description also included the following key characters: the antennal club is orange and the pronotum has golden hairs anteriorly. This description matches *N. vespillo* but suggests the type locality is erroneous.

See comments for *N. germanicus* and *N. interruptus* regarding the names of Gistel. We herein synonymyze *N. hadenius* Gistel, 1857 under *N. vespillo*.

Nicrophorus vespilloides Herbst, 1783

Type locality: "Berlin" [Germany; descrip.]

Type depository: ZMHB: Berlin?

Distribution: Holarctic: northern North America, all Europe, Asia: Siberia, Korea, Japan, Mongolia, China, Iran, Kazakhstan, Turkey

- 1783 Herbst: 32 (descriptions in German) >> Orig. comb.: *Nicrophorus Vespilloides* [!M, S]
 1790 Scriba: 168 (in German)
 1829b Stephens: 75 (catalog) >> as syn. of *N. mortuorum*
 1853 Mannerheim: 172 (descriptions in German) >> as syn. of *N. mortuorum*
 1855 Fairmaire &
 1858 Calwer: 106 (checklist, brief descriptions in German) >> as syn. of *N. mortuorum*
 1859a Motschulsky (catalog)
 1868 Gemminger & Harold: 719 (catalog) >> as syn. of *N. mortuorum*
 1873 Crotch: 37 (checklist) >> as *Silpha vespilloides*
 1877 Stein & Weise: 61 (catalog in Latin)
 1878a Hubbard & Schwarz: 632 (checklist)
 1878b Hubbard & Schwarz: 650 (checklist)
 1880 Heyden: 87 (checklist in German) >> as valid species
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as valid species
 1883 Heyden et al.: 73 (checklist) >> as valid species
 1884 Marseul: 192 (key, descriptions in French) >> as *Nicrophorus vespilloides*; as syn. of *N. mortuorum*
 1884 Reitter: 87 (descriptions in German) >> as *Silpha vespilloides*; as valid species
 1885 Henshaw: 26 (checklist) >> as *Nicrophorus vespilloides*; as valid species
 1885 Marseul: 169 (catalog in French) >> as syn. of *N. mortuorum*
 1885 Reitter: 321 (in German)

- 1888 Seidlitz: 313 (key in German) >> misspelled as *Necrophagus vespilloides*
 1889 Sahlberg: 20 (checklist in Swedish)
 1889 Seidlitz: 329 (key in German) >> misspelled as *Necrophagus vespilloides*
 1890 Flach: 109 (descriptions in German) >> as valid species; figured
 1891 Heyden et al.: 139 (checklist) >> as valid species
 1893 Heyden: 51 (checklist in German) >> as valid species
 1894 Hamilton: 15 (checklist)
 1895 Keen: 168 (checklist)
 1895b Reitter: 328 (description of variation in German) >> as valid species
 1896 Heyden: 38 (checklist in German) >> as valid species
 1898 Everts: 413
 1899 Ganglbauer: 71, 165 (key, descriptions, morphology, larval stages in German) >>
 as valid species; "Larva" - Hatch 1928
 1899 Poppius: 58 (checklist in Swedish)
 1900 Bordas: 283 (morphology: testes in French) >> as valid species; "Morphology:
 testes" - Hatch 1928
 1901 Carret: 331 (description of variation in French) >> as syn. of *N. mortuorum*
 1905b Portevin: 418 (distribution note in French) >> as valid species; record from
 Laponie [Lapland]: Finmark [Co. of Norway], Kirkeness
 1905 Weber (biology, ecology, behavior in German)
 1906 Heyden et al.: 247 (checklist) >> as valid species
 1908 Smirnov: 42 (description of variation in Russian) >> description of variation: 1
 unavailable name
 1909 Reitter: 240 (in German)
 1910 Barkowski: 80 (key, descriptions, regional in German)
 1910 Jakobson: 612 (checklist in Russian) >> as valid species
 1910 Smith: 229 (checklist)
 1913 Kuhnt: 335 (in German)
 1913 Roubal (biology, ecology in Czech & German)
 1914b Portevin: 224 (description of variation in French) >> as valid species
 1916 Frost: 381 (biology, ecology)
 1916 Pasquet: 143 (description of variation in French)
 1916 Schaufuss: 273 (checklist in German)
 1917b Pic: 21 (description of variation in French)
 1920 Britton: 224 (checklist)
 1920 Leng: 86 (catalog)
 1922 Everts: 182
 1922 Hansen: 114,116 (key, descriptions, morphology, larval stages in Danish)
 1922 Henriksen: 256 (key) >> "Larva" - Hatch 1928
 1923 Bernet Kempers: 78-79 (morphology: wing venation in German)
 1923 Portevin: 67 (key, descriptions in French) >> comment that this sp. can be found
 on *Boletus edulis*
 1924 Hatch: 560 (checklist)
 1924 Portevin: 375 (key, descriptions in French) >> description of variation: 1 unavail-
 able name
 1925 Weber: 124 >> "Biology" - Hatch 1928
 1925 Winkler: 265 (catalog)

- 1926 Porta: 333 (key, checklist in Italian)
- 1926a Portevin: 234 (revision: key, descriptions & catalog in French) >> description of variation: 1 unavailable name
- 1927b Hatch: 355 (revision: key, descriptions & catalog) >> description of variation: 1 unavailable name
- 1928 Hatch: 136 (catalog)
- 1928 Leonard: 271 (checklist)
- 1929 Kôno: 161, 164 (checklist, annotated)
- 1929 Portevin: 539 (key, intraspecific variation in French)
- 1930 Roubal: 241 (catalog in Czech)
- 1931 Walsh (biology)
- 1932 Hlisnikovsky: 30 (key, descriptions in German)
- 1932 Joy: 466 (key)
- 1932 Poll : 53 (morphology: malpighian tubules in French)
- 1933 Kano: 101 (checklist in Japanese (English summary))
- 1933 Pukowski: 518-586 (biology, ecology in German)
- 1933 Rapp: 537 (biology, ecology, distribution in German)
- 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
- 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian)
- 1933 Walsh: 28 (biology, ecology)
- 1934 Brundin: 257 (biology, ecology in German)
- 1934b Pukowski: 53-60 (morphology, larval stages in German) >> description of larva
- 1934 Roubal: 323 (description of variation in German) >> description of variation: 1 unavailable name
- 1935 Balduf: 70 (biology, ecology, behavior)
- 1936 Cho: 157 (checklist in Korean) >> new record for Korea
- 1937 Leech: 156 (nomenclature)
- 1937 Mochizuki & Tsunekawa (checklist)
- 1937 Wu (catalog)
- 1938 Brimley: 135 (checklist)
- 1938 Mori & Cho (checklist)
- 1939 Lengerken: 263 (biology in German)
- 1939 Masui (checklist)
- 1939 Roubal: 85 (description of variation in Czech (French summary))
- 1940 Hatch: 234 (description of variation)
- 1940 Šulc: 162 (morphology in Czech (German summary))
- 1943 Cooreman (biology, symbionts: mites in French)
- 1944 Arnett: 4, 20 (morphology: female genitalia) >> female genitalia figured, pl. 2, fig. 10
- 1944 Blackwelder: 100 (catalog)
- 1944 Kôno: 84 (checklist in Japanese (German title))
- 1944 Milne & Milne: 327 (biology, behavior)
- 1945 Kloet & Hincks: 155 (checklist)
- 1946 Procter: 121 (checklist, ecology)
- 1947 Arnett: 111 (catalog)
- 1947 Cantonnet & Lecordier: 134 (biology, ecology in French)
- 1947 Dethier: 287 (biology, behavior)

- 1948 Clark: 27 (checklist)
- 1948 Scheerpeltz & Höfler: 247 (biology, ecology in German)
- 1949 Bliss: 201 (morphology: sexual dimorphism)
- 1949 Horion: 77 (biology, ecology, distribution in German)
- 1949 Horion: 77 (biology, ecology, distribution in German)
- 1949 Mroczkowski: 196 (biology, ecology in Polish (English summary))
- 1949 Roehrich: 44 (biology, ecology in French)
- 1950 Smith: 62 (biology, cytology)
- 1950b Théodoridès: 5 (biology, ecology, morphology in French)
- 1952 Benick: 33 (biology, ecology in German)
- 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian)
- 1953 Smith: 35 (biology, cytology) >> chromosome number
- 1955 Moore: 294 (biology, ecology)
- 1955 Mroczkowski: 21 (key, descriptions in Polish)
- 1955 Rehous (biology, ecology in French)
- 1955 Théodoridès (biology, symbionts: mites in French)
- 1955 Wachek (biology, parasites in German)
- 1956 Esaki et al.: 1028 (checklist, descriptions in Japanese)
- 1957 Cho (catalog in Korean)
- 1958 Madge: 17 (revision: key, descriptions, ecology, distributions) >> as *N. vespilloides* subsp. *vespilloides*
- 1959 Hicks: 94 (biology, ecology)
- 1959 Linssen: 162 (catalog)
- 1960 Hansen et al.: 72 (checklist in Danish)
- 1960 Kauffmann: fig. 27, 30 (morphology in German)
- 1960 Merkushev (biology, parasites)
- 1961 Dollfus (biology, symbionts: mites in French)
- 1961 Székessy: 333 (description of variation in German) >> description of variation: 1 unavailable name
- 1962 Boeckh: 214 (morphology: antennal in German)
- 1962 Pearson: 133, 146 (fossils) >> fossils from 10,500 B.P., England
- 1963 Busnel (biology, behavior, physiology)
- 1963 Eisfelder (biology, ecology in German)
- 1963 Nakane: 75 (checklist, brief descriptions in Japanese)
- 1964 Kamimura et al.: A21 (biology, ecology)
- 1965 Báguena: 52 (checklist in Spanish)
- 1966 Korbel: 146 (biology, ecology in German (Czech & Russian summary))
- 1966 Payne & Crossley: 56 (biology, ecology)
- 1967 Schweiger: 547 (checklist in German)
- 1967 Welch (biology, ecology)
- 1968 Hansen: 20 (key, descriptions in Danish)
- 1968 Petruška: 168 (biology, ecology in Czech (English summary))
- 1969 Ernst: 75 (morphology: antennal sensillae in German (English summary))
- 1969 Evans (biology, ecology)
- 1969 Fjellberg (biology, ecology)
- 1969 Lindroth & Ball: 149
- 1969 Medvedev & Vysotskaya: 500 (biology, ecology)

- 1970 Franz: 214 (checklist, distribution in German)
 1970 Gersdorf: 367 (morphology: female genitalia in German)
 1970 Kirk: 25 (checklist)
 1970 Payne & King: 230 (biology, ecology)
 1971 Freude: 194 (key in German)
 1971 Mroczkowski: 214 (biology, ecology in Polish (Russian & English summary))
 1971 Obrtel (biology, ecology)
 1971 Wilson: 130 (comment)
 1972a Ernst: 218 (morphology: antennal sensillae in German (English summary))
 1972b Ernst: 96 (morphology: antennal sensillae in German (English summary))
 1972 Swan & Papp: 356 (description)
 1973 Blackwelder: 3 (checklist, synonymy)
 1973 Krivolutskaya: 71 (checklist in Russian (with electronic english translation))
 1973 Nabaglo (biology, ecology)
 1973 Schumacher: 65-75 (morphology: stridulatory files in German (English summary)) >> focal species
 1973 Waldow: 415-424 (morphology: olfactory receptors in German (English summary)) >> focal species
 1975 Baldwin: 23 (key, description, distribution, ecology)
 1975a Emetz: 61 (checklist in German)
 1975b Emetz: 106 (checklist in Russian)
 1975 Emetz & Schawaller: 231 (checklist in German (English summary)) >> compared to *N. encaustus*
 1975 Hågvar (biology, ecology)
 1975 Katakura & Fukuda: 78 (biology, ecology)
 1975 Schneider: 223 (morphology, behavior: wing motion in German)
 1976 Tischler: 100 (biology, ecology in German)
 1977 Baert & Maelfait (biology, ecology)
 1977 Bockeler: 45 (biology, parasites in German (English summary))
 1977 Pope: 20 (checklist)
 1978 Burakowski et al.: 204 (catalog, distribution, synonymy in Polish)
 1978 Klausnitzer & Zerche: 89 (morphology, larval stages) >> larva figured
 1978 Mroczkowski: 239 (biology, ecology in Polish (Russian & German summary))
 1978 Putman: 136 (biology, ecology)
 1978 Smith & Virkki: 240 (biology, cytology)
 1979 Blum: 536 (morphology: wing folding, abdominal structure in German)
 1979 Hammond: 123 (morphology: wing folding) >> wing folding diagrammatic figure
 1979 Salgado & Régil: 86 (catalog, annotated & figured in Spanish)
 1979 Silfverberg: 12 (checklist, distribution)
 1980 Easton: 121-123 (morphology: sexual dimorphism)
 1980 Franssen: 46 (morphology: female genitalia in French) >> female genitalia figured
 1981 Matis: 11 (distributional atlas in Russian) >> dot map of distribution in Russia
 1981 Spriggs: 116 (descriptions, ecology)
 1981 Šustek: 40 (key, descriptions, regional in Czech)
 1982c Anderson: 1316 (biology, ecology)
 1982c Korn: 207 (biology, symbionts: mites in German (English summary))

- 1982 Wisiniewski (biology, symbionts: mites in German)
- 1983 Christie (biology, symbionts: mites in English (German summary))
- 1983 Korn: 251 (biology, symbionts: mites in German (English summary))
- 1983 Putman: 17, 38-42 (biology, ecology)
- 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary))
- 1984b Bredohl (biology, genetics in German)
- 1984 Denman: 201 (biology, behavior)
- 1984 Papp: 70 (descriptions)
- 1985 Anderson & Peck: 72 (revision: key, descriptions & catalog in English (& keys in French also))
- 1985 Katakura & Ueno: 463 (biology, ecology) >> "more abundant in grassland habitat"
- 1985a Kurosawa: 248 (checklist) >> color habitus figure pl. 44
- 1985 Peck & Anderson: 275 (key, descriptions, phylogenetics)
- 1985 Zahradník: 122, 372 (catalog, annotated & figured in German) >> figured
- 1986 Erbeling & Erbeling: 234 (biology, ecology in German)
- 1986 Katakura et al.: 43-55 (biology, ecology)
- 1986 Müller: 180 (biology, behavior in German)
- 1986 Nishikawa: 99 (catalog in Japanese (English summary))
- 1986 Panov: 412 (morphology: cerebral neurosecretory cells)
- 1987a Bartlett: 471-472 (biology, behavior) >> focal species
- 1987b Bartlett: 179-183 (biology, behavior) >> focal species
- 1987 Dressel (biology, behavior in German)
- 1987 Eggert & Müller (biology, behavior in German)
- 1987 Jensen: 116 (biology, ecology in Danish (English summary))
- 1987 Lucht: 67 (catalog in German)
- 1987 Müller: 74-80 (biology, behavior) >> focal species
- 1987 Müller & Eggert: 297-304 (biology, behavior) >> focal species
- 1987 Müller & Cordes: 321 (biology, behavior in German)
- 1987 Peck & Kaulbars: 52 (checklist)
- 1987 Peschke et al.: 246 (biology, ecology)
- 1987 Ryabukhin & Matis: 10 (key, descriptions, distributions in Russian)
- 1987 Staines: 16 (key, descriptions) >> Maryland record
- 1988b Bartlett: 297-303 (biology, behavior) >> focal species
- 1988 Bartlett & Ashworth: 429-434 (biology, behavior) >> focal species
- 1988 Biström & Väisänen: 33 (biology, ecology)
- 1988 Cordes et al. (biology, behavior in German)
- 1988 Dressel & Müller: 342 (biology, behavior)
- 1988 Eggert & Müller (biology, behavior)
- 1988 Müller & Eggert: 31 (biology, behavior in German)
- 1988 Müller et al. (biology, behavior)
- 1988 Otronen: 191-201 (biology, behavior) >> focal species
- 1988 Reinking (biology, ecology, behavior)
- 1989a Eggert & Müller (biology, behavior in English (German summary))
- 1989b Eggert & Müller (biology, behavior)
- 1989c Eggert & Müller: 318 (biology, behavior in German)
- 1989 Koch: 164 (biology, ecology in German)

- 1989 Lafer: 338 (key, descriptions, description of variation in Russian)
- 1989 Martin: 876-879 (biology, ecology)
- 1989 Müller & Eggert: 245-249 (biology, behavior) >> focal species
- 1989 Núñez et al.: 443 (checklist in Spanish (English summary)) >> also found on dung & fungi: *Boletus edulis* & *Russula* sp.
- 1989 Stresemann et al. (key in German)
- 1990 Erbeling: 116 (biology, ecology in German (English summary))
- 1990 Hyatt: 136 (biology, symbionts: mites)
- 1990 Kentner & Streit: 26 (biology, ecology in English (German summary))
- 1990 Müller & Eggert: 11-16 (biology, behavior) >> focal species
- 1990 Müller et al.: 265-270 (biology, behavior) >> focal species
- 1990 Müller et al.: 491-499 (biology, behavior) >> focal species
- 1990 Müller & Schwarz: 23-30 (biology, symbionts: mites in English (German summary)) >> focal species
- 1990 Peck: 1122 (key)
- 1990 Reinking & Müller: 655-656 (biology, behavior) >> focal species
- 1990 Rohner: 453-464 (biology, ecology in German (English summary)) >> focal species
- 1990 Schwarz & Müller: 323-324 (biology, symbionts: mites)
- 1990 Zahradník: 123 (key in Spanish)
- 1991 Campbell: 86 (catalog, distribution)
- 1991 Laplante et al.: 29 (checklist in French)
- 1991 Ohkawara: 463-467 (biology, ecology in Japanese (English summary)) >> focal species
- 1991 Richter (biology, symbionts: nematodes in German)
- 1991 Schwarz et al. (biology, symbionts: mites)
- 1991 Schwarz & Schürmann (popular review in German)
- 1992 Beninger & Peck: 79-86 (biology, ecology)
- 1992 Cho & Lee: 22 (revision: key, descriptions & catalog)
- 1992 Eggert (biology, behavior)
- 1992 Eggert & Müller: 237-242 (biology, behavior) >> focal species
- 1992 Huerta: 13-21 (morphology: sternal glands in Spanish (English summary)) >> focal species
- 1992 Kozminykh: 64 (checklist in Russian)
- 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
- 1992 Růžička: 125 (key, descriptions, morphology, larval stages, phylogenetics) >> description of larval instars
- 1992 Schmitt: 272 (morphology: stridulatory files)
- 1992 Schwarz & Müller: 488 (biology, symbionts: mites)
- 1992 Silfverberg: 14 (checklist, distribution in English (Finnish & Swedish summaries))
- 1993 Athias-Binche et al.: 76 (biology, symbionts: mites)
- 1993 Beninger: 766-769 (biology, symbionts: mites)
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian)
- 1993 Peck & Miller: 9 (species-group catalog)
- 1993 Richter: 346-355 (biology, symbionts: mites in English (German summary)) >> focal species

- 1993 Růžička: 34 (checklist, distribution in English & Czech)
- 1993 Sauer: 84 (field guide, brief descriptions, ecology in German)
- 1994 Beninger: 135-143 (biology, ecology in English (French summary))
- 1994 Bertin & Fallaci: 219 (checklist in Italian (English summary))
- 1994 Blackman & Evans: 217-227 (biology, symbionts: mites) >> focal species
- 1994 Brown & Wilson: 3 (biology, symbionts: mites)
- 1994 Dunn (biology, behavior)
- 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
- 1994 Růžička: 69 (biology, ecology)
- 1995 Angelini et al.: 10 (checklist, distribution in Italian)
- 1995 Bocáková: 24 (biology, ecology in Czech (English summary))
- 1995 Dapsio: 120 (checklist in Lithuanian)
- 1995 Kozminykh: 110 (key in Russian)
- 1995 Kozminykh & Nemkov: 113 (catalog in Russian)
- 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English)
- 1996 Benken et al.: 237 (biology, behavior)
- 1996 Bertin & Lebboroni: 153 (checklist in Italian (English summary))
- 1996 Downie & Arnett: 357 (key, descriptions, regional)
- 1996 Hansen: 93 (checklist, distribution in Danish & English)
- 1996 Hoferer et al.: 246 (biology, behavior)
- 1996 Růžička: 74 (checklist) >> first reliable record from Iran
- 1996 Růžička & Schneider: 81 (checklist in English (Czech summary))
- 1996 Schwarz: 137 (biology, symbionts: mites)
- 1996 Schwarz & Walzl: 1339 (biology, symbionts: mites)
- 1997 Anderson et al.: 14 (checklist)
- 1997 Baker & Schwarz: 180 (biology, symbionts: mites)
- 1997 Blackman: 63-67 (biology, symbionts: mites) >> focal species
- 1997 Eggert & Müller: 217 (biology, review of: ecology, behavior)
- 1997 Klausnitzer: 44 (morphology, larval stages in German)
- 1997 Kozminykh: 65 (checklist in Russian)
- 1997 Krivolutskaya: 3 (checklist) >> (translation of Krivolutskaya 1973)
- 1997 Pennington (distribution note) >> First record of *N. vespilloides* in Scotland
- 1997 Telnov et al. (checklist)
- 1998 Benken et al.: 158-163 (biology, behavior)
- 1998 Eggert et al.: 97-107 (biology, behavior) >> focal species
- 1998 Harusawa: 34 (key in Japanese)
- 1998 Háva et al.: 180 (distribution note in English (Czech summary)) >> Turkey; Nemrut Mountains; First confirmed record for Turkey
- 1998 Kocárek: 387 (biology, ecology)
- 1998 Müller et al.: 195-200 (biology, behavior) >> focal species
- 1998 Ohkawara et al.: 551-559 (biology, ecology) >> focal species
- 1998 Perreau: 85 (biology, ecology in French (English summary))
- 1998 Sakaluk et al.: 553-564 (biology, behavior) >> focal species
- 1998 Schwarz et al.: 164 (biology, symbionts: mites)
- 1998 Schwarz & Koulianos: 623 (biology, symbionts: mites)
- 1998b Scott: 598+ (biology, review of: ecology, behavior)
- 1998 Trumbo & Thomas: 85-95 (biology, ecology) >> focal species

- 1999 Bertin & Lebboroni: 58 (checklist in Italian)
 1999 Háva et al.: 78 (key, descriptions)
 1999 Růžička: 318 (biology, ecology)
 1999 Suzuki: 205-208 (biology, ecology, behavior) >> focal species
 2000 Bahillo de la Puebla & López-Colón: 245 (biology, descriptions, distribution in Spanish)
 2000 Bertin et al.: 130 (biology, ecology in Italian (English summary))
 2000 Dobler & Müller: 392 (phylogenetics) >> CO1 based phylogeny
 2000 Eggert & Müller (biology, behavior)
 2000 Gwiazdowicz: 44 (biology, symbionts: mites) >> mite host
 2000 Jenkins et al.: 443 (biology, ecology, behavior) >> focal species
 2000 Koulianos & Schwarz: 836-840 (biology, ecology, behavior)
 2000 Nishikawa: 116 (checklist in English (Japanese summary))
 2000b Parkhomenko: 164 (morphology, larval stages in Ukrainian (English summary))
 2000 Purrington & Davidson: 355-358 (distribution note)
 2000 Sikes & Peck: 395 (descriptions, phylogenetics)
 2000a Suzuki: 269-272 (biology, ecology, behavior) >> focal species
 2000b Suzuki: 25-28 (biology, behavior) >> focal species
 2000c Suzuki: 38 (biology, ecology, behavior in Japanese with English abstract)
 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics)
 2000 Werner & Raffa: 145 (comment: ecology)
 2001 Kocárek: 431-438 (biology, ecology)
 2001 Nishikawa: 81 (larval descriptions, phylogenetics in English (Japanese summary)) >> larva compared to *N. maculifrons*
 2002 Nikolajev & Kozminykh: 118 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *altumi* Westhoff, 1881 NEW STATUS as absolute syn. of *N. vespilloides* Herbst

Type locality: "bei Mü." [Münster, Westphalia, Germany; descrip.]

Type depository: LNMD: Münster

- 1881 Westhoff: 108 (description of variation in German) >> Orig. comb.: *Necrophorus vespilloides* var. *Altumi* [!N]
 1898 Everts: 413
 1908 Smirnov: 42 (description of variation in Russian)
 1910 Jakobson: 612 (checklist in Russian) >> misspelled as *N. vespilloides* ab. *althumi* West.
 1913 Kuhnt: 335 (in German)
 1922 Everts: 182
 1925 Winkler: 265 (catalog) >> as *N. vespilloides* ab. *altumi*; misspelled *N. Althumi*
 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> misspelled as *N. vespilloides* ab. *Althumi*
 1928 Hatch: 138 (catalog) >> as *N. vespilloides* ab. *Altumi*
 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian) >> as *N. vespilloides* ab. *altumi*
 1934 Roubal: 323 (description of variation in German) >> as *N. vespilloides* form *Altumi*

= *aurora* Motschulsky, 1860 NEW STATUS as absolute syn. of *N. vespilloides*

Herbst

Type locality: “de la Russie septentrionale” [Russia; descrip.]

Type depository: ZMUM: Moscow

- 1860 Motschulsky: 126 (descriptions in French) >> Orig. comb.: *Necrophorus aurora* [!N, S]
 1868 Gemminger & Harold: 717 (catalog) >> as valid species
 1884 Marseul: 193 (key, descriptions in French) >> as valid species
 1885 Marseul: 169 (catalog in French) >> as valid species
 1895b Reitter: 328 (description of variation in German) >> as syn. of *N. vespilloides*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. vespilloides*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. vespilloides*
 1916 Pasquet: 147 (description of variation in French)
 1924 Portevin: 375 (key, descriptions in French) >> as *N. vespilloides* ab. *aurora*
 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as *N. vespilloides* ab. *Aurora*
 1928 Hatch: 138 (catalog) >> as *N. vespilloides* ab. *aurora*
 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian) >> as *N. vespilloides* ab. *aurora*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespilloides* ab. *aurora*
 1965 Báguena: 52 (checklist in Spanish) >> as *N. vespilloides* ab. *aurora*
 1979 Salgado & Régil: 87 (catalog, annotated & figured in Spanish) >> as *N. vespilloides* var. *aurora*
 1989 Núñez et al.: 443 (checklist in Spanish (English summary)) >> as *N. vespilloides* var. *aurora*; most freq. var. observed behind typical form

= *borealis* Portevin, 1914 CONFIRMED as SYNONYM of *N. vespilloides* Herbst

Type locality: “Laponie : Kirkeness. Ile Sakhaline” [Norway?; descrip.]

Type depository: MNHN: Paris [!] holotype

- 1914a Portevin: 195 (description of variation in French) >> Orig. comb.: *Necrophorus vespilloides* var. *borealis* [!N, S]
 1924 Portevin: 375 (key, descriptions in French) >> noted as ‘nov’ *N. vespilloides* var. *borealis*
 1925 Winkler: 265 (catalog) >> as *N. vespilloides* ab. *borealis*
 1926a Portevin: 259 (revision: key, descriptions & catalog in French) >> as *N. vespilloides* var. *borealis*
 1928 Hatch: 138 (catalog) >> as *N. vespilloides* var. *borealis*
 1929 Kôno: 161, 164 (checklist, annotated) >> as *N. vespilloides* f. *borealis*
 1933 Kano: 101 (checklist in Japanese (English summary)) >> as *N. vespilloides* var. *borealis*
 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian) >> as *N. vespilloides* ab. *borealis*
 1940 Hatch: 235 (description of variation) >> as *N. vespilloides* var. *borealis*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespilloides* var. *borealis*
 1967 Kuwayama (checklist in Russian)
 1973 Krivolutsкая: 71 (checklist in Russian (with electronic english translation)) >> as *N. vespilloides* var. *borealis* (cites Kano 1933-1934 usage)

- 1997 Krivolutskaya: 3 (checklist) >> as *N. vespilloides* var. *borealis* (cites Kano 1933-1934 usage); (Krivolutskaya 1973)
- 2000 Nishikawa: 116 (checklist in English (Japanese summary)) >> as absolute syn. of *N. vespilloides*

= *fractus* Portevin, 1914

Type locality: not mentioned

Type depository: DEIC: Eberswalde holotype?

- 1914a Portevin: 195 (description of variation in French) >> Orig. comb.: *Necrophorus vespilloides* var. *fractus* [!N, S]
- 1925 Winkler: 265 (catalog) >> as *N. vespilloides* ab. *fractus*
- 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as syn. of *N. vespilloides*
- 1928 Hatch: 137 (catalog) >> as syn. of *N. vespilloides*
- 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. vespilloides*
- 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespilloides*
- 1965 Báguena: 52 (checklist in Spanish) >> as *N. vespilloides* ab. *fractus*
- 1992 Cho & Lee: 24 (revision: key, descriptions & catalog) >> as syn. of *N. vespilloides*
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespilloides*
- 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. vespilloides*
- 2002 Nikolajev & Kozminykh: 118 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. vespilloides*

= *hebes* Kirby, 1837:96 CONFIRMED as SYNONYM of *N. vespilloides* Herbst

Type locality: "Nova Scotia" [Canada; label]

Type depository: BMNH: London [!] holotype male

- 1837 Kirby: 96 (descriptions) >> Orig. comb.: *Necrophorus hebes* [!N, S]
- 1853 LeConte: 278 (descriptions) >> as valid species
- 1853 Melsheimer: 39 (catalog) >> as valid species
- 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
- 1866a LeConte: 367 (nomenclature) >> as valid species
- 1868 Gemminger & Harold: 718 (catalog) >> as valid species
- 1870 LeConte: 398 (nomenclature) >> as senior syn. of *N. maritimus*
- 1873 Crotch: 37 (checklist) >> as *Silpha vespilloides* var. *hebes*
- 1873 LeConte: 326 (nomenclature) >> as *N. vespilloides* var. *hebes*
- 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. vespilloides*
- 1885 Henshaw: 26 (checklist) >> as syn. of *N. vespilloides*
- 1910 Barkowski: 80 (key, descriptions, regional in German) >> as syn. of *N. defodiens*
- 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. vespilloides*
- 1920 Leng: 86 (catalog) >> as syn. of *N. vespilloides*
- 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as syn. of *N. defodiens*
- 1928 Hatch: 138 (catalog) >> as syn. of *N. defodiens*

- 1937 Leech: 156 (nomenclature) >> as syn. of *N. vespilloides*
 1940 Hatch: 234 (description of variation) >> as syn. of *N. vespilloides*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespilloides*
 1985 Anderson & Peck: 72 (revision: key, descriptions & catalog) >> as syn. of *N. vespilloides*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespilloides*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. vespilloides*
 2002 Nikolajev & Kozminykh: 118 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. vespilloides*

= *mortuorum* Fabricius, 1792

Type locality: "in Germaniae" [Germany; descrip.]

Type depository: ZMUC: Kiel

- 1792 Fabricius: 248 (descriptions) >> Orig. comb.: *Nicrophorus mortuorum* [!N, S]
 1793 Herbst: 163 (catalog in German)
 1795 Panzer: 118 (catalog in German)
 1797 Panzer: 3 (catalog in German)
 1798 Illiger: 354 (catalog in German)
 1798 Paykull: 325
 1799 Hausmann: 33 (descriptions in German) >> compared to *N. bifasciatus*
 1801 Fabricius: 335 (descriptions) >> as valid species
 1802 Marsham: 115 >> as valid species; as *Silpha mortuorum*
 1807 Herschel: 274 (descriptions in German) >> as valid species
 1808 Gyllenhal: 260 (descriptions, catalog)
 1808 Schönherr: 121 (in German)
 1821 Dejean: 42 (catalog) >> as valid species
 1825 Charpentier: 201 (descriptions) >> as valid species, compared to *N. sepultor*
 1825 Curtis: Pl. 71 (checklist) >> text accompanying Plate 71; as valid species
 1825 Duftschmid: 112 (descriptions in German) >> as valid species
 1825 Say: 178 (description) >> as valid species; compared to *N. orbicollis*
 1827 Gyllenhal: 309 (descriptions) >> as valid species
 1829b Stephens: 75 (catalog) >> as valid species
 1830 Gebler: 94 (in German)
 1830 Stephens: 19 (biology, descriptions) >> as valid species
 1832 Ménétriés: 167 (checklist in French) >> as valid species
 1833 Dejean: 117 (catalog in French) >> as valid species
 1836 Dejean: 131 (catalog in French) >> as valid species
 1837 Erichson: 226 (species-group catalog in German) >> as valid species
 1838 Sturm: 72 (in German)
 1838 Zetterstedt: 109 (description)
 1839 Matzek: 23 (morphology: internal & external anatomy in Latin) >> as valid species
 1839 Stephens: 114 (descriptions) >> as valid species
 1840 Laporte: 2 (descriptions in French) >> as valid species
 1841a Heer: 388 (descriptions in German) >> as valid species

- 1841b Heer: 9 (checklist in German) >> as valid species
 1846b Küster: nr. 40 (catalog in German (English summary))
 1846 Mannerheim: 514 (descriptions in German) >> compared to *N. defodiens*
 1847a Gebler: 439
 1847 Rosenhauer: 105 (checklist in German) >> as valid species
 1849 Bach: 154 (checklist, brief descriptions in German) >> as valid species
 1849 Gaubil: 55 (catalog in French) >> as valid species
 1849 Ménétriés: 52 (checklist in French) >> as valid species
 1849 Redtenbacher: 140 (catalog in German)
 1853 Mannerheim: 172 (descriptions in German) >> as valid species
 1854 Lacordaire: 199 (biology, catalog in French) >> as valid species
 1855 Fairmaire & : 292
 1858 Calwer: 106 (checklist, brief descriptions in German) >> as valid species
 1858 Redtenbacher: 289 (catalog in German) >> as valid species
 1859 Gutfleisch & Bose: 202 (key, descriptions in German) >> as valid species
 1859a Motschulsky: 231 (catalog)
 1859c Motschulsky: 491 (catalog in French) >> as valid species
 1859 Schaum: 36 (catalog in German) >> as valid species
 1860 Motschulsky: 126 (descriptions in French) >> as valid species
 1862 Schaum: 38 (catalog in German) >> as valid species
 1862 Schiødte: 226 (morphology, larval stages in Danish)
 1862 Thomson: 10 (descriptions) >> as valid species
 1863 Grenier: 13 (checklist in French) >> as valid species
 1863 Marseul: 88 (catalog in French) >> as valid species
 1865 Power: 198 (revision: key, descriptions & catalog) >> as valid species
 1866a LeConte: 367 (nomenclature) >> as valid species; removes *N. pygmaeus* from
 synonymy under *N. mortuorum*
 1866 Marseul: 38 (catalog in French) >> as valid species
 1868 Gemminger & Harold: 718 (catalog) >> as valid species
 1868 Stein: 42 (catalog in Latin) >> as valid species
 1869 Stierlin & Gautard: 116 (checklist in German) >> as valid species
 1870 Vollenhoven et al.: 54 (checklist in Dutch) >> as valid species
 1873 Crotch: 37 (checklist) >> as *Silpha mortuorum*, as syn. of *Silpha vespilloides*
 1873 Klika: 127 (checklist in Czech)
 1873 Michow: 14, 23 (in German)
 1873 Wood: 90 (biology, ecology) >> as valid species
 1874 Cox: 407 (key, descriptions (brief)) >> as valid species
 1874 Seidlitz: 217 (key in German) >> as valid species
 1875 Siebke: 163 (checklist in Norwegian) >> as valid species
 1876b Kraatz: 395 (morphology: clypeus in German) >> as valid species
 1877 Hickel & Dragicsevics: 28 (checklist in French)
 1877 Stein & Weise: 61 (catalog in Latin) >> as syn. of *N. vespilloides*
 1880 Heyden: 87 (checklist in German) >> as syn. of *N. vespilloides*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. vespilloides*
 1883 Heyden et al.: 73 (checklist) >> as syn. of *N. vespilloides*
 1884 Marseul: 192 (key, descriptions in French) >> as valid species
 1884 Reitter: 87 (descriptions in German) >> as syn. of *Silpha vespilloides*

- 1885 Marseul: 169 (catalog in French) >> as valid species
 1885 Thomson: 66 (key, checklist in Swedish) >> as valid species
 1887 Lewis: 341 (description) >> as valid species; as *Necrophorus mortuorum*
 1888 Matthews: 94 (description) >> as valid species; compared to *N. quadrimaculatus*
 1888 Seidlitz: 313 (key in German) >> as syn. of *N. vespilloides*; misspelled as
Necrophagus mortuorum
 1888 Sparre Schneider: 177 (checklist in Norwegian (German summary)) >> as valid
 species
 1889 Fowler: 43 (descriptions, catalog)
 1889 Seidlitz: 329 (key in German) >> as syn. of *N. vespilloides*; misspelled as
Necrophagus mortuorum
 1890 Fauvel: 348 (descriptions in French) >> as valid species
 1891 Heyden et al.: 139 (checklist) >> as syn. of *N. vespilloides*
 1893 Heyden: 51 (checklist in German) >> as syn. of *N. vespilloides*
 1895b Reitter: 328 (description of variation in German) >> as syn. of *N. vespilloides*
 1896 Acloque: 241 (key in French) >> as valid species
 1896 Fairmaire: 82 (descriptions in French) >> as valid species; compared to *N.*
encaustus
 1901 Carret: 328 (description of variation in French) >> as valid species
 1902 Johnson & Halbert: 690 (checklist) >> as valid species
 1902 Morley: 249 (biology, behavior) >> as valid species; stridulation
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. vespilloides*
 1907 Sharp: xvi (morphology: micromorphism)
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. vespilloides*
 1912 Sharp & Muir: 504 (morphology: male genitalia) >> as valid species; “Morphol-
 ogy: male genitalia” - Hatch 1928
 1914 Gorke: 235 (morphology: malpighian tubules in German) >> as valid species
 1920 Leng: 86 (catalog) >> as syn. of *N. vespilloides*
 1925 Winkler: 265 (catalog) >> as syn. of *N. vespilloides*
 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as syn. of *N.*
vespilloides
 1926 Willoughby-Ellis: 3 (description of variation) >> description of variation: 2
 unavailable names
 1928 Hatch: 137 (catalog) >> as syn. of *N. vespilloides*
 1930 Baier: 155 (biology, behavior, physiology) >> as valid species
 1930 Vitzthum: 389 (biology, symbionts: mites in German) >> mite host; as valid spe-
 cies
 1932 Joy: 466 (key) >> as syn. of *N. vespilloides*
 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian)
 >> as syn. of *N. vespilloides*
 1934b Pukowski: 54 (morphology, larval stages in German) >> as syn. of *N. vespil-*
loides
 1937 Leech: 156 (nomenclature) >> as syn. of *N. vespilloides*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespilloides*
 1944 Milne & Milne: 327 (biology, behavior) >> as syn. of *N. vespilloides*; misspelled
 as *N. moratorium*
 1945 Kloet & Hincks: 155 (checklist) >> as syn. of *N. vespilloides*

- 1959 Linssen: 162 (catalog) >> as syn. of *N. vespilloides*
 1965 Báguena: 52 (checklist in Spanish) >> as syn. of *N. vespilloides*
 1992 Cho & Lee: 24 (revision: key, descriptions & catalog) >> as syn. of *N. vespilloides*; misspelled as *N. morturum*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespilloides*
 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. vespilloides*
 1997 Kozminykh: 65 (checklist in Russian) >> as syn. of *N. vespilloides*
 2002 Nikolajev & Kozminykh: 118 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. vespilloides*

= *oregonensis* Swann & Papp, 1972 NEW SYNONYM of *N. vespilloides* Herbst

Type locality: none mentioned [Swan & Papp 1972] “Baker City, Oregon” [USA; Hatch 1927b]

Type depository: NMNH: Washington D. C. [!] holotype

- 1927b Hatch: 356 (revision: key, descriptions & catalog) >> described in key, as *N. defodiens* ab. *oregonensis*; unavailable name
 1957 Hatch: 12 (description of variation) >> as *N. vespilloides vespilloides* ab. *oregonensis*; unavailable name
 1972 Swan & Papp: 357 (description) >> Orig. comb.: *N. vespilloides* subsp. *oregonensis*; no attribution, not indicated as new [!N]
 1984 Papp: 71 (descriptions) >> as valid species

= *pygmaeus* Kirby, 1837 CONFIRMED as SYNONYM of *N. vespilloides* Herbst

Type locality: “N. Amer. Rocky Mountains” [label]

Type depository: BMNH: London [!] holotype female

- 1837 Kirby: 98 (descriptions) >> Orig. comb.: *Necrophorus pygmaeus* [!N, S]
 1853 LeConte: 277 (descriptions) >> as valid species
 1853 Melsheimer: 39 (catalog) >> as valid species
 1854 Emmons: 57 (descriptions) >> as *N. pygmaeus* (Rich.)
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1866a LeConte: 367 (nomenclature) >> as valid species
 1866b LeConte: 347 (checklist) >> as valid species
 1868 Gemminger & Harold: 719 (catalog) >> as valid species
 1870 LeConte: 398 (nomenclature) >> as senior syn. of *N. defodiens*
 1873 Crotch: 37 (checklist) >> as syn. of *Silpha vespilloides*
 1880 Horn: 314 (revision: key, descriptions & catalog) >> as syn. of *N. vespilloides*
 1891 Heyden et al.: 139 (checklist) >> as syn. of *N. vespilloides*
 1895b Reitter: 328 (description of variation in German) >> as syn. of *N. vespilloides*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. vespilloides*
 1910 Barkowski: 80 (key, descriptions, regional in German) >> as syn. of *N. defodiens*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. vespilloides*
 1920 Leng: 86 (catalog) >> as syn. of *N. vespilloides*
 1926a Portevin: 258 (revision: key, descriptions & catalog in French) >> as syn. of *N. defodiens*
 1928 Hatch: 138 (catalog) >> as syn. of *N. defodiens*

- 1937 Leech: 156 (nomenclature) >> as syn. of *N. vespilloides*
 1940 Hatch: 234 (description of variation) >> as syn. of *N. vespilloides*
 1944 Arnett: 4 (morphology: female genitalia) >> as syn. of *N. vespilloides*
 1985 Anderson & Peck: 72 (revision: key, descriptions & catalog in English (& keys in French also)) >> as syn. of *N. vespilloides*; misspelled as *N. pigmaeus*
 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vespilloides*
 1993 Peck & Miller: 9 (species-group catalog) >> as syn. of *N. vespilloides*
 1995 Kozminykh & Nemkov: 113 (catalog in Russian) >> as syn. of *N. vespilloides*
 2002 Nikolajev & Kozminykh: 118 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. vespilloides*

= *subfasciatus* Portevin, 1914 NEW STATUS as absolute syn. of *N. vespilloides* Herbst

Type locality: "Allemagne. France." [descrip.]

Type depository: MNHN: Paris [not found]

- 1914a Portevin: 195 (description of variation in French) >> Orig. comb.: *Necrophorus vespilloides* var. *subfasciatus* [!N, S]
 1924 Portevin: 376 (key, descriptions in French) >> as *N. vespilloides* ab. *subfasciatus*
 1925 Winkler: 265 (catalog) >> as *N. vespilloides* ab. *subfasciatus*
 1926a Portevin: 235 (revision: key, descriptions & catalog in French) >> as *N. vespilloides* ab. *subfasciatus*
 1928 Hatch: 138 (catalog) >> as *N. vespilloides* ab. *subfasciatus*
 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian) >> as *N. vespilloides* ab. *subfasciatus*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespilloides* ab. *subfasciatus*
 1965 Báguena: 52 (checklist in Spanish) >> as *N. vespilloides* ab. *subfasciatus*
 1989 Núñez et al.: 443 (checklist in Spanish (English summary)) >> as *N. vespilloides* var. *subfasciatus*

= *subinterruptus* Pic, 1917 NEW STATUS as absolute syn. of *N. vespilloides* Herbst

Type locality: unknown

Type depository: MNHN: Paris. [not found]

- 1917b Pic: 21 (description of variation in French) >> Orig. comb.: *Necrophorus vespilloides* var. *subinterruptus*
 1925 Winkler: 265 (catalog) >> as *N. vespilloides* ab. *subinterruptus*
 1926b Portevin: 258 (descriptions in French) >> as syn. of *N. vespilloides* ab. *subfasciatus*
 1928 Hatch: 138 (catalog) >> as syn. of *N. vespilloides* ab. *subfasciatus*
 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian) >> as *N. vespilloides* ab. *subinterruptus*
 1934 Roubal: 323 (description of variation in German) >> as *N. vespilloides* form *subinterrupta*
 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespilloides* ab. *subinterruptus*
 1965 Báguena: 52 (checklist in Spanish) >> as syn. of *N. vespilloides* ab. *subfasciatus*

= *sylvaticus* Reitter, 1895 CONFIRMED as SYNONYM of *N. vespilloides* Herbst

Type locality: “Transbaikalien & Quellgebiet des Irkut” [syntype labels]

Type depository: HNHM: Budapest [!] 5 syntypes [HNHM, SMTD]

- 1895b Reitter: 328 (description of variation in German) >> Orig. comb.: *Necrophorus vespilloides* var. *sylvaticus* [!N, S]
- 1896 Heyden: 38 (checklist in German) >> as *N. vespilloides* var. *sylvaticus*
- 1897 Reitter: 48 (description of variation in German) >> as *N. vespilloides* var. *sylvaticus*; compared to *N. vespilloides* var. *sylvivagus*
- 1899 Ganglbauer: 165 (descriptions, in German) >> as *N. vespilloides* var. *sylvaticus*
- 1910 Jakobson: 612 (checklist in Russian) >> as *N. vespilloides* var. *sylvaticus*
- 1914a Portevin: 195 (description of variation in French) >> compared to *N. vespilloides* var. *borealis*
- 1916 Pasquet: 146 (description of variation in French)
- 1924 Portevin: 375 (key, descriptions in French) >> as *N. vespilloides* var. *sylvaticus*
- 1925 Winkler: 265 (catalog) >> as *N. vespilloides* ab. *sylvaticus*
- 1926a Portevin: 235 (revision: key, descriptions & catalog in French) >> as *N. vespilloides* var. *sylvaticus*
- 1928 Hatch: 138 (catalog) >> as *N. vespilloides* var. *sylvaticus*
- 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian) >> as *N. vespilloides* ab. *sylvaticus*
- 1940 Hatch: 235 (description of variation) >> as *N. vespilloides* var. *sylvaticus*
- 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespilloides* var. *sylvaticus*
- 1967 Kuwayama (checklist in Russian)
- 1973 Krivolutskaya: 71 (checklist in Russian (with electronic english translation)) >> as *N. vespilloides* var. *sylvaticus* (cites Kuwayama 1967 usage)
- 1997 Krivolutskaya: 3 (checklist) >> as *N. vespilloides* var. *sylvaticus* (cites Kuwayama 1967 usage); (Krivolutskaya 1973)
- 2000 Nishikawa: 116 (checklist in English (Japanese summary)) >> as syn. of *N. vespilloides*

= *sylvivagus* Reitter, 1897 NEW STATUS as absolute syn. of *N. vespilloides* Herbst

Type locality: “Japan” [from syntype labels]

Type depository: HNHM: Budapest [!] 3 syntypes

- 1897 Reitter: 48 (description of variation in German) >> Orig. comb.: *Necrophorus vespilloides* var. *sylvivagus* [!S]
- 1910 Jakobson: 612 (checklist in Russian) >> as *N. vespilloides* var. *sylvivagus*
- 1916 Pasquet: 147 (description of variation in French)
- 1924 Portevin: 375 (key, descriptions in French) >> as *N. vespilloides* var. *sylvivagus*
- 1925 Winkler: 265 (catalog) >> as *N. vespilloides* ab. *sylvivagus*
- 1926a Portevin: 235 (revision: key, descriptions & catalog in French) >> as *N. vespilloides* ab. *sylvivagus*
- 1928 Hatch: 138 (catalog) >> as *N. vespilloides* var. *sylvivagus*
- 1933a Shchegoleva-Barovskaya: 182 (revision: key, descriptions & catalog in Russian) >> as *N. vespilloides* ab. *sylvivagus*
- 1940 Hatch: 235 (description of variation) >> as *N. vespilloides* ab. *sylvivagus*
- 1944 Arnett: 4 (morphology: female genitalia) >> as *N. vespilloides* ab. *sylvivagus*
- 1965 Báguena: 52 (checklist in Spanish) >> as *N. vespilloides* ab. *sylvivagus*

Nicrophorus vestigator Herschel, 1807

Type locality: unknown

Type depository: ZMHB: Berlin ?

Distribution: Palearctic & Oriental: Europe to Israel*, Transcaucasia, w. Siberia, Turkey, Pakistan with rare records from India:Kashmir

- 1807 Herschel: 274 (descriptions in German) >> Orig. comb.: *Nicrophorus Vestigator* [!N, S]
- 1825 Charpentier: 201 (descriptions) >> compared to *N. sepultor*
- 1825 Curtis: Pl. 71 (checklist) >> text accompanying Plate 71
- 1827 Gyllenhal: 308 (descriptions) >> misidentified as *N. sepultor*
- 1829b Stephens: 75 (catalog)
- 1830 Stephens: 18 (biology, descriptions)
- 1833 Dejean: 117 (catalog in French) >> auth. attrib. Illiger
- 1837 Erichson: 224 (species-group catalog in German)
- 1838 Sturm: 65 (in German)
- 1839 Matzek: 19 (morphology: internal & external anatomy in Latin) >> as *N. Vestigatore*
- 1839 Stephens: 114 (descriptions)
- 1840 Mareuse (description of variation in French)
- 1841a Heer: 387 (descriptions in German)
- 1841b Heer: 9 (checklist in German)
- 1846 Kolenati: 50 (catalog) >> spec. 203 in list
- 1847 Colin: 110-111 (morphology, larval stages in French) >> "Biology" - Hatch 1928
- 1847 Rosenhauer: 105 (checklist in German)
- 1849 Bach: 153 (checklist, brief descriptions in German)
- 1849 Gaubil: 55 (catalog in French)
- 1849 Redtenbacher: 140 (catalog in German)
- 1854 Lacordaire: 199 (biology, catalog in French)
- 1855 Fairmaire & : 291
- 1857 Jacquelin du Val: pl. 33 (in French)
- 1858 Calwer: 106 (checklist, brief descriptions in German)
- 1858 Redtenbacher: 289 (catalog in German)
- 1859 Gutfleisch & Bose: 202 (key, descriptions in German)
- 1859 Schaum: 36 (catalog in German)
- 1862 Schaum: 38 (catalog in German)
- 1862 Thomson: 8 (descriptions)
- 1863 Grenier: 13 (checklist in French)
- 1863 Marseul: 88 (catalog in French)
- 1865 Power: 198 (revision: key, descriptions & catalog)
- 1866 Marseul: 38 (catalog in French)
- 1868 Gemminger & Harold: 719 (catalog)
- 1868 Stein: 42 (catalog in Latin)
- 1869 Stierlin & Gautard: 116 (checklist in German)
- 1870 Vollenhoven et al.: 54 (checklist in Dutch)
- 1873 Michow: 13, 21 (in German)
- 1874 Cox: 407 (key, descriptions (brief))

- 1874 Seidlitz: 216 (key in German)
- 1876b Kraatz: 395 (morphology: clypeus in German)
- 1877 Hickel & Dragicsevics: 27 (checklist in French)
- 1877 Stein & Weise: 61 (catalog in Latin)
- 1883 Heyden et al.: 73 (checklist)
- 1884 Marseul: 187 (key, descriptions in French)
- 1884 Reitter: 88 (descriptions in German) >> as *Silpha vestigator*
- 1885 Marseul: 169 (catalog in French)
- 1885 Reitter: 323 (in German)
- 1885 Thomson: 66 (key, checklist in Swedish)
- 1888 Seidlitz: 312 (key in German) >> misspelled as *Necrophagus vestigator*
- 1889 Fowler: 44 (descriptions, catalog)
- 1889 Sahlberg: 19 (checklist in Swedish)
- 1889 Seidlitz: 329 (key in German) >> misspelled as *Necrophagus vestigator*
- 1891 Heyden et al.: 139 (checklist) >> as *Necrophorus vestigator*
- 1893 Heyden: 51 (checklist in German)
- 1895b Reitter: 329 (description of variation in German)
- 1896 Acloque: 241 (key in French)
- 1898 Everts: 413
- 1899 Fabre (biology, larval stages in French) >> “Larva” - Hatch 1928
- 1899 Ganglbauer: 166 (key, descriptions, in German)
- 1900 Bordas: 297 (morphology: testes in French) >> “Morphology- testes” -Hatch 1928
- 1900 Reitter: 82 (description of variation in German)
- 1901 Carret: 329 (description of variation in French)
- 1902 Heyden: 12 (nomenclature in French)
- 1905 Weber (biology, ecology, behavior in German)
- 1906 Heyden et al.: 247 (checklist)
- 1909 Reitter: 241 (in German)
- 1910 Jakobson: 612 (checklist in Russian)
- 1911 Reitter: 106 (description of variation in German) >> description of variation: 1 unavailable name
- 1912 Benick: 197-203 (morphology, larval & pupal stages in German) >>
- 1912 Fleischer: 250 (description of variation in German) >> description of variation: 1 unavailable name
- 1913 Kniephof: 187 (in German)
- 1913 Kuhnt: 336 (in German)
- 1913 Lucas: 241
- 1914a Portevin: 195 (description of variation in French) >> description of variation: 1 unavailable name
- 1916 Pasquet: 168 (description of variation in French)
- 1916 Schaufuss: 274 (checklist in German)
- 1917b Pic (description of variation in French)
- 1918 Fabre (biology)
- 1919 Fabre: 294-351 (biology, ecology, behavior) >> “Biology” -Hatch 1928
- 1920 Portevin: 400 (descriptions in French)
- 1922 Everts: 182

- 1922 Sherborn: 6882 (catalog - index) >> auth. attrib. Ill.
 1925 Fuente y Morales: 120 (checklist in Spanish)
 1925 Portevin: 168 (description of variation in French) >> description of variation: 1 unavailable name
 1925 Winkler: 265 (catalog)
 1926 Porta: 333 (key, checklist in Italian)
 1926a Portevin: 247 (revision: key, descriptions & catalog in French)
 1927b Hatch: 362 (revision: key, descriptions & catalog) >> description of variation: 1 unavailable name
 1928 Hatch: 148 (catalog) >> description of variation: 1 unavailable name
 1929 Hlisnikovsky: 119, 120 (in German) >> description of variation: 2 unavailable names
 1929 Portevin: 540 (key, intraspecific variation in French)
 1930 Kieseritzky: 61 (descriptions in Russian (German summary)) >> in footnote
 1930 Roubal: 241 (catalog in Czech)
 1932 Hlisnikovsky: 30 (key, descriptions in German)
 1932 Joy: 466 (key)
 1933a Pic (description of variation in French)
 1933 Pukowski: 518-586 (biology, ecology in German)
 1933 Rapp: 538 (biology, ecology, distribution in German)
 1933 Semenov-Tian-Shanskij: 156 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian)
 1933 Walsh: 30 (biology, ecology)
 1934 Peyerimhoff: 334 (distribution note in French)
 1934b Pukowski: 54 (morphology, larval stages in German) >> cites Benick (1912)
 1939 Roubal: 85 (description of variation in Czech (French summary))
 1945 Kloet & Hincks: 155 (checklist)
 1946 Paulian: 95 (biology, ecology in French)
 1947 Cantonnet & Lecordier: 134 (biology, ecology in French)
 1949 Fabre: 235 (biology) >> observations of nest making behavioral repertoire
 1949 Horion: 77 (biology, ecology, distribution in German)
 1949 Mroczkowski: 196 (biology, ecology in Polish (English summary))
 1949 Roehrich: 44 (biology, ecology in French)
 1949 Théodoridès (biology, ecology in French)
 1950b Théodoridès: 5 (biology, ecology, morphology in French)
 1952 Benick: 33 (biology, ecology in German)
 1955 Moore: 294 (biology, ecology)
 1955 Mroczkowski: 23 (key, descriptions in Polish)
 1959 Hicks: 94 (biology, ecology)
 1959 Linszen: 163 (catalog)
 1960 Hansen et al.: 72 (checklist in Danish)
 1965 Báguena: 51 (checklist in Spanish) >> description of variation: 1 new unavailable name
 1968 Hansen: 20 (key, descriptions in Danish)
 1968 Petruška: 168 (biology, ecology in Czech (English summary))
 1969 Ernst: 75 (morphology: antennal sensillae in German (English summary))
 1969 Krzelj: 89 (morphology: elytra in French)

- 1971 Freude: 194 (key in German)
- 1972b Ernst: 96 (morphology: antennal sensillae in German (English summary))
- 1975b Emetz: 106 (checklist in Russian)
- 1977 Pope: 20 (checklist)
- 1978 Blas: 50 (key, descriptions in Spanish)
- 1978 Burakowski et al.: 205 (catalog, distribution, synonymy in Polish)
- 1979 Salgado & Régil: 87 (catalog, annotated & figured in Spanish)
- 1979 Silfverberg: 12 (checklist, distribution)
- 1980 Franssen: 46 (morphology: female genitalia in French) >> female genitalia figured
- 1981 Spriggs: 116 (descriptions, ecology)
- 1981 Šustek: 40 (key, descriptions, regional in Czech)
- 1982 Schawaller: 256 (checklist in German (English summary))
- 1983 Putman: 38-42 (biology, ecology)
- 1984a Bredohl: 11-25 (morphology: stridulatory files in German (English summary))
- 1985 Zahradník: 123 (catalog, annotated & figured in German)
- 1986 Nishikawa: 99 (catalog in Japanese (English summary))
- 1987 Lucht: 67 (catalog in German)
- 1989 Koch: 165 (biology, ecology in German)
- 1989 Núñez et al.: 443 (checklist in Spanish (English summary))
- 1990 Erbeling: 116 (biology, ecology in German (English summary))
- 1990 Zahradník: 123 (key in Spanish)
- 1992 Kozminykh: 64 (checklist in Russian)
- 1992 Kozminykh & Esjunin: 68 (checklist in Russian)
- 1992 Silfverberg: 14 (checklist, distribution in English (Finnish & Swedish summaries))
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian)
- 1993 Růžička: 34 (checklist, distribution in English & Czech)
- 1994 Bertin & Fallaci: 219 (checklist in Italian (English summary))
- 1994 Kozminykh & Esjunin: 78 (biology, ecology in English (Russian summary))
- 1994 Madge: 545 (comment)
- 1995 Angelini et al.: 10 (checklist, distribution in Italian)
- 1995 Dapsio: 120 (checklist in Lithuanian)
- 1995 Kozminykh: 110 (key in Russian)
- 1995 Kozminykh & Nemkov: 112 (catalog in Russian)
- 1996 Alexandrovich et al.: 17 (checklist, distribution in Russian & English)
- 1996 Bertin & Lebboroni: 155 (checklist in Italian (English summary))
- 1996 Hansen: 93 (checklist, distribution in Danish & English)
- 1996 Růžička & Schneider: 81 (checklist in English (Czech summary))
- 1997 Kozminykh: 65 (checklist in Russian)
- 1997 Pushkin: 24 (biology, ecology in Russian)
- 1997 Pushkin & Charthenko: 62 (biology, ecology in Russian)
- 1998 Háva et al.: 180 (distribution note in English (Czech summary)) >> Turkey; Abant; First confirmed record for Turkey
- 1998 Pushkin & Sigida: 84 (biology, ecology in Russian)
- 1999 Bertin & Lebboroni: 61 (checklist in Italian)
- 2000 Bahillo de la Puebla & López-Colón: 246 (biology, descriptions, distribution in

Spanish)

- 2002 Nikolajev & Kozminykh: 113 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *anglicus* Stephens, 1830

Type locality: not mentioned

Type depository: unknown

- 1825 Curtis: pl. 71 (checklist) >> text accompanying Plate 71; as "Leach's MSS"; no description, nomen nudum
- 1829a Stephens: 7 (checklist) >> no description, nomen nudum
- 1829b Stephens: 74 (catalog) >> no description; nomen nudum; "Leach MSS--(Curtis l. c. supra)"
- 1830 Stephens: 17 (biology, descriptions) >> Orig. comb.: *Necrophorus anglicus* as syn. of *N. sepultor* Gyllenhal [!N, S]
- 1833 Samouelle: 4-2 (descriptions) >> first use as valid
- 1868 Gemminger & Harold: 719 (catalog) >> as syn. of *N. sepultor* (misspelled as *N. sepulchralis*)
- 1926a Portevin: 261 (revision: key, descriptions & catalog in French) >> as syn. of *N. vestigator*
- 1928 Hatch: 148 (catalog) >> as syn. of *N. vestigator*
- 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. vestigator*
- 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. vestigator*
- 1993b Kozminykh: 65 (key, descriptions, regional in Russian) >> as syn. of *N. vestigator*
- 1995 Kozminykh & Nemkov: 112 (catalog in Russian) >> as syn. of *N. vestigator*
- 2002 Nikolajev & Kozminykh: 113 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *N. vestigator*

= *bipunctatus* Portevin, 1914 (junior primary homonym, not Kraatz 1880) NEW STATUS as absolute syn. of *N. vestigator* Herschel

Type locality: "Andalousie" [descrip.]

Type depository: unknown; not DEIC: Eberswalde [L. Zerche, in litt.]

- 1914a Portevin: 195 (description of variation in French) >> Orig. comb.: *Necrophorus vestigator* var. *bipunctatus* [!N, S]
- 1925 Winkler: 265 (catalog) >> as *N. vestigator* ab. *bipunctatus*
- 1926a Portevin: 261 (revision: key, descriptions & catalog in French) >> as syn. of *N. vestigator* ab. *Brullei*
- 1928 Hatch: 148 (catalog) >> as syn. of *N. vestigator* ab. *interruptus* Br.
- 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian) >> as *N. vestigator* ab. *bipunctatus*
- 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. vestigator* ab. *interruptus* Br.

= *brullei* Jacobson, 1910 (nomen novum for *N. interruptus* Brullé) NEW STATUS as absolute syn. of *N. vestigator*

Type locality: see *N. interruptus* Brullé

Type depository: see *N. interruptus* Brullé

- 1910 Jakobson: 612 (checklist in Russian) >> Orig. comb.: *Necrophorus vestigator* var. *brullei* [nomen novum] created replacement name for *N. interruptus* Brulle [preocc.] [!N, S]
- 1916 Pasquet: 167 (description of variation in French)
- 1925 Fuente y Morales: 120 (checklist in Spanish) >> as var. of *vestigator*
- 1925 Winkler: 265 (catalog) >> as syn. of *N. vestigator*
- 1926a Portevin: 261 (revision: key, descriptions & catalog in French) >> as *N. vestigator* ab. *brullei*
- 1928 Hatch: 148 (catalog) >> as syn. of *N. vestigator* ab. *interruptus*
- 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian) >> as *N. vestigator* ab. *brullei*
- 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. vestigator* ab. *interruptus*
- 1979 Salgado & Régil: 88 (catalog, annotated & figured in Spanish) >> as *N. vestigator* var. *brullei*
- 1989 Núñez et al.: 445 (checklist in Spanish (English summary)) >> as *N. vestigator* var. *brullei*; most common var. observed

= *cadaverinus* Mareuse, 1840 (junior primary homonym, not Gravenhorst, 1807)

Type locality: unknown

Type depository: unknown

- 1840 Mareuse: 40 (description of variation in French) >> Orig. comb.: *Necrophorus sepultor cadaverinus*; New junior primary homonym, not Gravenhorst 1807]
- 1925 Portevin: 168 (description of variation in French) >> as *N. vestigator* ab. *cadaverinus*
- 1926a Portevin: 247 (revision: key, descriptions & catalog in French) >> as *N. vestigator* ab. *cadaverinus*
- 1928 Hatch: 148 (catalog) >> Orig. comb.: *N. vestigator* ab. *Mareusei* (nomen novum for *N. sepultor cadaverinus*)
- 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian) >> as syn. of *N. vestigator* ab. *Mareusei*, syn. of *N. vestigator*

= *carreti* Pic, 1933 NEW STATUS as absolute syn. of *N. vestigator* Herschel

Type locality: unknown

Type depository: MNHN: Paris [not found]

- 1933a Pic: 5 (description of variation in French) >> Orig. comb.: *Necrophorus vestigator* var. *Carreti*

= *degener* Carret, 1901 NEW STATUS as absolute syn. of *N. vestigator* Herschel

Type locality: “Haute-Savoie: Mègeve; Orléans; Remiremont” [France: Mègeve 45.51°N, 6.37°E; Orelans: 47.54°N, 1.54°E; Remiremont: 48.01°N, 6.35°E; descrip.]

Type depository: MNHN: Paris [not found]

- 1901 Carret: 330 (description of variation in French) >> Orig. comb.: *Necrophorus vestigator* var. *degener* [!S]

- 1902 Heyden: 12 (nomenclature in French) >> as syn. of *N. vestigator* var. *rautenbergi*
 1906 Heyden et al.: 247 (checklist) >> as syn. of *N. vestigator* var. *rautenbergi*
 1910 Jakobson: 612 (checklist in Russian) >> as syn. of *N. vestigator* var. *rautenbergi*
 1925 Winkler: 265 (catalog) >> as syn. of *N. vestigator* ab. *rautenbergi*
 1926a Portevin: 261 (revision: key, descriptions & catalog in French) >> as syn. of *N. vestigartor* ab. *cadaverinus*
 1928 Hatch: 148 (catalog) >> as syn. of *N. vestigator* ab. *Rauterbergi*
 1965 Báguena: 51 (checklist in Spanish) >> as syn. of *N. vestigator* ab. *rauterbergi*

= *interruptiolus* Strand, 1917 (nomen novum for *interruptus* Gistel) REVISSED SYNONYM of *N. vestigator* Herschel

Type locality: see *N. interruptus* Gistel

Type depository: see *N. interruptus* Gistel

- 1917 Strand: 83 (descriptions in German) >> Orig. comb.: *Necrophorus interruptiolus*; (new name for *N. interruptus* Gistel; nomen dubium) [!N, S]
 1928 Hatch: 153 (catalog) >> *Incertae sedis*

= *interruptus* Gistel, 1857 (junior primary homonym, not Stephens 1830)

Type locality: "Hispania" [Spain; descrip.]

Type depository: ZSMC: München?

- 1857b Gistel: 565 (in German) >> Orig. comb.: *Necrophorus interruptus*; New junior primary homonym, not *N. interruptus* Stephens 1830 or *N. interruptus* Brullé 1832 [!N]
 1917 Strand: 83 (descriptions in German) >> notes that this name is preoccupied & creates nomen novum
 1928 Hatch: 153 (catalog) >> *Incertae sedis*

= *interruptus* Brullé, 1832 (junior primary homonym, not Stephens 1830) REVISSED SYNONYM of *N. brullei* Jakobson, syn. of *N. vestigator*

Type locality: not mentioned

Type depository: MNHN: Paris [not found]

- 1832 Brullé: 160 (descriptions) >> Orig. comb.: *Necrophorus interruptus*; New junior primary homonym, not Stephens 1830 [!N, S]
 1840 Laporte: 2 (descriptions in French) >> as *N. interruptus* Steph. var. *interruptus* Brullé
 1854 Lacordaire: 200 (biology, catalog in French) >> as valid species
 1859 Schaum: 36 (catalog in German) >> as *N. vestigator* var. *interruptus* Brullé
 1862 Schaum: 38 (catalog in German) >> as *N. vestigator* var. *interruptus* Brullé
 1863 Grenier: 13 (checklist in French) >> as *N. vestigator* var. *interruptus* Brullé
 1863 Marseul: 88 (catalog in French) >> as *N. vestigator* var. *interruptus* Brullé
 1868 Gemminger & Harold: 719 (catalog) >> as *N. vestigator* var. *interruptus* Brullé
 1868 Stein: 42 (catalog in Latin) >> as *N. vestigator* var. *interruptus* Brullé
 1877 Stein & Weise: 61 (catalog in Latin) >> as *N. vestigator* var. *interruptus* Brullé
 1883 Heyden et al.: 73 (checklist) >> as syn. of *N. vestigator* var. *trimaculatus* Gradl
 1884 Marseul: 187 (key, descriptions in French) >> as *N. vestigator* var. *interruptus* Brul.

- 1884 Reitter: 88 (descriptions in German) >> as *Silpha interruptus* Br.; as syn. of *N. vestigator*
- 1885 Marseul: 169 (catalog in French) >> as *N. vestigator* var. *interruptus* Brullé
- 1885 Reitter: 323 (in German)
- 1891 Heyden et al.: 139 (checklist) >> as *N. vestigator* var. *interruptus* Br.
- 1895b Reitter: 329 (description of variation in German) >> as absolute syn. of *N. vestigator*
- 1898 Everts: 413
- 1901 Carret: 329 (description of variation in French) >> as *N. vestigator* var. *interruptus* Br.
- 1906 Heyden et al.: 247 (checklist) >> as *N. vestigator* var. *interruptus* Br.
- 1910 Jakobson: 612 (checklist in Russian) >> Orig. comb.: *N. Brullei* (nomen novum for *N. interruptus* Brullé).
- 1911 Reitter: 106 (description of variation in German) >> as *N. vestigator* ab. *interruptus* Br.
- 1913 Kniephof: 187 (in German) >> as *N. vestigator* ab. *interruptus* Br.
- 1913 Kuhnt: 336 (in German)
- 1916 Schaufuss: 274 (checklist in German)
- 1922 Everts: 182
- 1922 Sherborn: 3229 (catalog - index)
- 1925 Portevin: 168 (description of variation in French) >> as *N. vestigator* ab. *interruptus* Br.
- 1925 Winkler: 265 (catalog) >> as absolute syn. of *N. vestigator*
- 1926a Portevin: 261 (revision: key, descriptions & catalog in French) >> as syn of *N. vestigator* ab. *Brullei* Jakobson
- 1928 Hatch: 148 (catalog) >> as *N. vestigator* ab. *interruptus* Br. [incorrect date Brullé 1822, should be 1832]
- 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian) >> as syn of *N. vestigator* ab. *Brullei* Jacobs
- 1965 Báguena: 51 (checklist in Spanish) >> as *N. vestigator* ab. *interruptus* Br.
- 1965 Báguena: 51 (checklist in Spanish) >> as *N. vestigator* ab. *interruptus* Br.
- 1979 Salgado & Régil: 88 (catalog, annotated & figured in Spanish) >> as *N. vestigator* var. *interruptus* Br.

= *obscuripennis* Portevin, 1914 NEW STATUS as absolute syn. of *N. vestigator* Herschel

Type locality: "Allemagne bork." [Germany: Nordrhein-Westfalen: 51.65N, 7.47E; label]

Type depository: MNHN: Paris [!] holotype female

- 1914a Portevin: 195 (description of variation in French) >> Orig. comb.: *Necrophorus vestigator* var. *obscuripennis* [!N, S]
- 1925 Winkler: 265 (catalog) >> as *N. vestigator* ab. *obscuripennis*
- 1926a Portevin: 261 (revision: key, descriptions & catalog in French) >> as syn. of *N. vestigator* ab. *cadaverinus*
- 1928 Hatch: 149 (catalog) >> as syn. of *N. vestigator* ab. *reductor*

- = olfactor Gistel, 1848 NEW SYNONYM of *N. vestigator* Herschel
 Type locality: "Spain" [descrip.]
 Type depository: ZSMC: München?
 1848 Gistel: 190 (descriptions in German) >> Orig. comb.: *Necrophorus Olfactor* [!N]
 1917 Strand: 84 (descriptions in German)
 1928 Hatch: 153 (catalog) >> *Incertae sedis*
- = rautenbergi Reitter, 1900 [corrected spelling] NEW STATUS as absolute syn. of
N. vestigator Herschel
 Type locality: "Hildesheim" [nw Germany: 52.15°N, 9.97°E; label]
 Type depository: HNHM: Budapest [!] holotype female
 1900 Reitter: 82 (description of variation in German) >> Orig. comb.: *Necrophorus*
 vestigator var. *Rautenbergi* [!S]
 1902 Heyden: 12 (nomenclature in French) >> as senior syn. of *N. vestigator* var.
 degener
 1906 Heyden et al.: 247 (checklist) >> as *N. vestigator* var. *rautenbergi*
 1909 Reitter: 241 (in German)
 1910 Jakobson: 612 (checklist in Russian) >> as *N. vestigator* var. *rautenbergi*
 1911 Reitter: 106 (description of variation in German) >> as *N. vestigator* ab. *Rauter-*
 bergi
 1913 Kuhnt: 336 (in German)
 1914a Portevin: 195 (description of variation in French) >> compared to *N. vestigator*
 var. *obscuripennis*
 1916 Schaufuss: 274 (checklist in German)
 1922 Everts: 182
 1925 Portevin: 168 (description of variation in French) >> as *N. vestigator* ab. *Rauter-*
 bergi
 1925 Winkler: 265 (catalog) >> as *N. vestigator* ab. *rautenbergi*
 1926a Portevin: 247 (revision: key, descriptions & catalog in French) >> as syn. of *N.*
 vestigator ab. *cadaverinus*
 1928 Hatch: 148 (catalog) >> as *N. vestigator* ab. *Rautenbergi*
 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian)
 >> as *N. vestigator* ab. *rautenbergi*
 1965 Báguena: 51 (checklist in Spanish) >> as *N. vestigator* ab. *rautenbergi*
- = sepultor Gyllenhal, 1827 (junior primary homonym, not Charpentier, 1825)
 Type locality: "Scania" [Skåne; descrip.]
 Type depository: unknown
 1827 Gyllenhal: 308 (descriptions) >> Orig. comb.: *Necrophorus sepultor* [!N, S]
 1821 Dejean: 42 (catalog) >> nomen nudum, no descriptions
 1829a Stephens: 7 (checklist) >> attrib. "DeJ."
 1829b Stephens: 75 (catalog) >> attrib. "DeJean C. 42, Gyll. iv.308"
 1830 Stephens: 17 (biology, descriptions) >> attrib. Gyllenhal
 1832 Ménétrés: 167 (checklist in French) >> as valid species, attrib. "Dej. Gyll."
 1833 Dejean: 117 (catalog in French) >> auth. attrib. Dejean

- 1837 Erichson: 224 (species-group catalog in German) >> as syn. of *N. vestigator* Herschel
- 1839 Stephens: 113 (descriptions) >> attrib. Gyllenhal
- 1841a Heer: 387 (descriptions in German) >> as syn. of *N. vestigator*
- 1849 Gaubil: 55 (catalog in French) >> as syn. of *N. vestigator*
- 1862 Thomson: 9 (descriptions) >> as syn. of *N. vestigator*
- 1874 Seidlitz: 216 (key in German) >> as syn. of *N. vestigator*
- 1885 Marseul: 169 (catalog in French) >> as syn. of *N. vestigator*
- 1888 Seidlitz: 312 (key in German) >> as syn. of *N. vestigator*, misspelled as *Necrophagus sepultor* Gyll.
- 1889 Seidlitz: 329 (key in German) >> as syn. of *N. vestigator*; misspelled as *Necrophagus sepultor* Gyll.

= *viturati* Pic, 1917 NEW STATUS as absolute syn. of *N. vestigator* Herschel

Type locality: unknown

Type depository: MNHN: Paris [!] holotype male

- 1917b Pic: 21 (description of variation in French) >> Orig. comb.: *Necrophorus vestigator* var. *Viturati*
- 1925 Portevin: 168 (description of variation in French) >> as *N. vestigator* ab. *Viturati*
- 1926a Portevin: 247 (revision: key, descriptions & catalog in French) >> as *N. vestigator* ab. *Viturati*
- 1933a Shchegoleva-Barovskaya: 180 (revision: key, descriptions & catalog in Russian) >> as *N. vestigator* ab. *viturati*
- 1965 Báguena: 51 (checklist in Spanish) >> as *N. vestigator* ab. *viturati*

Comments: The name *N. interruptus* Brullé (1832) is a junior primary homonym of *N. interruptus* Stephens (1830). The *nomen novum* *N. brullei* Jacobson (1910) was introduced to replace Brullé's homonym. Despite this action, many subsequent authors continued to use *N. interruptus* Brullé, based primarily on confusion wrought by Portevin (1926a) and Hatch (1928) over the date of *N. interruptus* Brullé (see comments under *N. interruptus* Stephens), so we are herein synonymizing this name under its replacement name. Both names are synonyms of *N. vestigator*.

See comments for *N. germanicus* and *N. interruptus* regarding the names of Gistel. We herein synonymize *N. interruptus* Gistel, 1857 and *N. olfactor* Gistel, 1848 under *N. vestigator*. Gistel described *N. olfactor* from Spain as being like “*sepultor*” and with yellow hairs on the pronotum; the only species matching this description from Spain is *N. vestigator* (which was misidentified as *N. sepultor* by Gyllenhal). The name *N. interruptolus* Strand was introduced as a *nomen novum* for Gistel's junior primary homonym, *N. interruptus*, and thus also is a synonym of *N. vestigator*.

PTOMASCOPUS Kraatz, 1876: 396

[correct original spelling, first reviser Kraatz 1877)

Type species: *Ptomascopus morio* Kraatz, 1877 (designated by Hatch, 1928: 154)

- 1876a Kraatz: 395 >> original misspelling as *Tomascopus*
 1877 Kraatz: 102 >> first reviser; *Ptomascopus* described as new
 1879 Rye: 31 >> unjustified emendation as *Ptomatoscopus*

***Ptomascopus morio* Kraatz, 1877**

Type locality: "Japan" [descrip.]

Type depository: unknown; not DEIC: Eberswalde [L. Zerche, in litt.]

Distribution: Palearctic: Japan, nChina, Korea, Russia- Amur & Ussuri reg.

- 1877 Kraatz: 104 (descriptions in German) >> Orig. comb.: *Ptomascopus morio* [!N, S]
 1879 Lewis: 460 (descriptions) >> compared to *P. plagiaticipennis*
 1887 Lewis: 341 (description)
 1890 Flach: 106 (descriptions in German) >> figured
 1904 Jakobson: 33 (in Russian)
 1909 Arrow: 190 (redescriptions)
 1910 Jakobson: 613 (checklist in Russian) >> as *Ptomascopus plagiatus* var. *morio*
 1914b Portevin: 223 (description of variation in French) >> as valid species
 1916 Bodemeyer: 112 (descriptions in German)
 1923 Portevin: 70 (key, descriptions in French)
 1925 Winkler: 265 (catalog)
 1926a Portevin: 184 (revision: key, descriptions & catalog in French)
 1927b Hatch: 364 (revision: key, descriptions & catalog)
 1928 Hatch: 154 (catalog)
 1929 Kōno: 164 (checklist, annotated)
 1930 Yokoyama: 121 (descriptions in Japanese)
 1931 Miwa: 47 (catalog)
 1932 Esaki et al. (catalog)
 1933 Semenov-Tian-Shanskij: 151 (catalog in Russian & Latin) >> as type sp. of genus *Ptomascopus* Kraatz
 1933a Shchegoleva-Barovskaya: 170 (revision: key, descriptions & catalog in Russian)
 1936 Cho: 155 (checklist in Korean)
 1937 Mochizuki & Tsunekawa (checklist)
 1937 Wu (catalog)
 1939 Masui (checklist)
 1953 Mazokhin-Porshnyakov: 235 (descriptions, catalog in Russian)
 1955a Nakane: 48 (checklist in Japanese)
 1956 Esaki et al.: 1029 (checklist, descriptions in Japanese)
 1957 Cho (catalog in Korean)
 1960 Kawada: 427 (morphology, larval stages) >> larvae figured
 1963 Cho (catalog in Korean)
 1963 Nakane: 76 (checklist, brief descriptions in Japanese)
 1964 Kamimura et al.: A19 (biology, ecology)

- 1966c Mroczkowski: 435 (checklist)
 1969 Gersdorf: 304 (fossils, descriptions in German)
 1970 Gersdorf: 364 (morphology: female genitalia in German) >> female genitalia figured
 1978 Kim: 62 (catalog, distribution)
 1979 Nakane & Baba: 10 (checklist, distribution in Japanese)
 1980 Madge: 358 (catalog)
 1980 Schwallier: 152 (checklist in German (English summary))
 1982a Anderson: 255 (key, descriptions, morphology, larval stages)
 1982 Peck: 107-111 (biology, behavior) >> focal species
 1985 Katakura & Ueno: 463 (biology, ecology)
 1985a Kurosawa: 248 (checklist) >> color habitus figure pl. 44
 1985 Lee et al. (checklist in Korean)
 1985 Paik: 2-12
 1985 Peck & Anderson: 275 (key, descriptions, phylogenetics)
 1986 Cho & Lee: 21 (phylogenetics)
 1986 Katakura et al.: 43-55 (biology, ecology)
 1986 Nishikawa: 99 (catalog in Japanese (English summary))
 1989 Lafer: 336 (key, descriptions, description of variation in Russian)
 1992 Cho & Lee: 20 (revision: key, descriptions & catalog)
 1992 Nomura & Lee: 81 (catalog)
 1992b Ôhara: 9 (checklist in Japanese (English summary))
 1993b Kozminykh: 61 (key, descriptions, regional in Russian)
 1993 Leschen: 78 (morphology: mandibles) >> genus name only in text
 1995a Ôhara: 25 (checklist in Japanese (English summary))
 1996 Palestini et al.: 442 (larval descriptions, phylogenetics)
 1997 Eggert & Müller: 222 (biology, review of: ecology, behavior)
 1997 Hansen: 334 (phylogenetics) >> larva figured
 1998 Harusawa: 34 (key in Japanese)
 1998b Scott: 602 (biology, review of: ecology, behavior)
 1998 Suzuki: 156 (biology, behavior in Japanese)
 1999 Háva et al.: 73 (key, descriptions) >> compared to *P. zhangla*
 2000 Dobler & Müller: 392 (phylogenetics) >> CO1 based phylogeny
 2000 Nomura et al.: 268
 2000 Szalanski et al.: 590 (biology, conservation, phylogenetics, genetics)
 2000 Trumbo & Sikes: 585-589 >> focal species
 2001 Nagano & Hoshina: 1-5 (description of variation in Japanese) >> focal species, description of elytral color variation
 2001 Trumbo et al.: 543-560 (biology, ecology, behavior) >> focal species; brood parasite of *N. concolor*
 2002 Nikolajev & Kozminykh: 96 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *carbunculus* Lewis, 1879 CONFIRMED as SYNONYM of *Ptomascopus morio*
 Kraatz
 Type locality: "Amazon River" [erroneous locality; label]

Type depository: BMNH: London [!] holotype female

- 1879 Lewis: 460 (descriptions) >> Orig. comb.: *Ptomascopus carbunculus* [!N, S]
 1909 Arrow: 190 (redescriptions) >> as syn. of *P. morio*; states type locality of “Amazons” is incorrect
 1914b Portevin: 223 (description of variation in French) >> suggest might be syn. of *P. morio*
 1926a Portevin: 249 (revision: key, descriptions & catalog in French) >> as syn. of *P. morio*
 1928 Hatch: 154 (catalog) >> as syn. of *P. morio*
 1933a Shchegoleva-Barovskaya: 170 (revision: key, descriptions & catalog in Russian) >> as syn. of *P. morio*
 1993b Kozminykh: 61 (key, descriptions, regional in Russian) >> as syn. of *P. morio*

= *lewisi* Portevin, 1914 NEW STATUS as absolute syn. of *P. morio* Kraatz

Type locality: not mentioned

Type depository: MNHN: Paris [not found]

- 1914b Portevin: 223 (description of variation in French) >> Orig. comb.: *Ptomascopus morio* var. *Lewisi* [!N, S]
 1923 Portevin: 70 (key, descriptions in French) >> as *P. morio* ab. *Lewisi*
 1925 Winkler: 265 (catalog) >> as *P. morio* ab. *lewisi*
 1926a Portevin: 184 (revision: key, descriptions & catalog in French) >> as *P. morio* ab. *Lewisi*
 1928 Hatch: 154 (catalog) >> as *P. morio* ab. *Lewisi*
 1933a Shchegoleva-Barovskaya: 170 (revision: key, descriptions & catalog in Russian) >> as *P. morio* ab. *lewisi*
 2001 Nagano & Hoshina: 3 (description of variation in Japanese) >> demonstration that this variety does not deserve subspecific rank

= *villosus* Portevin, 1923 NEW STATUS as absolute syn. of *P. morio* Kraatz

Type locality: “Corée” [Korea; label]

Type depository: MNHN: Paris [!] holotype

- 1923 Portevin: 70 (key, descriptions in French) >> Orig. comb.: *Ptomascopus morio* var. *villosus* [!N, S]
 1925 Winkler: 265 (catalog) >> as *P. morio* var. *villosus*
 1926a Portevin: 249 (revision: key, descriptions & catalog in French) >> as *P. morio* var. *villosus*
 1928 Hatch: 154 (catalog) >> as *P. morio* var. *villosus*
 1933a Shchegoleva-Barovskaya: 170 (revision: key, descriptions & catalog in Russian) >> as *P. morio* ab. *villosus*

***Ptomascopus plagiatus* (Ménétriés, 1854)**

Type locality: “mongolie chinoise et aux environs de Pékin” [ne China; descrip.]

Type depository: MNHN: Paris? [not found]

Distribution: Palearctic: neChina, Korea, Japan?, Russia: Ussuri reg.

- 1854 Ménétriés: 27 (descriptions in French) >> Orig. comb.: *Necrophorus plagiatus* [!N, S]

- 1868 Gemminger & Harold: 719 (catalog) >> as *Necrophorus plagiatus*
 1887 Lewis: 341 (description) >> as *Ptomascopus plagiatus*
 1888 Lewis: 9
 1891 Fairmaire: 192 (checklist in French)
 1904 Jakobson: 33 (in Russian)
 1910 Jakobson: 613 (checklist in Russian) >> as senior syn. of *P. morio*
 1914b Portevin: 223 (description of variation in French)
 1923 Portevin: 71 (key, descriptions in French)
 1925 Winkler: 265 (catalog)
 1926a Portevin: 185 (revision: key, descriptions & catalog in French)
 1927b Hatch: 364 (revision: key, descriptions & catalog)
 1928 Hatch: 154 (catalog)
 1929 Kôno: 164 (checklist, annotated)
 1933 Semenov-Tian-Shanskij: 154 (catalog in Russian & Latin)
 1933a Shchegoleva-Barovskaya: 170 (revision: key, descriptions & catalog in Russian)
 1936 Cho: 157 (checklist in Korean) >> new record for Korea
 1937 Mochizuki & Tsunekawa (checklist)
 1937 Wu (catalog)
 1938 Mori & Cho (checklist)
 1939 Masui (checklist)
 1942 Hlisenkovsky: 578 (nomenclature in German)
 1953 Mazokhin-Porshnyakov: 235 (descriptions, catalog in Russian)
 1956 Esaki et al.: 1028 (checklist, descriptions in Japanese)
 1957 Cho (catalog in Korean)
 1963 Nakane: 76 (checklist, brief descriptions in Japanese)
 1966c Mroczkowski: 435 (checklist)
 1980 Schawaller: 153 (checklist in German (English summary))
 1982 Peck: 108 (biology, behavior)
 1986 Nishikawa: 99 (catalog in Japanese (English summary))
 1989 Lafer: 336 (key, descriptions, description of variation in Russian)
 1992 Cho & Lee: 20 (revision: key, descriptions & catalog)
 1993b Kozminykh: 61 (key, descriptions, regional in Russian)
 1996 Růžička & Schneider: 80 (checklist in English (Czech summary))
 1997 Hansen: 17, 222 (phylogenetics) >> stridulatory files figured
 1999 Háva et al.: 73 (key, descriptions) >> compared to *P. zhangla*
 2001 Nagano & Hoshina: 1-2 (description of variation in Japanese) >> elytral pattern compared to variation in *P. morio*
 2002 Nikolajev & Kozminykh: 96 (catalog, distribution, descriptions, keys, figures in Russian (English summary))

= *dauidis* Deyrolle & Fairmaire, 1878 CONFIRMED as SYNONYM of *Ptomascopus plagiatus* (Ménétriés)

Type locality: "Nord Pekin" [China; label]

Type depository: MNHN: Paris [!] 2 syntype males

- 1878 Deyrolle & Fairmaire: 91 (descriptions in French) >> Orig. comb.: *Ptomascopus Davidis* [!S]

- 1925 Winkler: 265 (catalog) >> as syn. of *P. morio*
 1926a Portevin: 249 (revision: key, descriptions & catalog in French) >> as syn. of *P. plagiatus*
 1928 Hatch: 154 (catalog) >> as syn. of *P. plagiatus*
 1933a Shchegoleva-Barovskaya: 170 (revision: key, descriptions & catalog in Russian)
 >> as syn. of *P. plagiatus*
 1993b Kozminykh: 61 (key, descriptions, regional in Russian) >> as syn. of *P. plagiatus*
 2002 Nikolajev & Kozminykh: 96 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *P. plagiatus*

= *plagiatiipennis* Lewis, 1879 CONFIRMED as SYNONYM of *Ptomascopus plagiatus* (Ménétriés)

Type locality: “Kagoshima” [Kyushu, Japan; label; probably erroneous (Nagano & Hoshina 2001)]

Type depository: BMNH: London [!] holotype female

- 1879 Lewis: 460 (descriptions) >> Orig. comb.: *Ptomascopus plagiatiipennis* [!N, S]
 1910 Jakobson: 613 (checklist in Russian) >> as syn. of *P. plagiatus*
 1925 Winkler: 265 (catalog) >> as syn. of *P. morio*
 1926a Portevin: 249 (revision: key, descriptions & catalog in French) >> as syn. of *P. plagiatus*
 1928 Hatch: 154 (catalog) >> as syn. of *P. plagiatus*
 1933a Shchegoleva-Barovskaya: 170 (revision: key, descriptions & catalog in Russian)
 >> as syn. of *P. plagiatus*
 1993b Kozminykh: 61 (key, descriptions, regional in Russian) >> as syn. of *P. plagiatus*
 2001 Nagano & Hoshina: 2 (description of variation in Japanese) >> as only Japanese record of *P. plagiatus*- probably erroneous label data
 2002 Nikolajev & Kozminykh: 96 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *P. plagiatus*

= *quadrifaculatus* Kraatz, 1877

Type locality: “Japan” [from title of paper] and “in China”

Type depository: MNHN: Paris? [not found]; not DEIC: Eberswalde [L. Zerche, in litt.]

- 1877 Kraatz: 104 (descriptions in German) >> Orig. comb.: *Ptomascopus 4-maculatus* [!N, S]
 1878 Deyrolle & Fairmaire: 92 (descriptions in French) >> compared to *P. davidis*
 1910 Jakobson: 613 (checklist in Russian) >> as syn. of *P. plagiatus*
 1914b Portevin: 223 (description of variation in French) >> as syn. of *P. plagiatus*
 1926a Portevin: 249 (revision: key, descriptions & catalog in French) >> as syn. of *P. plagiatus*
 1928 Hatch: 154 (catalog) >> as syn. of *P. plagiatus*
 1933a Shchegoleva-Barovskaya: 170 (revision: key, descriptions & catalog in Russian)
 >> as syn. of *P. plagiatus*
 1992 Cho & Lee: 20 (revision: key, descriptions & catalog) >> as syn. of *P. plagiatus*; misspelled as *P. maculatus*

- 1993b Kozminykh: 61 (key, descriptions, regional in Russian) >> as syn. of *P. plagiatus*
 2002 Nikolajev & Kozminykh: 96 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *P. plagiatus*

= *weberi* Bodemeyer, 1916 REVISSED SYNONYM of *Ptomascopus plagiatus* (Ménétriés)

Type locality: "Chitaitzki-Sterana [Strana], Ost-Sibirien, rechtes Amur-Ufer" [China, Heilongjian Prov., Kitaiskaya starana - Chinese side of the Amur River; descrip.]

Type depository: Hamburg [destroyed?]

- 1916 Bodemeyer: 112 (descriptions in German) >> Orig. comb.: *Ptomascopus Weberi* [!M, S]
 1923 Portevin: 71 (key, descriptions in French) >> as valid species
 1925 Winkler: 265 (catalog) >> as valid species
 1926a Portevin: 185 (revision: key, descriptions & catalog in French) >> as valid species
 1927b Hatch: 364 (revision: key, descriptions & catalog) >> as valid species; specimens not seen by Hatch
 1928 Hatch: 154 (catalog) >> as valid species
 1933 Semenov-Tian-Shanskij: 154 (catalog in Russian & Latin) >> as valid species
 1933a Shchegoleva-Barovskaya: 171 (revision: key, descriptions & catalog in Russian) >> as valid species
 1942 Hlisnikovsky: 578 (nomenclature in German) >> as syn. of *P. plagiatus*
 1986 Nishikawa: 99 (catalog in Japanese (English summary)) >> as syn. of *P. plagiatus*
 1993b Kozminykh: 61 (key, descriptions, regional in Russian) >> as syn. of *P. morio*
 2002 Nikolajev & Kozminykh: 96 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as syn. of *P. morio*

Comments: Bodemeyer (1916) described *Ptomascopus Weberi* as "like the Japanese [*Ptomascopus morio*"]; which is an all-black species, but noted among other differences that his new species had red markings. *Ptomascopus plagiatus* occurs in the type locality of Bodemeyer's species and is primarily differentiated from *P. morio* by the presence of red maculae on the elytra. Hlisnikovsky (1942) first synonymized Bodemeyer's name under *P. plagiatus*, but Kozminykh (1993) considered *P. morio* to be the senior synonym. Although *P. morio* also occurs in the type locality of Bodemeyer's *P. weberi*, based on the original description we agree with Hlisnikovsky (1942) and return *P. weberi* to synonymy under *P. plagiatus*.

The only specimen of *P. plagiatus* collected from Japan is the type of *Ptomascopus plagiatiipennis* Lewis (1879), which DSS has studied and confirmed is conspecific with *P. plagiatus*. Nagano & Hoshina (2001) pointed out, however, that no corroboration of a Japanese population of this species has been demonstrated and therefore suggests that the type locality data might be erroneous for Lewis' name. This notion is supported by the fact that although the holotype of *P. plagiatiipennis* bears a single locality label from Japan, Lewis included in the original description an additional locality of Pekin, China, where *P. plagiatus* occurs.

Ptomascopus zhangla Háva, Schneider & Růžička, 1999

Type locality: “China, N. Sichuan, Zhangla” [32.8°N, 103.67°E; label]

Type depository: SMNS: Stuttgart [!] holotype male, allotype female [SMNS], 4 paratypes [JHC, JSC, JRC]

Distribution: Oriental: China: Sichuan, Shaanxi, & Gansu provinces

1999 Háva et al.: 70 (key, descriptions) >> Orig. comb.: *Ptomascopus zhangla* [!S]

2001 Nagano & Hoshina: 2 (description of variation in Japanese) >> elytral pattern compared to variation in *P. morio*

Fossils

Nicrophorus

Nicrophorus pliozaenicus Gersdorf, 1969 [fossil]

Type locality: “n Germany, Upper Tertiary” [descrip.]

Type depository: unknown, holotype (impression fossil of wing)

1969 Gersdorf: 305 (fossils, descriptions in German) >> Orig. comb.: *Nicrophorus pliozaenicus*; misspelled as *N. plioaenicus* in abstract [!N, S]

PALAEOSILPHA Flach, 1890: 106

Type species: *Palaeosilpha fraasii* Flach, 1890 (monotypy)

Palaeosilpha fraasii Flach, 1890 [fossil]

Type locality: “Aveyron von Caylux” [s. France; descrip]

Type depository: SMFD?: Frankfurt? holotype

1890 Flach: 107 (descriptions in German) >> Orig. comb.: *Paleosilpha Fraasii* [!N, S]

1927b Hatch: 368 (revision: key, descriptions & catalog) >> confirms diagnosis in subfamily Nicrophorinae

1932 Hatch: 391 (nomenclature)

1969 Gersdorf: 303 (fossils, descriptions in German)

1980 Madge: 359 (catalog)

1999 Háva et al.: 73 (key, descriptions) >> compared to *P. zhangla*

Ptomascopus

Ptomascopus aveyronensis Flach, 1890 [fossil]

Type locality: “Aveyron von Caylux” [s. France; descrip]

Type depository: SMFD?: Frankfurt? holotype

1890 Flach: 106 (descriptions in German) >> Orig. comb.: *Ptomascopus Aveyronensis* [!N, S]

- 1927b Hatch: 364 (revision: key, descriptions & catalog) >> specimens not seen by Hatch
 1932 Hatch: 391 (nomenclature)
 1933 Semenov-Tian-Shanskij: 154 (catalog in Russian & Latin)
 1944 Handschin: 9 (fossils; description, discussion in German)
 1969 Gersdorf: 303 (fossils, descriptions in German)
 1993b Kozminykh: 61 (key, descriptions, regional in Russian) >> as valid fossil species
 1999 Háva et al.: 73 (key, descriptions) >> compared to *P. zhangla*
 2001 Nagano & Hoshina: 2 (description of variation in Japanese)

Nomina dubia

Nicrophorus chryseus Mazokhin-Porshnyakov, 1953

Type locality: “Severo-Vostochnij Kitai” [ne China], and “Manchzhuria, Gao-Lintszi” [=Gaoliyingzi 44.46 N, 128.43E, Heilongjiang Prov.; descrip]

Type depository: : not Moscow; Gusarov in litt.; lost? holotype female

- 1953 Mazokhin-Porshnyakov: 236 (descriptions, catalog in Russian) >> Orig. comb.: *Nicrophorus* (*Necropter*) *chryseus* [!N, S]
 1986 Nishikawa: 98 (catalog in Japanese (English summary)) >> as valid species
 2002 Nikolajev & Kozminykh: 126 (catalog, distribution, descriptions, keys, figures in Russian (English summary)) >> as doubtfully valid species

Comments: Inquiries at the St. Petersburg and Moscow collections failed to locate the type specimen of this name. Since the type of this name has apparently been lost, the validity of this name cannot be confirmed. However, the original description states it is a species near *Nicrophorus praedator* which is herein synonymized under *N. investigator*. Thus, *N. chryseus* is likely a synonym of the widespread and polymorphic species *N. investigator*.

Nicrophorus funerarius (Weigel, 1806)

Type locality: Silesia? [descrip.]

Type depository: unknown

- 1806 Weigel (descriptions in German) >> Orig. comb.: *Necroborus funerarius*
 1978 Burakowski et al.: 206 (catalog, in Polish) >> as “Species dubia”

Lapsus calami

Necrophilus subterraneus (Dahl, 1807: 363) [Agyrtidae]

- 1993 Clavier: 265 (JA: note in French) >> misspelled as *Nicrophorus subterraneus* [Not Silphidae! as *Nicrophorus subterraneus* in Zoological Record Plus (1993-1996) Accession number 13100011732]

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- Anonymous (1991) [Article on conservation of *Nicrophorus americanus*]. *Wildlife Conservation, 1991 (Nov/Dec.)* (biology, conservation)
- Arellano G.L. (1998) Distribución de Silphidae (Coleoptera: Insecta) en la región central de Veracruz, México. *Dugesiana*, 5 (2), 1-16. (checklist, distribution in Spanish) [!N]
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- Arnett, R.H., Jr. (1946a) Coleoptera notes I: Silphidae. *Canadian Entomologist*, 78, 131-134. (biology) [*Adds a fifth Nearctic species (N. carolinus) to the list documented as buriers of carrion. Documents N. hybridus from New York.*] [!N, S]
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- nepalensis* are more closely related to *N. pustulatus* of the Nearctic than any other Nearctic species (based on female genitalia) [!M, N, S]
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- description of *N. didymus*. According to an editorial note at the beginning of the volume Brullé was responsible for the early part of this work, i.e. text pages 1-56 [1836-1837] and plates 1-5 [1835-1836]; it was completed by Blanchard.] [!N]
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- Busnel, R.G. (1963) *Acoustic Behaviour of Animals*. Elsevier Publishing Corp. Amsterdam/ New York (biology, behavior, physiology) [Mentions stridulation in *Nicrophorus*]
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- Collett, H.R.P. (1930) The burying of carrion by Coleoptera. *Entomologist's Monthly Magazine*, 66, 257-258. (biology, behavior) [!M, N]

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- Contarini, N. (1843) *Cataloghi degli uccelli e degli insetti delle provincie di Padova e Venezia compilati dal nobile signor conte Nicolò Contarini del fu Bertucci*. Tip. Baseggio, Bassano (catalog)
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- Cooreman, J. (1943) Note sur la faune des Hautes-Fagnes en Belgique. XI. Acariens Parasitiformes. *Bulletin du Musée Royal d'Histoire Naturelle de Belgique*, 19, 63-91. (biology, symbionts: mites in French) [Found *Neoseius* adult mites free-living in peat and deutonymphs on 4 species of *Nicrophorus*.]
- Cordes, R., Kaschuba, A. & Müller, J.K. (1988) Strategien tageszeitlicher Aktivität von *Nicrophorus vespilloides* (Sil., Col.) und *Pterostichus oblongopunctatus* (Car., Col.) im Vergleich Verhandlungen der Deutschen Zoologischen Gesellschaft, 81, 339-340. (biology, behavior in German)
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- Cox, H.E. (1874) *A handbook of the Coleoptera, or beetles, of Great Britain and Ireland*. Vol. 1. E. W. Janson, London. viii + 522 pp. (key, descriptions (brief)) [!N]
- Coyle, D.R. & Larsen, K.J. (1998) Carrion beetles (Coleoptera: Silphidae) of northeastern Iowa: A comparison of baits for sampling. *Journal of the Iowa Academy of Science*, 105(4), 161-164. (biology, ecology) [*Chicken* was the most attractive of the baits tested.] [!N]
- Creamer, K.D. (1992a) Natural history, husbandry & display of carrion beetles (Coleoptera: Silphidae). *American Association of Zoological Parks and Aquariums, Regional Conference Proceedings*, 1992, 288-293. (Conference report: biology, conservation)
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- Creamer, K.D. (1993) Husbandry and display techniques of the American burying beetle *Nicrophorus americanus* (Coleoptera: Silphidae). *American Association of Zoological Parks and Aquariums, Regional Conference Proceedings*, 1993, 136-141. (Conference report: biology, conservation)
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- Creighton, J.C., & Schnell, G.D. (1998) Short-term movement patterns of the endangered American burying beetle *Nicrophorus americanus*. *Biological Conservation*, 86(3), 281-287. (biology, conservation) [71% of ABB recaptures were in a different habitat from the first.] [!S]
- Creighton, J.C., Vaughn, C.C. & Chapman, B.R. (1993) Habitat preference of the endangered American Burying Beetle (*Nicrophorus americanus*) in Oklahoma. *The Southwestern Naturalist*, 38(3), 275-277. (biology, conservation) [More ABB were caught in oak-hickory forests than grasslands.] [!N, S]
- Crotch, G.R. (1873) *Check List of the Coleoptera of America, North of Mexico*. Naturalists' Agency, Salem, Mass. 136 pp. (checklist) [!N]
- Crowson, R.A. (1938) The metendosternite in Coleoptera: a comparative study. *Transactions of the Royal Entomological Society of London*, 87, 397-415. (morphology: metendosternite) [!N, S]

- Curtis, J. (1825) *British entomology, being illustrations and descriptions of the genera of insects found in Great Britain and Ireland, ...* Vol. 2, pls. 51-98. L. Reeve & Co., London (checklist) [!N]
- Dapsio, A. (1995) *Silphidae*. In: S. Pileckis & V. Monsevicius (eds.). *Lietuvos Fauna [Fauna of Lithuania]*. Vol. 1. Mokslo ir Enciklopediju Leidykla, Vilnius. pp. 117-121 (checklist in Lithuanian) [!N]
- Davis, C.A. (1904) Instructions for collecting and mounting insects; Also a checklist of the Coleoptera of the state of Rhode Island, U.S.A.. 3rd ed. *Bulletin of the Roger Williams Park Museum, Providence Pilgrim Press*, 1, 1-47. (checklist) [Comment that *N. americanus* was common (in 1890-1904) and *N. marginatus* was abundant (in 1890-1904).] [!S]
- Davis, C.A. (1905) Additions to the check-list of Rhode Island Coleoptera. *Apteryx*, 1, 13-17. (checklist) [!S]
- Davis, L.R., Jr. (1980) Notes on beetle distributions, with a discussion of *Nicrophorus americanus* Olivier and its abundance in collections (Coleoptera: Scarabaeidae, Lampyridae, and Silphidae). *Coleopterists Bulletin*, 34(2), 245-251. (biology, conservation) [Reports on Baldwin (1975) who noted *N. americanus* had not been collected in Ill since 1944; first published account on decline of *N. americanus*.] [!N, S]
- De Jong, G.D. & Chadwick, J.W. (1999) Decomposition and arthropod succession on exposed rabbit carrion during summer at high altitudes in Colorado, USA. *Journal of Medical Entomology*, 36, 833-845. (biology, ecology) [!N]
- DeGeer, Ch. (1774) *Mémoires pour servir à l'histoire des Insects*. Stockholm, 4, 1-456, 12 pls. (biology in French)
- Dejean, P.F.M.A. (1821) *Catalogue de la Collection de Coléoptères de M. le Baron Dejean*. Paris viii + 1- 136 + (2) pp. (catalog) [numerous ms names listed, all unavailable, nomen nuda: *Stygius Dahl*. [nomen nudum ex Dejean 1821]; *Cadaverinus Dejean* 1821. [nomen nudum]; *Basalis Dejean* 1821. [nomen nudum]; *Interruptus Dejean* 1821. [nomen nudum]; *Sepultor Dejean* 1821. [nomen nudum]; *Investigator* Il. [ex Dejean 1821 nomen nudum]] [!S]
- Dejean, P.F.M.A. (1833) *Catalogue des Coléoptères de la collection de M. le Comte Dejean ...* [2nd edition.] Méquignon-Marvis, Paris, pp. 1-176. (catalog in French) [numerous ms names listed, all unavailable nomina nuda of *Nicrophorus*: *Speculifrons Fischer*, Russ. mer. or.; *Megacephalus Eschsch* id; *Stygius Dahl*, Illyria; *Lateralis Eschsch*, California; *Auripilosus Eschsch*, id.; *Lunatus Dej*. Amer. bor.; *Cadaverinus Dej*. Gallia bor.; *Quadrifasciatus Dej*. Amer. bor.; *Sexpustulatus Dej*. Amer. bor.; *Velutinus var. Marginatus Dejean* cat, Amer. bor.; *Nigricornis Dej*, Dauria; *Nigricornis var. Asiaticus*, Faldermann, Persia occid.; *Halseyi Petit*, Amer. bor.] [!S]
- Dejean, P.F.M.A. (1836) *Catalogue des Coléoptères de la collection de M. le Comte Dejean, pair de France, lieutenant général, grand officier de la légion d'honneur, membre de plusieurs sociétés savantes nationales et étrangères. Troisième édition, revue, corrigée et augmentée*. Méquignon-Marvis, Paris, pp. 1-384. (catalog in French) [numerous ms names listed, all unavailable, nomina nuda of *Nicrophorus*: *N. Speculifrons Fischer* [Rus. mer. or.]; *N. megacephalus Eschscholtz* - as sn. of *N. speculifrons* [Rus. mer. or.]; *N. Stygius Dahl*. [Illyria]; *N. Lateralis Eschscholtz* [California]; *N. Auripilosus Eschscholtz* [California]; *N. Lunatus Dej*. [Amer. bor.]; *N. Curvipes Megerle* - as syn. of *N. vespillo* [Austria]; *N. Cadaverinus Dej*. [Gallia bor.]; *N. Investigator Mac Leay* - as syn. of *N. Cadaverinus Dej*. [Anglia]; *N. Basalis Dej*. [Gallia]; *N. Sepultor Dej*. [P.]; *N. Investigator Dej*. Catal. - as syn. of *N. sepultor Dej*. [Austria]; *N. Interruptus Dej*. [Hispania]; *N. Vestigator Illiger* [P.]; *N. sepultor Dej*. catal. - as syn. of *N. vestigator* Ill. [P.]; *N. Corsicus Dej*. [Corsica]; *N. Quadrifasciatus Dej*. [Amer. bor.]; *N. Sexpustulatus Dej*. [Amer. bor.]; *N. Velutinus var. Marginatus Dej*. Catal. [Amer. bor.]; *N. Nigricornis Dej*. [Dauria]; *N. Nigricornis var. Asiaticus Faldermann* [Persia occid.]; *N. Halseyi Petit* [Amer. bor.]] [!S]

- Delahon, P. (1913) Nachträge zum Schilskyschen Verzeichnis der Käfer Deutschlands von 1909 und einige sonstige Bemerkungen über deutsche Käfer. *Deutsche Entomologische Zeitschrift*, 1913, 529-539. (checklist in German)
- Delahon, P. (1925) Nachträge zu "Schilskys Systematischen Verzeichnis der Käfer Deutschlands" von 1909 mit besonderer Berücksichtigung der Formen der Mark Brandenburg, sowie einige sonstige Bemerkungen über Käfer aus Deutschland. *Deutsche Entomologische Zeitschrift*, 1925, 305-308. (comment in German)
- Deloya, C. (1997) ["1996"] Los macro-coleopteros necrófilos de Tepoztlan, Morelos, Mexico (Scarabaeidae, Trogidae, Silphidae). *Folia Entomologica Mexicana*, 97, 39-54. (biology, ecology in Spanish) [*N. olidus* among the most abundant species.]
- Denman, D.J. (1984) The feeding habits of two species of burying beetles: *Necrophorus vespilloides* Herbst and *N. humator* Goeze *Entomologist's Record and Journal of Variation*, 96(9-10), 201. (biology, behavior)
- Dethier, V.G. (1947) The role of the antennae in the orientation of carrion beetles to odors. *Journal of the New York Entomological Society*, 55, 285-293. (biology, behavior) [Controls-87.5% returned; lacking 1 antenna-59% returned; lacking both antennae- 0% returned; lacking clubs of both antennae- 27% returned.] [!M, N, S]
- Deyrolle, H. & Fairmaire, L. (1878) Descriptions de Coléoptères recueillis par M. l'abbé David dans la Chine centrale. *Annales de la Société Entomologique de France*, 5(8), 87-140. (descriptions in French) [Original description of *N. ocellatus* (= *N. nepalensis*); *P. davidis* (= *P. plagiatus*).] [!S]
- Dillon, E.S. & Dillon, L.S. (1961) *A manual of common beetles of eastern North America*. Row, Peterson and Co., Evanston, Illinois. viii + 884 pp. (key, descriptions) [!N]
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- Růžička, J. (1993) *Agyrtidae, Silphidae*, pp. 33-34. In: J. Jelínek (ed.), Check-list of Czechoslovak insects, IV (Coleoptera). *Folia Heyrovskyana Supplementum*, 1, 1-172. (checklist, distribution in English & Czech) [!N]
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- Růžička, J. (1996) Results of the Czechoslovak-Iranian entomological expeditions to Iran. Coleoptera: Silphidae. *Klapalekiana*, 32(1-2), 73-75. (checklist) [First reliable records for *N. vespilloides* & *N. investigator* from Iran are provided.] [!S]

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- Ryabukhin, A.S. & Matis, E.G. (1987) *Materialy po faune zhukov-mertvoedov (Coleoptera: Silphidae) Severo-Vostoka SSSR*. Preprint. Institut Biologicheskikh Problem Severa, Pal'nevostochnyy Nauchyy Tsentr, Akademiya Nauk SSSR, Magadan. 38 pp. (key, descriptions, distributions in Russian) [!N]
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- Rye, E.C. (1879) Coleoptera. *Zoological Record*, 14 (Insecta), 8-95 (catalog) [Subsequent misspelling of *Ptomascopus*: *Ptomatoscopus*] [!N]
- Safryn, S.A. & Scott, M.P. (2000) Sizing up the competition: Do burying beetles weigh or measure their opponents? *Journal of Insect Behavior*, 13, 291-297. (biology, behavior) [Pronotal width is a better predictor of competition success than body mass between male *N. orbicollis*.] [!S]
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- Schawaller, W. (1982) ["1981"] Die Aaskäfer des Himalaya (Insecta: Coleoptera: Silphidae s. str.). *Senckenbergiana Biologica*, 62(4-6), 237-260. (checklist in German (English summary)) [Synonymizes *N. tibetianus* (= *N. argutor*) under *N. semenowi*] [!S]
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- Schoenly, K. & Reid, W. (1983) Community structure of carrion arthropods in the Chihuahuan Desert. *Journal of Arid Environments*, 6, 253-263. (biology, ecology) [!S]
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- Schulze, J.D. (1775) Beiträge zur Kenntniss seltener Insecten. Erstes Stück. *Naturforscher*, 6, 87-98. (descriptions in German) [Original description of *Silpha speciosa* (= *N. germanicus*).] [!N, S]
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- Schwarz, H.H. & Koulianos, S. (1998) When to leave the brood chamber? Routes of dispersal in mites associated with burying beetles. *Experimental and Applied Acarology*, 22, 621-631. (biology, symbionts: mites) [*Nice chart of seasonality of some European Necrophorus spp.; attractiveness of beetles to mites increases as the beetles age. Only P. carabi complex and P. subterraneus prefer parents for dispersal- other mites prefer the offspring.*] [!S]
- Schwarz, H.H. & Müller, J.K. (1990) Do *Poecilochirus carabi* deutonymphs recognize their carriers' sex? *Verhandlungen der Deutschen Zoologischen Gesellschaft*, 82, 323-324. (Abstract: biology, symbionts: mites) [*Yes. But only do so when dispersing from a reproductive crypt. Male N. vespilloides parents, departing their brood chambers, carry significantly more mites than either the female parent or the beetle progeny.*] [!S]
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- Schwarz, H.H., & Schürmann, A. (1991) Eine Leiche für die Kinder. Einige Aaskäfer begraben tote Vögel oder Kleinsäuger, um ihre Larven daran aufzuziehen. *Kosmos (Stuttgart)*, 10/91 pp. 80-85. (popular review in German) [*Includes photographs of brood-caring N. vespilloides*]
- Schwarz, H.H., Starrach, M., & Koulianos, S. (1998) Host specificity and permanence of associations between mesostigmatic mites (Acari: Anactinotrichida) and burying beetles (Coleoptera: Silphidae: *Necrophorus*). *Journal of Natural History*, 32(2), 159-172. (biology, symbionts: mites) [*7 species of 4 genera of mites: Poecilochirus carabi s. str., P. necrophori, P. subterraneus, Macrocheles nataliae, M. merdarius, Alliphis necrophilus, Neoseius novus.*] [!S]
- Schwarz, H.H., & M.G. Walz (1996) Pairing, oviposition and development in two sibling species of phoretic mites (Acari: Mesostigmata: Parasitidae: *Poecilochirus* spp.) associated with burying beetles (Coleoptera: Silphidae: *Necrophorus* spp.). *Journal of Natural History*, 30(9), 1337-1348. (biology, symbionts: mites) [*Host specialist sib spp. differ in reproductive behavior & fail to interbreed.*] [!S]
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- Schweitzer, D.F. & Master, L.L. (1987) *Nicrophorus americanus* (American burying beetle): results of a global status survey. The Nature Conservancy, Eastern Heritage Task Force, Boston, MA 13 pp. (unpublished report: biology, conservation)
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- Scott, M.P. (1989) Male parental care and reproductive success in the burying beetle *Nicrophorus orbicollis*. *Journal of Insect Behavior*, 2(1), 133-137. (biology, behavior) [Broods that received biparental care were both smaller and had lower offspring weight [possible artifact?]] [!N, S]
- Scott, M.P. (1990) Brood guarding and the evolution of male parental care in burying beetles. *Behavioral Ecology and Sociobiology*, 26(1), 31-39. (biology, behavior) [!S]
- Scott, M.P. (1994a) Competition with flies promotes communal breeding in the burying beetle, *Nicrophorus tomentosus*. *Behavioral Ecology and Sociobiology*, 34, 367-373. (biology, ecology, behavior) [On both medium and large carcasses, pairs rearing broods on flyblown carcasses had fewer young than pairs on clean carcasses or foursomes on flyblown carcasses.] [!S]
- Scott, M.P. (1994b) The benefit of paternal assistance in intra- and interspecific competition for the burying beetle, *Nicrophorus defodiens*. *Ethology Ecology & Evolution*, 6(4), 537-543. (biology, behavior) [Paternal care reduces the probability that the carcass will be usurped by a conspecific competitor.] [!S]
- Scott, M.P. (1996) Communal breeding in burying beetles. *American Scientist*, 84, 376-382. (popular review) [Review of aspects of communal breeding.] [!S]
- Scott, M.P. (1997) Reproductive dominance and differential ovicide in the communally breeding burying beetle *Nicrophorus tomentosus*. *Behavioral Ecology and Sociobiology*, 40(5), 313-320. (biology, behavior) [Influences of size of beetles and carcasses on communal breeding.]
- Scott, M.P. (1998a) Facultative adjustment of the duration of parental care by burying beetles. *Journal of Insect Behavior*, 11(4), 597-603. (biology, behavior) [Males raised in lab in dense groups provided longer care than males raised in isolation (cues for detection of population density).] [!S]
- Scott, M.P. (1998b) The ecology and behavior of burying beetles. *Annual Review of Entomology*, 43, 595-618. (biology, review of: ecology, behavior) [Lengthy review of literature on *Nicrophorus* behavior.] [!S]
- Scott, M.P., & Gladstein, D.S. (1993) Calculating males? An empirical and theoretical examination of the duration of paternal care in burying beetles. *Evolutionary Ecology*, 7(4), 362-378. (biology, behavior) [Variables: size of carcass & probability of usurpation.] [!S]
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- Scott, M.P. & Traniello, J.F.A. (1989) Guardians of the Underworld. *Natural History*, 6, 32-36. (popular review) [!S]
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- Scott, M.P., Trumbo, S.T., Neese, P.A., Bailey, W.D., & Roe, M.R. (2001) Changes in biosynthesis and degradation of juvenile hormone during breeding by burying beetles: a reproductive or social role? *Journal of Insect Physiology*, 47(3), 295-302. (biology, behavior, physiology)

- [Suggests role of increase in JH upon carcass discovery is not to influence vitellogenesis but to influence behavior.] [!S]
- Scott, M.P., & Williams, S.M. (1993) Comparative reproductive success of communally breeding burying beetles as assessed by PCR with randomly amplified polymorphic DNA. *Proceedings of the National Academy of Sciences, USA*, 90(6), 2242-2245. (biology, behavior) [“The male and female providing longer care, usually the larger of each sex, were the mother and father of most larvae (50-100%).”]
- Scriba, W. (1864) Ueber *Necrophorus fossor* und *gallicus*. *Berliner Entomologische Zeitschrift*, 8, 377-378. (descriptions in German)
- Scriba, H. v. L.G. (1790) [“1790-1791”] *Neuestes Magazin für die Liebhaber der Entomologie. (Frankfurt, bey Varrentrapp und Wenner, 1790-[1791])*, 1, 1-296. (in German) [not found]
- Seidlitz, G. (1874) *Fauna Baltica. Die Käfer (Coleoptera) der Ostseeprovinzen Russlands [3. Lieferung]*. H. Laakmann, Dorpat. pp. 49-80 (Gattungen), 209-340 (Arten). pp. 1872. (key in German) [!N]
- Seidlitz, G. (1888) *Fauna Baltica. Die Kaefer (Coleoptera) der Deutschen Ostseeprovinzen Russlands. Zweite neu bearbeitete Auflage*. [Lieferung 2, 3: Gattungen, pp. 17-80, Arten, pp. 97-336]. Hartungsche Verlagsdruckerei, Königsberg. pp. 1891. (key in German) [!N]
- Seidlitz, G. (1889) *Fauna Transsylvanica. Die Kaefer (Coleoptera) Siebenbürgens*. [Lieferung 3-4: Gattungen, pp. 49-128, Arten, pp. 241-544]. Hartungsche Verlagsdruckerei, Königsberg. pp. 1891. (key in German) [!N]
- Selous, C.F. (1911) A preliminary note on the so-called carrion-feeding Coleoptera. *Entomologist's Monthly Magazine*, 47, 86-89. (biology) [“Beetles flew into wind, walking last few feet to carrion, dragged carcasses to softer earth. Not convinced that *Nicrophorus* are feeders on carrion, probably predators.”-Milne & Milne 1944.]
- Semenov-Tian-Shanskij, A. (1894) Coleoptera Asiatica nova. *Horae Societatis Entomologicae Rossicae*, 28, 526-547. (description in Latin) [Original description of *N. przewalskii*.] [!S]
- Semenov-Tian-Shanskij, A. (1926) *Analecta coleopterologica*, XIX. *Russkoye Entomologicheskoe Obozrenie*, 20, 33-55. (descriptions in Latin) [Original description of *Necroxenus (=Nicrophorus)*.] [!N]
- Semenov-Tian-Shanskij, A. (1933) De tribu *Necrophorini* (Coleoptera, Silphidae) classificanda et de ejus distributione geographica. *Trudy Zoologicheskogo Instituta Akademii Nauk SSSR*, 1, 149-160. (catalog in Russian & Latin) [Original description of 8 genus-group names, all =*Nicrophorus*: *Eunecrophorus*, type species=*N. americanus*; *Necrophorus*, type species=*N. lunatus*; *Nesonecrophorus*, type species=*N. podagricus*; *Necrophorindus*, type species=*N. validus*; *Necroleptes*, type species=*N. humator*; *Nesonecropter*, type species=*N. distinctus*; *Necropter*, type species=*N. investigator*; *Stictonecropter*, type species=*N. pustulatus*.] [!N, S]
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- Suzuki, S. (2000b) Changing dominant-subordinate relationships during carcass preparation between burying beetle species (*Nicrophorus*: Silphidae: Coleoptera). *Journal of Ethology*, 18(1), 25-28. (biology, behavior) [Demonstration that *Nicrophorus* species may differ in preference of (1) burying vs (2) stealing carcasses already buried.] [!S]
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- Théodorides, J. (1950a) Sur la répartition géographique de *Necrophorus humator* F. *Vie et Milieu*, 1, 97. (checklist in French) [!S]
- Théodoridès, J. (1950b) Notes diverses sur les *Necrophorus* (Coleoptera Silphidae). *Bulletin de l'Institut Royal des Sciences Naturelles de Belgique*, 26(52), 1-20. (biology, ecology, morphology in French) [!N]
- Théodoridès, J. (1955) *Contribution a l'étude des parasites et phoretiques de coléoptères terrestres*. *Vie et Milieu*, Suppl. No. 4, 310 pp. (biology, symbionts: mites in French) [Recorded *Neoseius novus* from *N. vespillo* and *N. vespilloides* in France. But no *Nicrophorus* found in Mediterranean region.]
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- Acanthopsilus Portevin, 20
- Cyrtoscelis Hope, 20
- Eonecrophorus** Kurosawa, 20
tenuicornis Kurosawa, 20
- Eunecrophorus Semenov-Tian-Shanskij, 20
- Necrocharis Portevin, 20
- Necrocleptes Semenov-Tian-Shanskij, 21
- Necrophagus; Leach, 20
- Necrophorindus Semenov-Tian-Shanskij, 21
- Necrophoriscus Semenov-Tian-Shanskij, 20
- Necrophorus Thunberg, 20
- Necropter Semenov-Tian-Shanskij, 21
- Necroxenus Semenov-Tian-Shanskij, 21
- Neonicrophorus Hatch, 21
- Nesonecrophorus Semenov-Tian-Shanskij, 20
- Nesonecropter Semenov-Tian-Shanskij, 21
- Nicrophorus** Fabricius, 20
 aleuticus Gistel, 99
 algiricus Pasquet, 81
 alpha Pierce, 141
 altumi Westhoff, 203
americanus Olivier, 20
 anglicus Stephens, 216
antennatus (Reitter), 27
 apicalis Kraatz, 54
- apo** Arnett, 29
argutor Jakovlev, 29
 armeniacus Portevin, 55
 atricornis Meier, 73
 aurigaster Portevin, 180
 aurora Motschulsky, 204
 baeckmanni Kieseritzky, 99
basalis Faldermann, 31
 basalis Gistel, 81
 benguetensis Arnett, 137
 bicolon Newman, 155
 bifasciatus Hausmann, 191
 bimaculatus Haworth, 56
 bipunctatus Kraatz, 56
 bipunctatus Portevin, 216
 bohemicus Roubal, 191
 bolsmanni Westhoff, 191
 borealis Portevin, 204
 brullei Jacobson, 216
 brunnipes Gradl, 81
 burmanicus Hlisnikovsky, 142
 cadaverinus Gravenhorst, 192
 cadaverinus Mareuse, 217
 cadaverinus Gistel, 57
carolinus (Linnaeus), 32
 carreti Pic, 217
 centralis Portevin, 28
 centrimaculatus Reitter, 82
chilensis Philippi, 36
 chryseus Mazokhin-Porshnyakov, 229
concolor Kraatz, 36
 confossor LeConte, 99
confusus Portevin, 39
 conversator Walker, 44
 corsicus Laporte, 83
 curvipes Duftschmid, 192
dauricus Motschulsky, 40
defodiens Mannerheim, 42
 degener Carret, 217
didymus Brull, 47
distinctus Grouvelle, 49
 dolosus Portevin, 34
encaustus Fairmaire, 49

Index (continued)

Nicrophorus

- fasciatus Hlisenkovsky, 175
 fascifer (Reitter), 57
 fauveli Fauconnet, 193
 flexuosus Portevin, 48
 fossor Erichson, 84
 fractus Portevin, 205
 frontalis Fischer von Waldheim, 58
 funebris Jakovlev, 134
 funerarius (Weigel), 229
 functor Fauvel, 100
 funereus Gn, 87
 funeror (Reitter), 100
 gallicus Jacquelin du Val, 88
germanicus (Linnaeus), 49
 grahami Swan & Papp, 101
 grandior Angell, 59
 grandis Fabricius, 25
guttula Motschulsky, 62
 hadenius Gistel, 193
 hallii Kirby, 149
 hauseri Hlisenkovsky, 193
 hebes Kirby, 205
 hecate Bland, 63
heurni Portevin, 65
hispaniola Sikes & Peck, 66
humator (Gleditsch), 66
 humeralis Pic, 77
hybridus Hatch & Angell, 76
 immaculatus Portevin, 160
 immaculosis Hatch, 64
 inclusus Reitter, 156
 infodiens Mannerheim, 101
 infuscaticornis Portevin, 89
insularis Grouvelle, 77
 insularis Lafer, 102
 intermedius Reitter, 102
 interruptiolus Strand, 218
interruptus Stephens, 78
 interruptus Brull, 218
 interruptus Gistel, 218
investigator Zetterstedt, 93
japonicus Harold, 116
 karafutonis Kno, 121
kieticus Mroczkowski, 118
 labiatus Motschulsky, 103
 labreae Pierce, 126
 laportei Meier, 89
 lateralis Portevin, 45
 latifasciatus Lewis, 103
 latifrons Pierce, 126
 listerianus (Geoffroy), 59
lunatus Fischer von Waldheim, 118
 lunatus LeConte, 164
 lunatus Gistel, 126
 luniger Harold, 165
 lunulatus Gistel, 126
 maculiceps (Jakovlev), 122
maculifrons Kraatz, 120
 maculosus Meier, 74
marginatus Fabricius, 123
 marginatus Gistel, 180
 maritimus Gurin-Mneville, 104
 maritimus Mannerheim, 105
 maritimus Gistel, 106
 mckittricki Pierce, 127
 mediatus Fabricius, 34
 melsheimeri Kirby, 106
mexicanus Matthews, 128
 microcephalus Thomson, 107
 minnesotianus Hatch, 76
 minor Westhoff, 193
 mixtus Hlisenkovsky, 131
mongolicus Shcheg.-Barovskaya, 129
 montezumae Matthews, 127
montivagus Lewis, 131
morio Gebler, 132
 mortuorum Fabricius, 206
 mysticallis Angell, 35
nepalensis Hope, 135
 nigerrimus Kraatz, 74
 nigricans Pasquet, 89
nigricornis Faldermann, 138
 nigrifrons Portevin, 150
nigrita Mannerheim, 139
oberthuri Portevin, 141

Nicrophorus

- obrutor Erichson, 172
 obscuripennis Portevin, 219
obscurus Kirby, 142
 obtusiscutellum Pierce, 127
 ocellatus Deyrolle & Fairmaire, 137
 olfactor Gistel, 220
olidus Matthews, 143
orbicollis Say, 144
 oregonensis Swann & Papp, 209
 orientalis (Herbst), 26
 orientalis Motschulsky, 41
 ornatus Hlisnikovsky, 60
 particeps Fischer von Waldheim, 108
 parvulus Hlisnikovsky, 122
 pasqueti Pic, 90
 peruvianus Pic, 48
 plagiatus Motschulsky, 45
pliozaenicus Gersdorf, 228
podagricus Portevin, 150
 pollinator LeConte, 46
 pollinator Mannerheim, 109
 portevini Pic, 48
 praedator (Reitter), 110
 proserpinae Gistel, 60
przewalskii Sem.-Tian-Shanskij, 151
 pseudobrutor Reitter, 30
 pulsator Gistel, 165
 punctostriatus Pierce, 64
pustulatus Herschel, 152
 pygmaeus Kirby, 209
quadraticollis Portevin, 156
 quadricollis Hatch, 157
 quadricollis Gistel, 144
 quadriguttata Angell, 65
quadrimaculatus Matthews, 157
quadripunctatus Kraatz, 158
 quadrisignatus Laporte, 149
 rautenbergi Reitter, 220
reichardti Kieseritzky, 160
 requiescator Gistel, 180
 rotundicollis Portevin, 38
 ruficornis Motschulsky, 141
 rugulipennis Jakovlev, 134
 ruspator Erichson, 111
 ruthenus Motschulsky, 60
satanas Reitter, 161
sausai Ruzicka, et al., 162
sayi Laporte, 162
scrutator Blanchard, 166
semenowi (Reitter), 166
sepulchralis Heer, 167
sepultor Charpentier, 169
 sepultor Gyllenhal, 220
 sibiricus Motschulsky, 113
smefarka Hva, et al., 173
 speciosus (J.D. Schulze), 61
 spinipes Leach, 194
 stenopthalmus (Jakovlev), 119
 subfasciatus Portevin, 210
 subinterruptus Pic, 210
 submaculatus Reitter, 113
 subterraneus Dahl, 229
 sulcatus Fischer von Waldheim, 75
 suturalis Motschulsky, 90
 sylvaticus Reitter, 211
 sylvivagus Reitter, 211
 tardus Mannerheim, 155
 temporalis Shch.-Barovskaya, 167
tenuipes Lewis, 173
 tibetanus Hlisnikovsky, 30
tomentosus Weber, 176
 trimaculatus Gradl, 90
 trinotatus Reitter, 91
 unifasciatus Hlisnikovsky, 142
ussuriensis Portevin, 182
validus Portevin, 183
 vandykei Angell, 65
 varendorffi Westhoff, 194
 variolosus Portevin, 114
 velutinus Fabricius, 181
vespillo (Linnaeus), 183
vespilloides Herbst, 195
vestigator Herschel, 212
 vicinus Shchegoleva-Barovskaya, 175
 virginicus Frlich, 26

Index (continued)**Nicrophorus**

- viturati Pic, 91
- vodozi Meier, 221
- vulgaris Fabricius, 194

Palaeosilpha Flach, 228

- fraasii** Flach, 228

Ptomascopus Kraatz, 222

- aveyronensis** Flach, 228
- carbunculus Lewis, 223
- davidis Deyrolle & Fairmaire, 225
- lewisi Portevin, 224

morio Kraatz, 222

- plagiatipennis Lewis, 226
- plagiatus** (Mntris), 224
- quadrimaculatus Kraatz, 226
- villosus Portevin, 224
- weberi Bodemeyer, 227
- zhangla** Hva, et al., 228

Ptomatoscopus Rye, 222

Stictonecropter Semenov-Tian-Shanskij, 21

Tomascopus Kraatz, 222