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Occurrence of the centipede *Ectonocryptoides quadrimeropus* Shelley and Mercurio, 2005, in central Mexico (Scolopendromorpha: Scolopocryptopidae: Ectonocryptopinae)

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OCCURRENCE OF THE CENTIPEDE *ECTONOCRYPTOIDES QUADRIMEROPUS* SHELLEY AND MERCURIO, 2005, IN CENTRAL MEXICO (SCOLOPENDROMORPHA: SCOLOPOCRYPTOPIDAE: ECTONOCRYPTOPINAE)

Rowland M. Shelley¹

ABSTRACT.—An individual of the centipede *Ectonocryptoides quadrimeropus* Shelley and Mercurio, 2005, is reported from Puebla State, Mexico. It constitutes the third sample and fourth individual of the Ectonocryptopinae, and the first that is geographically removed from the Pacific Coast.

Key words: *Ectonocryptopinae*, *Ectonocryptoides quadrimeropus*, Mexico, Puebla.

The centipede subfamily Ectonocryptopinae (Scolopendromorpha: Scolopocryptopidae) occurs on the Pacific Coast of “mainland” Mexico and is known from 2 samples and 3 individuals—the holotype of *Ectonocryptops kraepelini* Crabill, 1977, from Colima, and the 2 syntypes of *Ectonocryptoides quadrimeropus* Shelley and Mercurio, 2005, from Jalisco (Crabill 1977, Shelley and Mercurio 2005, 2008). The latter sample was discovered in 2005 among the millipede holdings at the American Museum of Natural History, New York (AMNH), and while recently perusing more AMNH millipedes, I discovered a second sample and third individual of *Ectonocryptoides quadrimeropus* from Puebla State in central Mexico, some 450 miles (720 km) east-southeast of the type locality (Fig. 1). The second sample contains one individual, the largest ectonocryptopine known at 17.8 mm long and ca. 0.8 mm wide, in fair condition with only one caudal leg present (the right one) that comprises 4 podomeres with the tibia and 1st tarsus inflated and bulbous. As is characteristic for the subfamily (Shelley and Mercurio 2008), 3 ventral spines adorn the ultimate prefemur and 2 the femur (Fig. 2), the distal of which is somewhat recumbent instead of upright; these podomeres also possess minute spines and stiff hairs. Like the syntypes, the 1st tarsus exhibits an apical impression that gives rise to fine hairs and seemingly holds a sensory function (Fig. 3), but examination under 400X magnification did not reveal an excavation on the dorsal surface

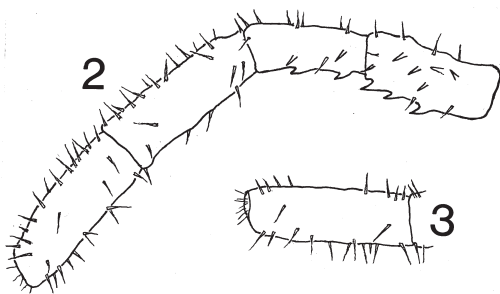
of this article. Shelley and Mercurio (2008) offered 2 explanations for the absence of the 2nd tarsus in *Ectonocryptoides*; either the boundary between the 1st and 2nd tarsi or the podomere itself is lost, and the apparent absence of the distal excavation in the Puebla individual supports the latter hypothesis.

Shelley and Mercurio (2005) addressed the apparent rarity of the Ectonocryptopinae and noted that a person sampling manually would have difficulty detecting so minute an organism in litter and humus mixed among decaying leaves, twigs, and roots; consequently, Berlese extraction may be the only method of obtaining these centipedes. Only 3 ectonocryptopine samples and 4 individuals are known, all housed at the AMNH, and 2 samples were unknowingly housed with millipedes rather than centipedes. While one can never exclude the possibility of discovering more individuals in institutional holdings, I have thoroughly examined the combined millipede and centipede collections in all major and minor North American repositories without finding any additional individuals. I have also perused holdings in 10 major and minor European repositories without finding ectonocryptopines. European colleagues have not found them either. Under these circumstances, a sample from a different area and physiographic region of the one known country of occurrence significantly enhances knowledge of a poorly known taxon. The present specimen extends the subfamilial range into central Mexico, away from the

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Fig. 1. Distribution of the Ectonocryptopinae. Dot, *Ectonocryptops kraepelini*. Stars, *Ectonocryptoides quadrimeropus*.



Figs. 2–3. *Ectonocryptoides quadrimeropus*: 2, right caudal leg of specimen from Puebla, medial view (drawn at 375X); 3, first tarsus of the same specimen, dorsolateral view (drawn at 400X).

Pacific Coast, and suggests a broader ectonocryptopine distribution that probably spans the breadth of the country and extends southward into Central America. Data for the new sample are as follows:

MEXICO: PUEBLA: Tehuacán, 24 July 1956, W.J. Gertsch, V. Roth (AMNH). **New state record.**

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