



Redescription of species of the Neotropical parasitoid *Notiospathius* Mathews et Marsh (Braconidae: Doryctinae) based on their nineteenth and early twentieth century types

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Abstract

Seven species of the speciose Neotropical parasitoid wasp genus *Notiospathius* Mathews et Marsh are redescribed. These species were originally described during the nineteenth and early twentieth centuries. Examination of the holotypes of *N. meliorator* and *N. necator* revealed that they actually belong to an undescribed doryctine genus that is similar to *Ptesimogaster* Marsh, 1965. A key is provided to distinguish these species.

Key words: Hymenoptera, Ichneumonoidea, Apocrita

Resumen

Se describen siete especies del género de avispa parasitoides *Notiospathius*. Estas especies fueron originalmente descritas a finales del siglo diecinueve y principios del veinte. La revisión de los holotipos de *N. meliorator* y *N. necator* reveló que éstos en realidad pertenecen a un género no descrito de doryctino que es similar a *Ptesimogaster* Marsh, 1965. Se presenta una clave complementaria para identificar a las especies de *Notiospathius* que se describen.

Introduction

The Doryctinae is one of the most diverse subfamilies within the parasitoid wasp family Braconidae, being particularly diverse in the Neotropical region, where approximately 70% of its recognized genera have been described (Shenefelt and Marsh, 1976; Belokobylskij, 1992). Most doryctine species whose biology is known are idiobiont ectoparasitoids of xylophagous or bark-boring Coleoptera larvae; however, several other hosts orders (e.g. Lepidoptera, Hymenoptera) and life history strategies (e.g. endoparasitism, phytophagy, gall and fig association, termitophily) are present within the group. This wide variety of biologies has probably led to the considerable external morphological heterogeneity among the members of this subfamily.

One of the most significant morphological features of several doryctine taxa is the considerable enlargement of the first metasomal tergite forming a petiole. This feature had been previously regarded as the main character used to distinguish the large tribe Spathiini *sensu lato* (Shenefelt and Marsh, 1976; Belokobylskij, 1992). Recent molecular phylogenetic studies, however, have demonstrated that it actually evolved in various independent lineages within the Doryctinae, probably as an adaptation to attack concealed host larvae using a long ovipositor while maintaining a vertical drilling posture (Zaldívar-Riverón et al., 2007, 2008).