

A NEW SPECIES OF *PELTOCULUS* (ACARI: TROMBICULIDAE) FROM ECUADOR¹

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ABSTRACT—*Peltoculus ecuadorensis* is described as new from specimens collected off *Caenolestes convelatus* (Marsupialia: Caenolestidae) from Ecuador.

INTRODUCTION

Brennan (1972) proposed the genus *Peltoculus* to accommodate 2 species of chiggers having the eyes incorporated into the lateral margins of the scutum, *Trombicula almae* Brennan, 1968, and *Peltoculus bobbiannae* Brennan, 1972. Examination of chiggers collected from a specimen of the Ecuadorian Shrew Opossum, *Caenolestes convelatus* (Marsupialia: Caenolestidae) taken in Ecuador has revealed a third species in this genus, described below. The holotype is in the collection of the Field Museum of Natural History, Chicago, and paratypes there and in the collection of the U.S. National Museum of Natural History/Smithsonian Institution (chigger collection currently housed at the Acarology Laboratory, University of Hawaii at Manoa). Terminology follows Goff et al. (1982). All measurements are given in microns.

Peltoculus ecuadorensis Goff & Timm, n. sp.
(Fig. 1.)

Description of species—LARVA.

Idiosoma—Measuring 490 X 375 in engorged specimen. 1 pair of humeral setae, measuring 63-68; 18 dorsal idiosomal setae, arranged 6-2-4-4-2, measuring 46-52; 2 pairs of sternal setae, anterior 65-69, posterior 56-57; 14 preanal setae, 42-46; 4 postanal setae, 52-53; total idiosomal setae 42.

Gnathosoma—Palpal setal formula B/B/NNN/7BS; palpal claw simple; galeala forked; cheliceral

blade (41-43) with tricuspid cap; gnathobase moderately punctate, bearing a pair of branched setae.

Scutum—Moderately punctate with biconcave anterior margin, posterior margin deeply rounded posterior to level of PL bases; 2 pairs of eyes incorporated onto lateral margins of scutum, anterior eye larger; AM base in line with AL bases; SB in line with or slightly anterior to level of PL bases; AM > PL > AL; sensillae missing from all specimens; PW/SD = 0.78-0.83. Scutal measurements of holotype followed by means and ranges of type series in parentheses: AW 83 (80, 78-83); PW 106 (100, 98-106); SB 46 (44, 43-46); ASB 28 (27, 26-28); PSB 55 (54, 53-55); AP 31 (28, 26-31); AM 63 (64, 63-65); AL 46 (44, 41-46); PL 51 (54, 51-59).

Legs—All 7-segmented, terminating in a pair of claws and clawlike empodium. Onychotriches absent. IP 922-943. Leg I: 302-318; coxa with 1 branched seta (1B); trochanter 1B; basifemur 1B; telofemur 5B; genu 4B, 2 genualae, microgenuala; tibia 8B, 2 tibialae, microtibiala; tarsus (75 X 24) 21B, tarsala, microtarsala, subterminala, parasubterminala, pretarsala. Leg II: 280-300; coxa 1B; trochanter 1B; basifemur 2B; telofemur 4B; genu 3B, genuala; tibia 6B, 2 tibialae; tarsus (65 X 22) 16B, tarsala, microtarsala, pretarsala. Leg III: 325-340; coxa 1B; trochanter 1B; basifemur 2B; telofemur 3B; genu 3B, genuala, tibia 6B, tibiala; tarsus (84 X 19) 14B, nude mastitarsala (59).

Type data—Holotype and 3 paratypes from Ecuador, Imbabura Prov., Hacienda La Vega, 5 km ESE of San Pablo del Lago, 2600m, ex *Caenolestes convelatus* (FMNH 124620), 11.IX.1983, R.M. Timm, coll.

Remarks—*Peltoculus ecuadorensis* may be easily separated from the other 2 species in the genus in hav-

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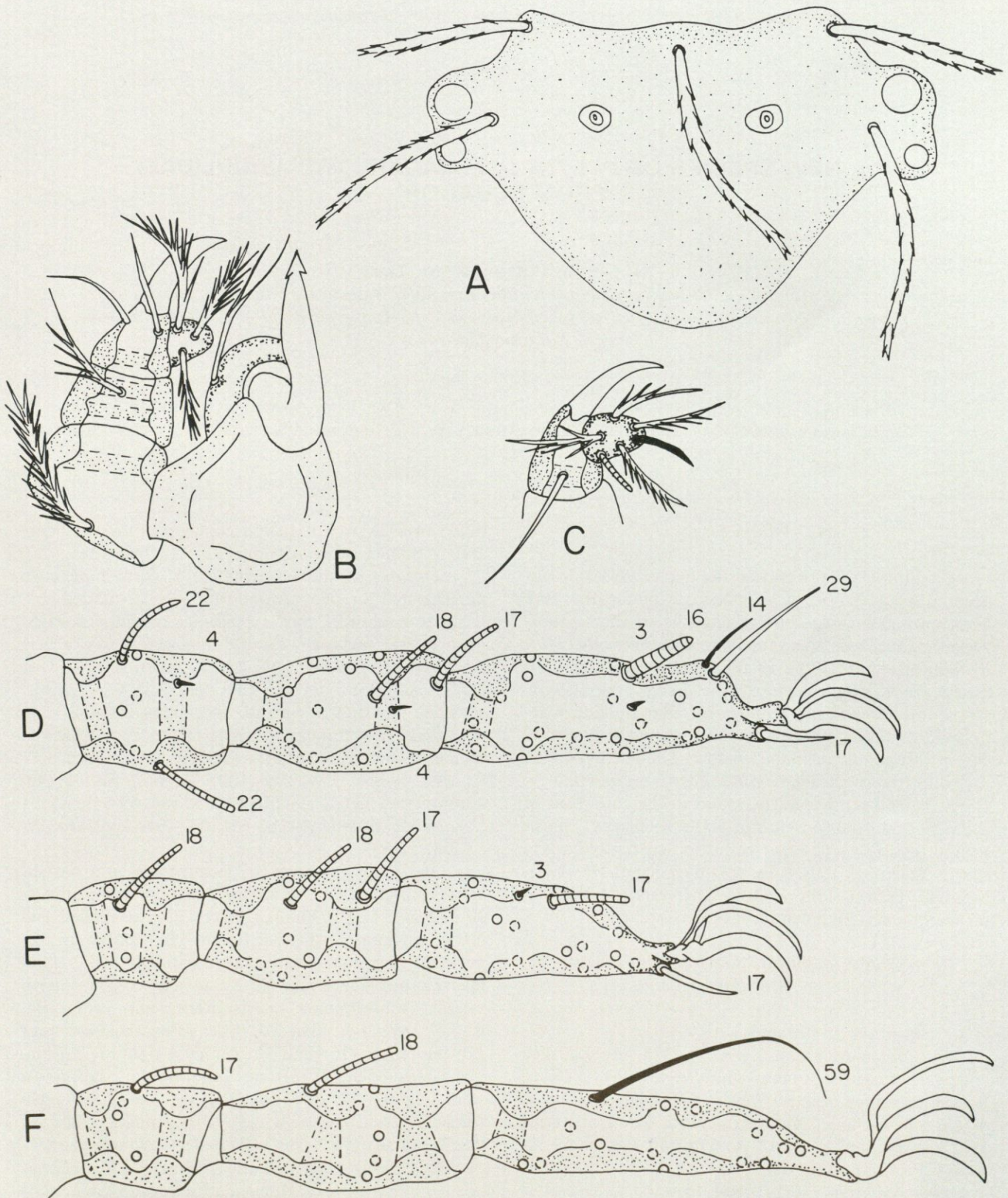


Fig. 1. *Peltoculus ecuadorensis* Goff & Timm, n. sp. A, scutum with eyes; B, dorsal aspect of gnathosoma; C, ventral aspect of palpal tibia and tarsus; D, leg I distal 3 segments showing specialized setae (measurements in microns) and bases of branched setae; E, leg II as above; F, leg III as above.

ing the palpal tibial claw with a single prong (trifurcate for the other species) and in having palpal tibial setation NNN (NNB for the other species). Among New World chiggers, the only other known species having eyes incorporated into the lateral margins of the scutum is *Hoffmannina reedi* Brennan, 1972. *Peltoculus ecuadorensis* may be easily separated from this species in having only 5 setae on the scutum (7 setae for *H. reedi*), palpal tibial setation NNN (NNB for *H. reedi*) and palpal tibial claw simple (trifurcate in *H. reedi*). The species name is based on the country of origin, Ecuador.

The genus *Peltoculus*, as now recognized, contains 3 species: *P. almae* from 3 species of *Oryzomys*, *Thomasomys fuscatus* (Rodentia: Cricetidae), and *Heteromys australis* (Rodentia: Heteromyidae) from several localities in Andean Colombia; *P. bobbiannae* from *Oryzomys minutus* and *Thomasomys hylophilus* from a single locality in Andean Venezuela; and *P. ecuadorensis* from *Caenolestes convelatus* from a single locality in Andean Ecuador. This relatively wide host range for the genus suggests that, like most trombiculids, *Peltoculus* species can parasitize a wide array of small mammals. Microhabitat available for the postlarval stages appears to be a more probable limiting factor than the available hosts for the larval stage. Geographic range for *Peltoculus* species appears to be restricted to the Andean highlands of northern South

America.

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