



A review of Western Palaearctic *Amblyscelio* and *Baryconus* (Hymenoptera: Platygastroidea, Platygastriidae)

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Abstract

The European species of the genera *Amblyscelio* and *Baryconus* are reviewed and revised based on morphological data. Females of *Amblyscelio striaticeps* Kieffer, 1913 and *Baryconus graeffei* (Kieffer, 1908) are described and the ovipositor of *Amblyscelio* is illustrated for the first time. The monotypic genus *Amblyscelio* was previously known only from a single male specimen. *Baryconus graeffei* is confirmed as a distinct species, while *B. orbus* Kononova, 2008 is recognized as a junior subjective synonym of *B. europaeus* (Kieffer, 1908) **syn. nov.** These findings are supported by a principal component analysis (PCA) of ratios of various distance measurements. *Amblyscelio striaticeps* is newly recorded from Greece and Slovenia, *Baryconus graeffei* from France, Greece, Montenegro and Turkey and *B. europaeus* (Kieffer, 1908) from Croatia, France, Morocco, Portugal, Sicily, Spain and the United Arab Emirates.

Key words: microhymenoptera, egg parasitoids, ovipositor, morphometrics, intraspecific variability, multivariate statistical methods, identification key

Introduction

The Platygastroidea is the third largest of the parasitic superfamilies after the Ichneumonoidea and Chalcidoidea (Huber 2009). Despite their abundance in nature and importance in biological control, most scelionid species concepts are poorly understood. Numerous European species were described from single specimens and thus descriptions do not represent the range of intraspecific variability. Recent studies such as Vecher (1980), Johnson *et al.* (1987) and Popovici *et al.* (2011) have revealed significant intraspecific variability in some platygastroid species, which show that it is necessary to reassess the species concepts of early authors, using extensive newly collected material verified against type specimens.

Amblyscelio was erected by Kieffer (1913) for a single species, *A. striaticeps*, described from one male. Later mentions of *Amblyscelio* appear to repeat Kieffer's description (Kieffer, 1926; Kozlov, 1971 & 1978; Kononova & Kozlov, 2008) until Masner (1976) provided a more detailed description of the male of *A. striaticeps* and noted the existence of another, as yet undescribed, African species. *Amblyscelio* is a monotypic genus with an uncertain position in Platygastroidea. Kozlov (1970) placed this genus in Scelionini close to *Scelio* Latreille, *Sparasion* Latreille, *Sceliomorpha* Ashmead, *Lepidoscelio* Kieffer, *Acanthoscelio* Ashmead, *Heptascelio* Kieffer, *Oreiscelio* Kieffer and *Nixonia* Masner. Masner (1976) considered that *Amblyscelio* did "...not possess a single character typical for Scelionini..." and classified it in Calliscelionini, near *Dichoteleas* Kieffer. In the present study we provide a detailed description of the female of *Amblyscelio striaticeps*, including the ovipositor assembly that reveals some important information on the phylogenetic position of the genus.

Baryconus has been considered to belong to the Baryconini, together with *Apegus* Förster, *Bracalba* Dodd, *Oxytelio* Kieffer and *Chromoteleia* Ashmead (Kozlov 1970, Masner 1976). The monophyly of the tribe was