

Revision of the Palearctic species of *Macroglenes* Westwood (Hymenoptera: Pteromalidae)

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Abstract

The Palearctic species of *Macroglenes* Westwood (Hymenoptera: Pteromalidae) are revised. A brief diagnosis is given for each species and distribution and hosts are summarized. Twenty species are regarded as valid, including eight described as new: *M. caudatus* sp. nov., *M. gibsoni* sp. nov., *M. hokkaidensis* sp. nov., *M. incisiclypeatus* sp. nov., *M. japonicus* sp. nov., *M. noyesi* sp. nov., *M. samurai* sp. nov., and *M. zdeneki* sp. nov. *Macroglenes nigroclipeatus* Amerling & Kirchner, 1860 is treated as *nomen dubium*. *Stenophrus* Förster is regarded as a synonym of *Macroglenes* Westwood, syn. nov. Consequently, *Calypso* Haliday and *Euryophrys* Förster are treated as synonyms of *Macroglenes* Westwood, syn. nov. Another two new synonyms and two new combinations are proposed: *M. chalybeus* Haliday = *M. rasnitsyni* (Dzhanokmen), syn. nov., *M. penetrans* (Kirby) = *M. decipiens* (Graham), syn. nov., *Stenophrus compressus* Förster = *Macroglenes compressus* (Förster), comb. nov., and *Pirene yuasai* Ishii = *Macroglenes yuasai* (Ishii), comb. nov. New distributional data are given for eight species. The association between *M. gramineus* (Haliday) and *Contarinia tritici* (Kirby) (Diptera: Cecidomyiidae) is published for the first time, as well as several parasitoid-plant associations.

Key words: Chalcidoidea, Pireninae, new species, gall midge, parasitoid

Introduction

The genus *Macroglenes* Westwood (Chalcidoidea: Pteromalidae) belongs to the subfamily Pireninae and includes very small (less than 2 mm in length), apparently similar species that are parasitic, at least for the few species where the hosts are known, on gall midges (Diptera: Cecidomyiidae). Among the hosts of some *Macroglenes* are economically important species such as *Contarinia tritici* (Kirby) and *Sitodiplosis mosellana* (Gehin) attacking wheat or *Contarinia pisi* (Loew) attacking pea.

Based on Noyes (2003), the genus is composed of twenty valid world species, with thirteen species described from Europe (Kirby 1800; Haliday 1833, 1844; Nees 1834; Kirchner 1860; Graham 1969), one from Kazakhstan (Dzhanokmen 1993), one from India (Narendran *et al.* 2004), one from Japan (Ishii 1953), one from North America (Girault 1916) and three from Australia (Girault 1925, 1925a).

Pirene Haliday, 1833 was synonymised with *Macroglenes* Westwood, 1832 by Graham (1969) because the differences stated by Haliday (1844) and Thomson (1876) proved to be unsatisfactory. Graham (1969) gave a key to 11 species of *Macroglenes*, including 5 described as new, and stated that a revision of the genus is “badly needed” (p. 335).

The monotypic genus *Stenophrus* Förster, 1841 is treated here as a synonym of *Macroglenes* following the views of Thomson (1876), Ashmead (1904) and Schmiedeknecht (1909). The arguments for this are mentioned below.

Material and methods

The following lists the museum and collection abbreviations (Evenhuis 2010) used in this taxonomic revision. Whenever possible type specimens were examined.

BMNM	The Natural History Museum [formerly British Museum (Natural History)], London, U.K.;
CNC	Canadian National Collection of Insects, Ottawa, Canada;
OUMNH	University Museum of Natural History, Oxford, U.K.;
MHNG	Muséum d'Histoire Naturelle, Geneva, Switzerland;
MICO	Mitroiu Collection, Faculty of Biology, Alexandru Ioan Cuza, Iasi, Romania;
NMBE	Naturhistorisches Museum, Bern, Switzerland;
NMPC	Narodni Muzeum v Praze, Prague, Czech Republic;
RMNH	Nationaal Natuurhistorische Museum (“Naturalis”) [formerly Rijksmuseum Natuurlijke Historie], Leiden, Netherlands.