NEIVAMYRMEX CORNUTUS, N. SP. (Formicidae: Dorylinae) FROM OAXACA, MEXICO

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NEIVAMYRMEX CORNUTUS, N. SP. (Formicidae: Dorylinae) FROM OAXACA, MEXICO[1]

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ABSTRACT

Neivamyrmex **cornutus**, n. sp. (Formicidae: Dorylinae) from Tehuantepec, Oaxaca, Mexico, collected 13 December 1947, by T. MacDougal is described from 35 worker ants. Illustrations include a profile of the whole ant, frontal view of head, anteroventral view of mandible and dorsal view of the petiole and postpetiole. The holotype is deposited in the American Museum of Natural History, New York, U. S. A.

Neivamyrmex **cornutus**, n. sp. ☿
(Figs. 1–4)

MAJOR WORKER (HOLOTYPE). Length 5.2 mm. Head (Fig. 2): median length 1.25 mm; greatest width 1.30 mm; slightly narrowed posteriorly; sides slightly convex, almost straight; posterior corners with tall, triangular projections ("cornutus"). Eyes: diameter 0.1 mm; distinct cornea; located above head middle. Mandible (Fig. 3): length 0.8 mm; somewhat triangular; basal tooth absent; inner basal margin evenly curving into masticatory margin which has four or five small teeth. Frontal carinae: well developed with distinct, depressed area between them; straight, but slightly narrowed dorsally and ending in a

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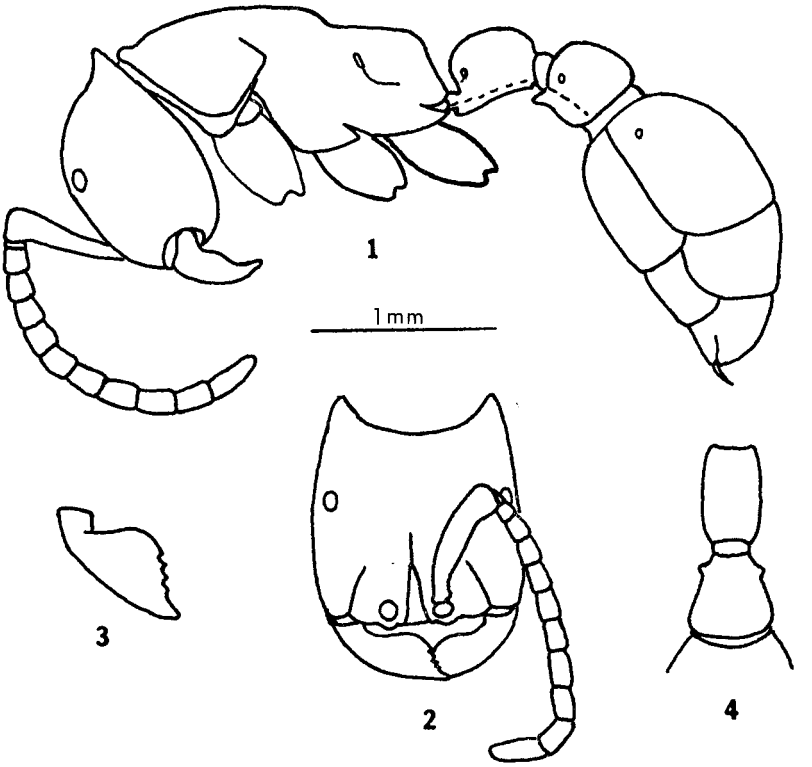

FIGS. 1–4, major worker of *Neivamyrmex cornutus*, n. sp.: 1, lateral view of whole ant; 2, frontal view of head; 3, anteroventral view of mandible; 4, dorsal view of petiole and postpetiole.

short median groove; ventrally curving outward, then constricting to narrow, flat flanges in front of antennal fossae. Antenna: scape: length, exclusive of basal condyle, 1.0 mm; basal width 0.1 mm; distal width 0.25 mm; moderately curved outwards. Flagellum: length 2.3 mm including segment-one which is recessed into apex of scape when perpendicular to it (frontal view); width of segment-two 0.15 mm, segment-ten 0.2 mm; segment-two slightly longer than wide, segments-three-six about as long as wide, segments-seven-ten slightly longer than wide, segment-eleven 2.3 times longer than wide. Alitrunk (Fig. 1): length 2.1 mm; greatest width 0.7 mm. Pronotum (lateral view): antero-dorsal border with distinct transverse ridge; ventrolateral border with broad, translucent flange extending perpendicular to lateral surface; posterolateral border separated from mesothorax by a distinct "V-shaped" suture. Promesonotal dorsum, in profile, almost level except

near anterior and posterior margins. Posterior margin of mesonotal dorsum curves downwards to the almost level surface of propodeum. Propodeum: indistinctly separated from meso- and metathorax, without a lateral suture or dorsal indentation, and not compressed laterally; level dorsum gradually curves into almost straight declining surface. Petiole: length of node 0.55 mm; width 0.325 mm; height 0.45 mm; without distinct ventral tooth, but with blunt anteroventral protuberance; node (dorsal view, Fig. 4) elongate, rectangular. Postpetiole: length 0.5 mm; height 0.5 mm; trapezoidal (dorsal view, Fig. 4); anterior width 0.25 mm; posterior width 0.475 mm. Gaster: somewhat oval, but more narrowed posteriorly; length 1.7 mm; width 1.1 mm; height 1.0 mm. Sting: well developed; length 0.2 mm. Metaleg: coxa conical, length 0.6 mm; trochanter short, length 0.18 mm; femur length 1.7 mm, median width 0.3 mm, apical one-sixth slightly bent downwards; tibia incrassated, basal width 0.12 mm, distal width 0.22 mm, length 1.7 mm, apical spur well developed, pectinate, length 0.25 mm; tarsus straight and slender, width of segment-one 0.1 mm, length of segment-one 1.2 mm, -two 0.5 mm, -three 0.4 mm, -four 0.25 mm, -five 0.32 mm; claws strongly bent, without teeth, length 0.15 mm. Head, alitrunk, petiole and postpetiole thickly granulated and indistinctly rugated. Scape and legs finely shagreened (50×). Mandibles finely striated. Gaster smooth. Setae: semierect, short to moderately long and moderately abundant on most surfaces, except more sparse on head, sides of alitrunk, sides of petiole and postpetiole; mixture of short and long erect setae on scape, the longest about one and one-half times longer than greatest width of scape. Color: reddish brown, head and alitrunk darker (slightly blackish), and gaster lighter (more yellowish brown).

VARIATIONS: WORKERS: length 3.5–5.2 mm. The characteristics of the series of 35 workers from Tehuantepec, Mexico, are fairly uniform. The smallest workers have a slightly more visible mesopropodeal suture and slightly more concave declining surface of the propodeum. The lateral "V-shaped" suture between the pronotum and mesothorax is less pronounced in the smaller workers. Heads vary from blackish brown to almost black, and the bases of the gasters vary from yellowish brown to blackish brown. Five workers from Cuernavaca, Mexico, are more reddish brown and have slightly less projecting occipital corners.

MALE AND QUEEN. Unknown.

TYPES. WORKERS. Red determination labels. Collected by T. MacDougal; Mexico, Oxaca, Tehuantepec; 13 December 1947. Holotype and two paratypes deposited in Amer. Museum Natural Hist., New York, U.S.A.; three paratypes deposited in U.S. National Museum, Wash., D.C., U.S.A.; three paratypes deposited in Watkins' Collection, Baylor Univ., Waco, Texas, U.S.A.

TYPE LOCALITY. Mexico, Oaxaca, Tehuantepec.

GEOGRAPHICAL DISTRIBUTION. Mexico: Oaxaca, Tehuantepec; Morelos, Cuernavaca.

SPECIMENS STUDIED. Thirty-five workers in one series from type locality and five workers collected by W. M. Wheeler from Cuernavaca, Morelos, Mexico. Specimens deposited in Amer. Museum of Natural History, U.S. National Museum and Watkins' Collection.

DIFFERENTIAL DIAGNOSIS. WORKERS: promesonotum not hump-shaped; concave posterodorsal border of head broader than pronotum; basal surface of propodeum longer than declining surface; scape extended above eye level; node of petiole (dorsal view) elongate-rectangular; declining surface of propodeum not distinctly indented or carinated; basal surface of mandible gradually curving into masticatory surface; posterodorsal corners of head strongly projecting and visible from a frontal view; head and alitrunk granulated but without large distinct pit-like depressions; postpetiole trapezoidal (dorsal view); mesopropodeal suture indistinct and not indented below dorsum of propodeum; ventrolateral flange of pronotum well developed and turned-out perpendicular to lateral surface.

DISCUSSION. *Neivamyrmex cornutus*, n. sp. will key to couplet 36 in Borgmeier (1955:292), but is distinctly different from *N. sumichrasti* (Norton) and *N. densepunctatus* (Borg.). The propodeum of *N. cornutus* (lateral view) is more level, more gradually rounded into the declining surface and the declining surface is less concave than on the above two species. Also, the mesopropodeal suture is indistinct and not indented below the propodeal dorsum. *N. cornutus* lacks the large, distinct, pit-like depressions on the head and alitrunk of *N. sumichrasti*, and the area between the frontal carinae is deeper and narrower. *N. cornutus* has longer antennal scapes, a more trapezoidal postpetiole, and lacks the sharp anteroventral petiole tooth of *N. densepunctatus*. *N. cornutus* most closely resembles *N. texanus* Watkins, 1972, but has longer posterodorsal projections on the head corners, is more rugose, has a less distinct mesopropodeal indentation, and lacks a concave declining surface of the propodeum.

Wheeler (1908:411) identified several workers which he collected from Cuernavaca, Mexico, as *Eciton (Acamatus) sumichrasti* Norton. Borgmeier (1955:493) included these specimens in *N. nigrescens* Cresson, but noted that their occipital corners were unusually elongated. I examined five of these specimens from the Amer. Museum of Natural History collection and believe them to be *N. cornutus*, n. sp.

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