

Research Note

NEW RECORDS OF PARASITOIDS OF ACULEATE HYMENOPTERA IN PUERTO RICO^{1,2}

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There are few reports of parasitoids of Aculeate Hymenoptera for Puerto Rico (Wolcott, 1948). Parasitoids are potentially significant control agents of other insect species, and it is important to know their distribution and hosts. The parasitic species reported here have not previously been recorded from Puerto Rico. These parasitoids were collected or reared during the course of our studies of the Aculeate Hymenoptera of Puerto Rico.

ORDER STREPSIPTERA

Halictoxenos sp. (Stylopidae)

Species of *Halictoxenos* are parasites of bees of the genera *Lasioglossum* and *Halictus* (Halictidae) (Bohart, 1941; Kifune, 1963; Kifune et al., 1982). We have one female specimen found under metasomal tergum 4 of a male of *L. (Dialictus)* sp. collected in a light trap at Guánica on 5-VI-96. In the absence of a recent revision of the American representatives of this genus, it is not possible to assign a name to our specimen at this time. Two other species of Strepsiptera have been recorded from Puerto Rico: *Stenocranophilus quadratus* (Halictophagidae) a parasitoid of the fulgorid *Saccharosydne saccharivora* (Wolcott, 1948) and *Triozocera mexicana* (Mengeidae) (Maldonado and Navarro, 1967).

ORDER HYMENOPTERA

Coelopencyrtus gagaris Walker (Encyrtidae)

We have reared *Coelopencyrtus gagaris* from a pupa of the carpenter bee, *Xylocopa mordax* F. Smith (Anthophoridae) collected at San Lorenzo, 31-VII-95. Hundreds of adult parasitoids may emerge from a single pupa of the much larger host. This is the only *Coelopencyrtus* known from the Greater Antilles (G. Zolnerowich, personal communication).

Kapala terminalis Ashmead (Eucharitidae)

Wolcott (1948) recorded *Kapala furcata* (as *Kalapa furcata* Fabricius) from Puerto Rico. That identification is incorrect; *K. furcata* is a very different species known only from

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Brazil (J. Heraty, personal communication). It is probable that the Wolcott specimens (not available for verification) are actually *K. terminalis*, originally described from Cuba. We collected many specimens, mostly males, from Malaise and light traps in the Guánica Forest, 14-VIII-96. Hosts are large ponerine ants, such as *Odontomachus* species; *O. ruginodis* is the only species present in Puerto Rico (Snelling and Torres, unpublished).

Kapala terminalis is a very distinctive black wasp with a robust body (about 4.0 to 4.5 mm in length) and definite metallic greenish reflections; the antennae of the males are plumose; both sexes have a pair of long, curved scutellar spines.

Orasema minutissima Howard (Eucharitidae)

This is a Caribbean species that ranges from Cuba to northern South America, also present in Central America (Heraty, 1994). It is a parasitoid of the immature stages of the ants *Wasmannia auropunctata* Roger ("el abayalde") and *W. sigmoidea* Mayr (collected from ant nests at Guaynabo, 2-VI-91 and San Lorenzo, 26-VII-89, respectively). Wolcott (1948) reports *O. smithi* Howard as present in Puerto Rico, but no host species is provided.

Elasmus polistis Burks (Elasmidae)

This chalcidoid is a parasitoid of the paper wasp, *Polistes crinitus* Felton (Vespidae), reared from nests of the host collected at Río Piedras, 8-IV-85 and Carite Forest, 26-VII-89. Wolcott (1948) recorded *E. maculatus* Howard from Puerto Rico; he reported this parasitoid from cocoons of the braconid *Cotesia americana* Lepeletier (as *Apanteles americanus*).

Pachysomoides fulvus Cresson (Ichneumonidae)

We reared *P. fulvus* from nests of the wasp *Mischocyttarus phthisicus* Saussure (Vespidae) collected in Carolina, 5-IV-85; Morovis, 23-IV-85; Utuado, 8-VI-83; and Río Abajo, 4-VI-85. It is a common parasitoid of larvae of various species of *Polistes* (Vespidae) and ranges across much of the continental United States; it has also been found in México and Cuba (Carlson, 1979). This is the first report of *P. fulvus* as a parasitoid of a host other than *Polistes*. Although specimens from North America are often mostly red, the Puerto Rican specimens are more richly marked. The head and mesosoma are red, but with most of the face yellowish, including a yellow stripe around the compound eyes. The metasoma is black above, reddish below; sharply defined cream colored bands are present on the margins of the first four to six dorsal segments.

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