



Seven new synonyms within the genus *Onthophagus* (Coleoptera: Scarabaeidae) from the Oriental Region

SERGEY I. TARASOV

Department of Entomology, Natural History Museum of Denmark / University of Copenhagen, Zoological Museum, Universitetsparken 15, DK-2100 Copenhagen, Denmark. Email: sergfx@yandex.ru.
Institute of Natural Science, Kaluga State University, Stepana Razina str. 26, Kaluga 248023, Russia.

Examination of the type material of the Oriental representatives of the genus *Onthophagus* Latreille, 1802 (Coleoptera: Scarabaeidae: Scarabaeinae: Onthophagini) deposited at the Natural History Museum in London, National Museum of Natural History in Paris, Museum of Natural History in Basel and National Museum in Prague revealed seven new synonyms. The names synonymized herein were described as separate species mainly for two reasons. The first reason owes to the insufficient knowledge of entire *Onthophagus* diversity from Oriental Region and the fact that authors describing new species did not check the type material or even original descriptions for already described taxa. The following synonymized species were likely described due to this oversight: *O. anamalaiensis* Balthasar, 1974; *O. chulapornus* Masumoto, Ochi & Hanboonong, 2008; *O. demaak* Masumoto, 1989; *O. jucundus* Arrow, 1931; *O. laosensis* Frey, 1971; and *O. parvidens* Frey, 1971. The second reason is the great range of intraspecific variation of such allometric characters as shape of head, horns and pronotum in *Onthophagus*. Therefore, detailed examination of the external characters for the large series of specimens, and careful study of male genitalia are required for reliable species identification. Unfortunately, this was not the case for many new species descriptions. In particular, *O. perroti* Paulian, 1978, was described as a species but actually only represents the minor form of *O. orientalis* Harold, 1868. The lectotype of *O. gracilipes* is designated in order to preserve the stability of zoological nomenclature.

The material examined in the present study is kept in the following institutions:

MNHN – Muséum national d'Histoire naturelle, Paris, France (O. Montreuil, A. Mantilleri)

NHB – Naturhistorisches Museum Basel, Switzerland (E. Sprecher)

NHM – Natural History Museum, London, UK (M. Barclay, M. Kerley)

NMP – National Museum Prague, Czech Republik (J. Hájek, M. Fikáček)

Onthophagus clermonti Paulian, 1931

Onthophagus clermonti Paulian, 1931: 271 (type locality: Hoa-Binh, Tonkin [Vietnam])

Onthophagus parvidens Frey, 1971: 98 **syn.n.** (type locality: Hoa-Binh, Tonkin [Vietnam])

Type material examined. *Holotype* of *O. clermonti* (MNHN), female bearing the following labels:

1. White, printed: Hoa-Binh (Tonkin) (A.de Cooman) Coll.J.Clermont
2. Red, printed: TYPE
3. White, handwritten: Clermonti type
4. Orange: HOLOTYPE *O. clermonti* Paulian, 931 [handwritten] S. Tarasov det. 2009 [printed]

Holotype of *O. parvidens* (NHB), male bearing the following labels:

1. White, printed: HOA-BINH TONKIN VII. [handwritten] 1934 A.DE COOMAN
2. Red, handwritten: Type
3. White, handwritten: Type *Onthophagus* [printed] *parvidens* n.sp. ♂ det.G.Frey,196 [printed]
4. Orange: HOLOTYPE *O. parvidens* Frey, 1971 [handwritten] S. Tarasov det. 2009 [printed]
5. White: *Onthophagus clermonti* Paulian [handwritten] S. Tarasov det. 2009 [printed]

Additional material examined: 1♂, Vietnam, Hoa Binh Lac Tho, leg. A. de Cooman (MNHN)

Remarks. Apparently, Frey did not take into account the insufficient and obscure description of *O. clermonti* based on one female and did not examine the holotype of the former. In the original description (Frey 1971) he compares *O. parvidens* with *O. deflexicollis* Lansberge, 1883. The type series of *O. clermonti* is comprised only of the holotype female, therefore it is not possible to examine the critical structures of the aedeagus for species identification in *Onthophagus*. However, I conclude that the holotypes of *O. clermonti* and *O. parvidens* are conspecific because they