



<http://dx.doi.org/10.11646/zootaxa.3838.3.2>

<http://zoobank.org/urn:lsid:zoobank.org:pub:202990D3-043E-4347-BA14-CC36E6D2D8C4>

The digger wasps of the genus *Alysson* Panzer (Hymenoptera: Crabronidae: Bembicinae) of Russia and adjacent territories, with a key to species and new synonymies

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Abstract

Nine species of *Alysson* Panzer 1806 are recorded from Russia and adjacent territories. The new synonymy is proposed for *Alysson pertheesi* Gorski 1852 = *A. fuscatus* var. *jaroslavensis* Kokujev 1906, = *A. harbinensis* Tsuneki 1967; *Pompilus spinosus* (Panzer 1801) = *Alysson katkovi* Kokujev 1906. The number of valid species-group taxa in the genus *Alysson* is reduced to 39 species. An original key to the species is provided.

Key words: sand wasps, *Alysson*, Palaearctic, fauna

Introduction

Alysson Panzer 1806 currently includes 42 species distributed worldwide except the Neotropical Region (Pulawski 2013). Seventeen species are known from the Palearctic Region and six from Russia (Nemkov 2012b). Most of the species are rarely collected, and some are known from the type series only. The females construct nests with one to several cells in hard or more often in sandy soil. The larvae feed on different Homoptera, mainly leafhoppers (Bohart & Menke 1976, Evans & O'Neill 2007, Nemkov 2012a).

This paper deals with *Alysson* of Russia and the adjacent territories (countries of the former Soviet Union, Mongolia, northern China, Korean Peninsula, and northern Japan). These wasps have been revised only by Kokujev (1906) more than a century ago. Within the area considered here there are keys to the species of South and East Asia (Tsuneki 1968), European part of former USSR (Pulawski 1978), Kazakhstan and Middle Asia (Kazenas 1978), China (Wu & Zhou 1987), and Russian Far East (Nemkov *et al.* 1995).

The current number of the valid species in the genus *Alysson* (including the new synonymies from this paper) is reduced to 39, to 14 in the Palaearctic Region, and to five in Russia.

Materials and methods

About 150 specimens have been studied. The following are abbreviations of the names of institutions in which the type specimens and studied materials are deposited:

CAS	California Academy of Sciences, San Francisco, USA
ELKU	Entomological Laboratory, Kyushu University, Fukuoka, Japan
IBSS	Institute of Biology and Soils Science, Vladivostok, Russia
MNHAH	Museum of Nature and Human Activities, Hyogo, Japan
NNML	Nationaal Natuurhistorisch Museum, Leiden, Netherlands
TMB	Természettudományi Múzeum, Budapest, Hungary
ZIN	Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia

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