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The genus *Paracholula* (Hemiptera: Heteroptera: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Myodochini)

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Abstract

The genus *Paracholula* Harrington has been represented by two species, *P. picta* (Fab) and *P. thoracica* (Distant), both recorded from Mexico. Individuals of one population from Guerrero were studied and compared with individuals of both species from different collections, including the types. Using scanning electron micrographs of different structures, and observation of the male genitalia of some individuals, together with a close examination of all the individuals from the population from Guerrero, we discovered, that there is great variation in all the structures and that some characters that were used to separate the two species are present within the population from Guerrero. Therefore we synonymize both species, stating that the valid name for this species is *Paracholula picta* (Fab). Descriptions and illustrations of all the immature stages from the Guerrero population are included. Notes about host plants, biology and distributional records are also included.

Key words: *Ficus*, synonymy, arboreal insects, *Heliocarpus*, Tiliaceae, Mexico

Introduction

The genus *Paracholula* was erected by Harrington (1980), based on *Neocattarus thoracicus* Distant, which was originally described from Guatemala and Panama (Distant 1893).

The other species, *P. picta* was described by Fabricius (1803) as *Coreus pictus* from South America; in 1868, Stål transferred this species to the genus *Plociomera*. Slater, in his catalogue of the Lygaeidae of the World (1964), considered it as *Ptochiomera picta* (Fab.). Later on Scudder (1970) transferred *P. picta* to *Neocattarus*; and synonymized *Neocattarus vegetus* Distant to *N. pictus*. And finally Harrington (1980) transferred this species to the genus *Paracholula*.

Paracholula picta was originally described from Panama and has been recorded also from Honduras and Mexico (Slater 1964). In Mexico, Slater and Brailovsky (2000) registered *P. picta* from Puebla, and *P. thoracica* from Oaxaca. Melo *et al.* (2004) registered also *P. picta* in Corrientes, Argentina, and Rengifo and Gonzalez (2011) recorded the genus *Paracholula* from several localities in Colombia.

The immature stages of *Paracholula* have never been described and very little is known about the biology of the genus. *Paracholula picta* has been intercepted in the USA in orchids from Honduras and Mexico (Swezey 1945). In the genus *Cholula* Distant (according to Harrington (1980), this is the closest related genus), some species are known to be arboreal, mainly associated with fig trees (Cervantes & Pacheco 2003, 2006).

Here, based mainly on the variation within one population from Guerrero and comparing them with individuals from different collections, including the types, we believe that both species are the same, and synonymize *P. thoracica* under *P. picta*.

Also, we describe and illustrate the immature stages of *P. picta*; with notes on their biology and host plants; and scanning electron micrographs of some adult structures are included as well as illustrations of the male genitalia.

The immature stages of *P. picta* are very similar to the immature stages of *Cholula maculatus* (Cervantes & Pacheco 2006), but very different from *Cholula bracteicola* (Cervantes & Pacheco 2003). The shape of the body is narrower in *P. picta*, and the abdomen of *C. maculatus* is much wider. The color patterns are more or less the same; there are slight variations in the antennal segments, the black annulus in *P. picta* is much more apparent; the fourth and fifth instar of *P. picta* have also two red maculae, one between the mesocoxae and another dorsal macula between the scent gland plates III-IV and IV-V, these maculae are completely absent in *C. maculatus*. The first instar of *C. bracteicola* have red maculae between the scent gland plates IV-V and V-VI, similar to the maculae found in the fourth and fifth instars of *P. picta*. The first instars of *P. picta* have a red band which is wide between the scent gland plates and narrows towards the lateral margins of the abdomen. In the *C. maculatus* first instar, this macula is absent.

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