## NEIVAMYRMEX ANGULIMANDIBULATUS, NEW SPECIES (FORMICIDAE: DORYLINAE) FROM CORDOBA, MEXICO

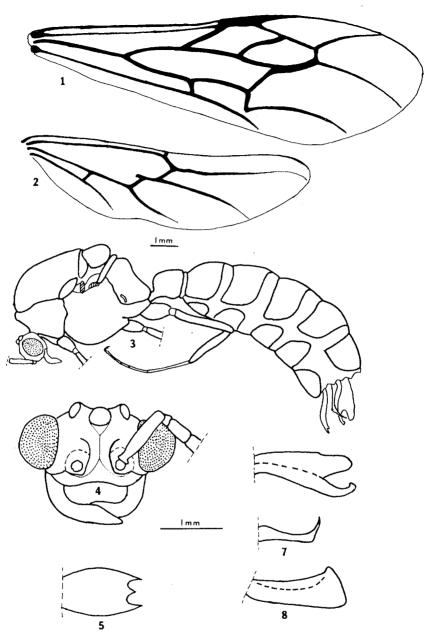
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ABSTRACT. *Neivamyrmex angulimandibulatus*, n. sp. (Formicidae: Dorylinae) from Cordoba, Vera Cruz, Mexico is described from five males. Illustrations include a profile of the whole ant, forewing, hindwing, frontal view of head, ventral view of the subgenital plate, and lateral views of the sagitta, volsella and stipes. This new species is most closely related to *N. rosenbergi* and *N. diabolus*.

## Neivamyrmex angulimandibulatus, new species &

MALE (Holotype; Mexico, Vera Cruz, Cordoba; 6-9-XI-1966; A. B. Lau). Length 15.0 mm. Head (Fig. 4) width (including compound eyes) 2.4 mm, height 1.3 mm, dorsal border (viewed from front) not extended above compound eyes; ocellar triangle elevated above general surface of head; dorsal border between lateral ocelli moderately concave. Ocelli large. Width of median ocellus 0.375mm; height of lateral ocellus 0.3 mm; distance from median ocellus to lateral ocellus 0.275 mm; distance from lateral ocellus to compound eye 0.2 mm. Compound eyes strongly bulging and covering almost entire lateral borders of head; height of compound eye 0.9 mm, width (frontal view) 0.625 mm. Ventral border of clypeus slightly concave, distance between ventral border and antennal fossa 0.175 mm. Edges of frontal carinae between bases of antennae sharp and projecting, but become rounded as they extend dorsally to form transverse swellings over only the median one-third of the antennal fossae. Narrowest distance between frontal carinae 0.35 mm. Mandibles broad, abruptly bent medially ("angulimandibulatus") about one-third their lengths from their bases; width at base (frontal view) 0.25 mm; greatest width (0.3 mm) about two-thirds length from base, then inner border slopes diagonally to blunt apex. Antennal scape long, almost straight, cylindrical, extending to dorsal border of lateral ocellus; length (excluding basal condyle) 1.0 mm; median width 0.275 mm. Flagellum filiform, slightly tapering distally; length 5.4 mm; width at segment three 0.25 mm; length of segments: one 0.175 mm, two 0.375 mm, three and four



Figs. 1—8. Male of Neivamyrmex angulimandibulatus, n. sp. 1, forewing; 2, hindwing; 3, profile of whole ant; 4, frontal view of head; 5, ventral view of subgenital plate; lateral views of 6. sagitta; 7, volsella; and 8, stipes. To avoid damaging the holotype, all illustrations were drawn from a paratype whose wings were removed and genitalia partially dissected.

0.40 mm, five and six 0.425 mm, seven 0.45 mm, eight 0.475 mm, nine-eleven 0.50 mm, twelve 0.74 mm.

Alitrunk (Fig. 3) length 5.2 mm, height 3.5 mm, width 2.9 mm, arched anteriorly over about one-half the thickness of the head. Pronotum compressed ventrolaterally and narrower than the somewhat bulging mesopleuron. In profile, promesoscutal and promesopleural sutures prominent; dorsal surface of scutum anteriorly rounding into a level posterior surface; propodeum separated from metaepimeron and metasternum by deep impressions, and slightly concave along posterior border. Scutellum extending over about one-half the length of the dorsum of propodeum. From a dorsal view, length of scutum 3.2 mm, width 2.7 mm, with a median longitudinal suture extending from anterior border about one-half the length of scutum, and two narrow lateral longitudinal ridges beginning about one-third the distance from the anterior border and extending to the posterior border. Paraptera distinct, but very narrow along the median one-third. Scutellum 1.2 mm long, 1.7 mm wide, and bluntly rounded posteriorly.

Forewing (Fig. 1) length 15.2 mm, greatest width 5.0 mm, vein greatly thickened below the distal margin of the second submarginal (cubital) cell which is three times longer than wide. Hindwing (Fig. 2) length 11.3 mm, greatest width 3.1 mm.

Metaleg (Fig. 3): length of coxa 1.0 mm, femur 2.3 mm, tibia 2.0 mm, tarsal segment one 1.55 mm, two 0.55 mm, three 0.45 mm, four 0.25 mm, five 0.50 mm. Each claw 0.25 mm long with a very small median tooth on its inner border.

Petiole. from a dorsal view, rectangular, 1.1 mm long and 2.0 mm wide; from a lateral view, steep anterior surface curves broadly into the dorsal surface which forms a blunt corner with the posterior surface; height 1.2 mm.

Gaster (Fig. 3) elongate, cylindrical, gradually broadened distally; length 8.6 mm, greatest height 3.0 mm, greatest width 3.0 mm. Subgenital plate (Fig. 5), from a ventral view, "shovel-shaped" with slightly convex sides and three apical teeth, the outer teeth about two times the length of the median tooth. Stipes (Fig. 8), in profile, somewhat triangularly shaped distally, with the gradually ascending dorsal surface forming a small, rounded bump at the corner of the steeply descending posterior surface. Volsella (Fig. 7), in profile, narrow, not forked, and distally curving upward to form a pointed apex. Sagitta (Fig. 6), in profile, with a short, apically rounded, posterodorsal projection and paired, slightly longer, narrower, posteroventral projections which are only slightly out-turned at their tips.

Entire body reddish-brown, except the dorsal half of the head which is blackish, and the wings which are lighter and more yellowish.

All body surfaces thickly covered with yellowish setae which tend to be appressed on the dorsal and lateral surfaces, but more erect on the ventral surfaces. The setae are long and erect on the head, antennal scapes, mandibles and legs, but are very short on the wings.

WORKER AND QUEEN. Unknown.

TYPES. Holotype and four paratype males with red labels, collected by A. B. Lau, 6–9 November 1966, Cordoba, Vera Cruz, Mexico, deposited in the U. S. National Museum, Washington, D. C., U. S. A.

TYPE LOCALITY. Cordoba, Vera Cruz, Mexico.

GEOGRAPHICAL DISTRIBUTION. Known only from the type locality.

SPECIMENS STUDIED. Holotype and four paratype males.

DIAGNOSTIC CHARACTERISTICS. *Male*: length about 15 mm; clypeus without teeth; first gastric tergite as long as the second; subgenital plate with three teeth; mandibles broad and abruptly bent inward about one-third their lengths from their bases; ocelli large with the distance between the lateral ocelli and compound eyes equal to about one-half the width of the median ocellus; alitrunk and gaster rusty reddish-brown, upper half of head blackish, wings yellowish; long, erect, yellowish setae on the head, antennal scapes, mandibles and legs.

DISCUSSION. The Neviamyrmex angulimandibulatus male was compared with specimens of N. rosenbergi and N. diabolus to which it may be keyed in Borgmeier, T. 1955: 297 [Die Wanderameisen der neotropischen Region (Hym. Formicidae). Stud. Entomol., Nr. 3: 1–716], but can be separated from by the broader mandibles, more reddish coloration, longer and more erect yellowish setae on the scapes, mandibles and legs, and differently shaped stipes of N. angulimandibulatus.

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