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NEW RECORDS FOR THE ANT *CHELIOMYRMEX MOROSUS* IN MEXICO (HYMENOPTERA: FORMICIDAE)

Cheliomyrmex is a rarely collected Neotropical genus of ants. The biology of these ants is almost unknown (Wheeler, 1909, 1921; Skwarra, 1934; Borgmeier, 1955). It is the only genus in the subfamily Ecitoninae that has the postpetiole broadly attached to the gaster and the mandibles are elongated with three well defined teeth. Its origin and phylogenetic position are unresolved (Borgmeier, 1955; Gotwald and Kupiec, 1975; Gotwald and Burdette, 1981; Snelling, 1981), although it is clearly a member of the subfamily Ecitoninae, based on several apomorphic characters (Bolton, 1990). Our objectives are to add two new localities for *Cheliomyrmex morosus* (Fr. Smith), discuss our observations of the biology of this species and to specify the type locality.

Cheliomyrmex morosus is found in Mexico and Central America (Honduras, Belize, Guatemala). It is the only species of the genus in Mexico (Watkins, 1982), previously reported from Campeche, Chiapas, Hidalgo, San Luís Potosí and Veracruz. We add two new localities: Veracruz, 5.6 K NE of Coscomátepec, Carretera Nacional 125, 5-vi-1988, 19°06'N, 97°01'W and Puebla, Teziutlán, 7-vi-1988, 1,940 m, 19°48'N 98°20'W. The first site is a coffee plantation, and at the second site there were two colonies, one in a grassland (*Paspalum/Hilaria*) and the other colony was in a disturbed area of dense secondary forest (*Quercus/Rubus*). All three areas were greatly disturbed as the original vegetation was mixed mountain forest (Rzedowski, 1978). Both localities were very wet and had recently received precipitation in the form of dew deposition or rains. This species is able to live in altered habitats. Both of our sites are surrounded by urban areas and coffee and corn crops.

This species was active on the surface of the soil from the afternoon (17:00–18:00 central Mexican time) throughout the night. One colony had thousands of workers and made a column several meters long under litter and through cracks in the soil. We did not observe a bivouac or other type of nest in the colonies. This is a very aggressive species. The mandibles easily penetrate the skin and the sting is very painful. A swelling and blister appear almost immediately. The pain subsides after a few hours in most cases.

There is confusion over the type locality of this species. Borgmeier (1955) mentioned that he could not find Atoyac in the state of Veracruz, and the type locality was probably in the states of Oaxaca or Jalisco. Atoyac is actually 15 K ENE of Córdoba, Veracruz, and is located at 18°56'N and 97°44'W, at an altitude of 525 m, an area of low forest with temporary agriculture.

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A NEW NAME FOR *PSEUDOGRAMMA* CARPENTER (CALONEURODEA: PALEUTHYGRAMMATIDAE)

The extinct order Caloneurodea, characterized by the similarly shaped fore- and hindwings and in having veins CuA and CuP simple, is only known from Upper Carboniferous and Permian deposits (303–245 million years ago). The group is quite small with only 9 families and 16 genera (see Carpenter, 1992, for complete listing). Although some authors have suggested the Caloneurodea to be a basal neuropteroid order of the Endopterygota (Sharov, 1966; Rasnitsyn, 1980), the order is best considered a relative of the extinct order Protorthoptera in the Exopterygota (Burnham, 1984; Carpenter, 1992).

In 1943 Dr. Frank M. Carpenter erected a new genus, *Pseudogramma*, for the euthygrammatid species *Euthygramma aberrans* (Martynov, 1938). At that time, Carpenter also moved *Pseudogramma* into a new family, the Paleuthygrammatidae,



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