Taxonomic studies on some little known genera of Palearctic Eulophidae and Pteromalidae (Hymenoptera: Chalcidoidea)

R.A. BURKS

Department of Evolution, Ecology, and Organismal Biology, The Ohio State University, 1315 Kinnear Road, Columbus, OH 43212, U.S.A. E-mail burks.roger@gmail.com

Abstract

Some neglected genera of Palearctic Eulophidae and Pteromalidae (Chalcidoidea) are reviewed as part of ongoing preparation of keys to identification of world genera of these families. Some of these genera are represented by distinctive species which properly belong to larger genera, and some were described based on misinterpreted morphological characters. **Bryopezus** Erdös *syn.* nov. is synonymized under **Deutereulophus** Schulz, **Danuviella** Erdös *syn.* nov. under **Diglyphus** Walker, **Cleolophus** Mercet *syn.* nov. and **Parpholema** Szelényi *syn.* nov. under **Hemiptarsenus** Westwood, **Dubiostalon** Szelényi *syn.* nov. under **Neotrichoporoides** Girault, and **Dudichilla** Szelényi *syn.* nov. under **Syntomopus** Walker. **Deutereulophus brevipennis** (Erdös) *comb.* nov., **Diglyphus subplanus** (Erdös) *comb.* nov., **Hemiptarsenus autonomus** (Mercet) *comb.* nov., **Hemiptarsenus virescens** (Storozheva) *comb.* nov., **Neotrichoporoides inusitatus** (Szelényi) *comb.* nov., **Mesopolobus fuscus** (Szelényi) *comb.* nov., **Syntomopus crassicornis** (Szelényi) *comb.* nov. are new combinations resulting from these changes. Two species are transferred to their proper genera: the brachypterous species **Necremnus collaris** (Szelényi) *comb.* nov. from **Microlycus** Thomson, and **Mesopolobus fuscus** (Szelényi) *comb.* nov. from **Tricolas** Bouček. **Neanica** Erdös is discussed as a distinct and valid genus within Pteromalinae, with comparison to other genera. The replacement name **Hemiptarsenus collapsus** nom. nov. is chosen for **Parpholema collaris** Szelényi, which becomes a junior homonym of **Hemiptarsenus collaris** (Ashmead). Reasons for taxonomic changes are discussed with reference to distinctive features shared with species in other genera. One newly discovered morphological feature is discussed, the prepectal bulge found in some Sphegigastrini (Pteromalidae). Photographs of type specimens are provided to facilitate future recognition of these species.

Key words: Morphology, parasitoid wasp, taxonomy, Eulophinae, Entedoninae, Sphegigastrini, Pteromalinae, brachyptery

Introduction

Some genera of Chalcidoidea described by workers in Eastern Europe in the mid-20th century have been almost entirely ignored in the literature since their description. Although these parasitoid wasp genera may have seemed distinct near the time of description (Peck et al. 1964), some previously obscure taxa have become better known recently and new characters have been discovered (Bouček 1988; Schauf 2000; Gauthier et al. 2000). This has created a situation where a review of some poorly-known taxa is needed to determine if they remain distinct given new interpretations of morphological characters, related taxa, and phylogenetic context.

Confusion over the identity of some Eulophidae and Pteromalidae persists in part because of the lack of a global resource addressing taxonomic identity of genera and species of these families. Family-level morphological reviews of eulophids and pteromalids have been geographically limited in scope (Graham 1959; Peck et al. 1964; Graham 1969; Bouček 1988; Bouček & Rasplus 1991; Bouček & Heydon 1997; Schauf et al. 1997; Burks 2003), and therefore can lack comparisons of regional taxa with other described taxa not known to occur in the targeted geographic area. Generic descriptions tend to follow suit with these geographic limitations, with new species being interpreted mainly using regional keys or comparisons with other species from their immediate area. This can lead