

NEIVAMYRMEX DIGITISTIPUS, n. sp.
(FORMICIDAE: DORYLINAE) FROM
COSTA RICA

by JULIAN F. WATKINS II

Department of Biology, Baylor University
Waco, Texas 76703

ABSTRACT

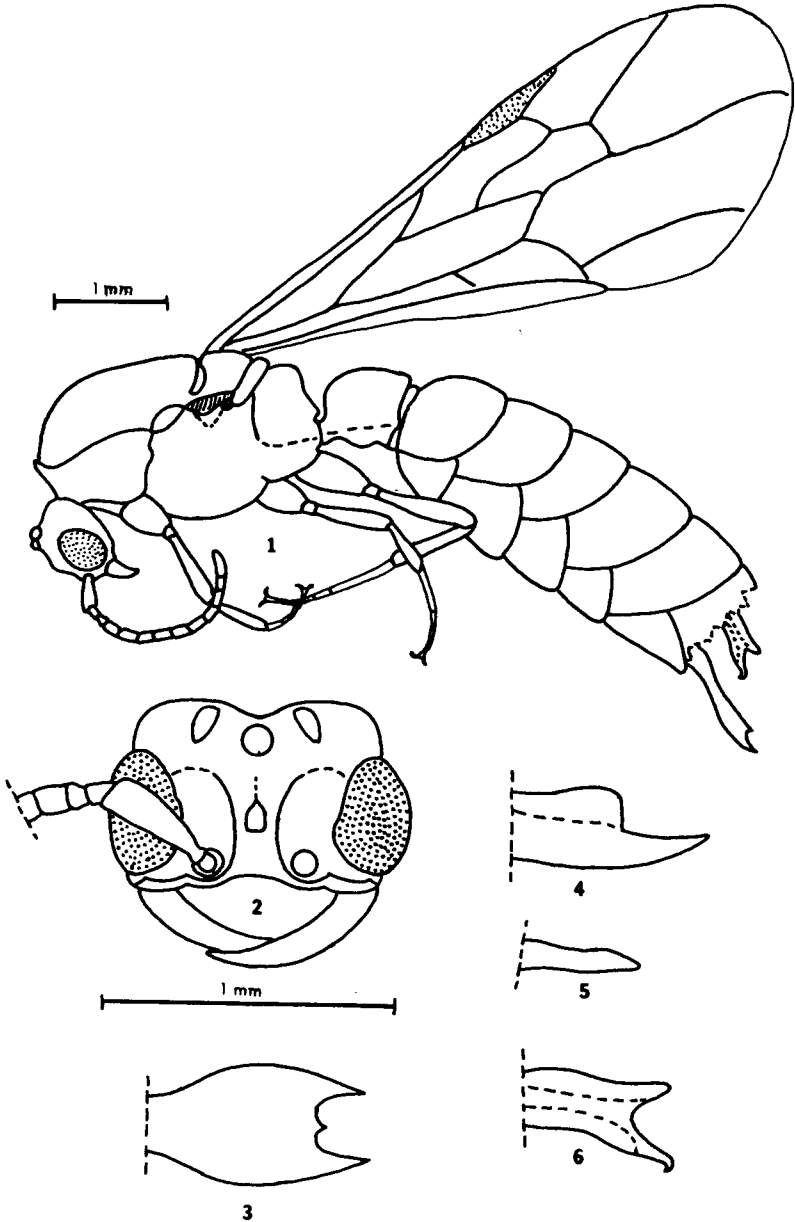
Neivamyrmex digitistipus, n. sp. (Formicidae: Dorylinae) from Turrialba, Costa Rica, collected 16 July 1965 by P. J. Spangler is described from one male specimen. Illustrations include a profile of the whole ant, frontal view of the head, ventral view of the subgenital plate, and lateral views of the stipes, volsella and saggita.

NEIVAMYRMEX DIGITISTIPUS, n. sp. ♂

MALE (Holotype, Costa Rica: Turrialba; 16-VII-1965, P. J. Spangler). Length 6.8 mm. Head (Fig. 2) length 0.6 mm, width (including compound eyes) 1.05 mm. Posterior margin of head, viewed from front, with rounded corners strongly projecting posterolateral from the ocelli and dorsal from compound eyes. Border between lateral ocelli strongly concave. Ocelli small. Lateral ocellus separated from margin of compound eye by a distance greater than diameter of median ocellus. Width of median ocellus 0.137 mm; distance from median ocellus to lateral ocellus 0.075 mm; distance from lateral ocellus to margin of compound eye 0.187 mm. Anterior border of clypeus between the frontal carinae slightly concave. Edges of frontal carinae between antennal fossae sharp, but become rounded as they extend dorsally, then curve laterally to form moderate swellings above the antennal fossae and below the ocelli. Area between frontal carinae with shallow pentagonal impression. Mandibles sickle-shaped, slightly curved medially, and gradually tapering apically; length of mandible 0.6 mm. Scape widened distally, length 0.4 mm, proximal width 0.1 mm, distal width 0.175 mm. Flagellum filiform, very slightly tapered distally (diameter of segment 2, 0.125 mm; segment 11, 0.1 mm). Length of flagellum 1.69 mm, segment 2 shortest, apical segment longest (1.6 X length of antepical segment).

Alitrunk (Fig. 1) length 2.2 mm, greatest height 1.3 mm, greatest width 1.0 mm, arched anteriorly over about 1/3 the thickness of the head. Pronotum moderately compressed ventrolaterally. In profile, promesoscutal and pro-

mesopleural sutures prominent; dorsal surface of scutum anteriorly rounding into a level posterior surface; mesosternum appears swollen; suture between



Figs. 1-6. Male of *Neivamyrmex digitistipus*, n. sp. 1, profile; 2, frontal view of head; 3, ventral view of subgenital plate; lateral views of 4, stipes; 5, volsella; and 6, saggita.

metaepimeron and propodeum distinct, but only a weak depression between propodeum and metasternum; propodeum arched dorsally and steeply sloping posteriorly, length of dorsal surface 0.25 mm, sloping surface 0.5 mm. From a dorsal view, length of scutum 1.4 mm, width 1.0 mm; median 1/3 of paraptera thin and depressed below general surface of alitrunk, lateral portions of parapter crescent-shaped; scutellum 0.45 mm long, narrowed and rounded posteriorly, below which can be seen the narrow, rounded metanotum; dorsal surface of propodeum 3 X wider than long.

Forewing (Fig. 1) length 5.5 mm, greatest width 2.0 mm, second submarginal (cubital) cell 3.5 X longer than wide, stigma and veins brownish, entire surface thickly covered with short brownish setae. Hindwing length 4.0 mm, greatest width 1.0 mm.

Metaleg (Fig. 1): coxa elongate, slightly conical, 2.4 X longer than wide; trochanter short, about as broad as long; femur 2 X broader in middle than at proximal end, with slightly down-turned distal end; tibia straight, about same length as femur; tarsal segments straight and decreasing slightly in diameter; length of coxa 0.6 mm, trochanter 0.1 mm, femur 0.8 mm, tibia 0.8 mm, tarsus 1.05 mm; tarsal segment 1 longer than segments 2-4 combined, segment 4 shortest.

Petiole, from a dorsal view, subquadrate and almost 2 X wider than long (width 0.8 mm, median length 0.5 mm) with straight sides and moderately concave posterior margin; in profile, steep anterior surface evenly curves into almost level dorsal surface; height 0.5 mm.

Gaster (Fig. 1) elongate, cylindrical; length 4.0 mm, height 1.2 mm, width 1.1 mm. Subgenital plate (Fig. 3) "shovel-shaped" with slightly convex sides and 2 long, sharp, apically upturned, outer apical teeth and one very small median apical tooth. Stipes (Fig. 4), in profile, with broad basal one-half, then abruptly curving into a pointed, blade-shaped ("finger-like") projection. Volsella (Fig. 5) in profile, narrow, almost straight, not forked, and decreasing in width to a pointed apex. Saggita (Fig. 6), in profile, with short, apically rounded, posterodorsal projection and a slightly longer, out-turned, sharp-pointed posteroventral projection.

Entire body surface yellowish-brown, except eyes are blackish, and wings are brownish. All surfaces with thickly spaced, short to moderately long, semierect setae.

WORKER AND QUEEN. Unknown.

TYPES

Holotype male with red label, collected by P. J. Spangler, 16 July 1965, Turrialba, Costa Rica, deposited in the U. S. National Museum, Washington, D. C., U. S. A.

TYPE LOCALITY

Turrialba, Cartago, Costa Rica.

GEOGRAPHICAL DISTRIBUTION

Known only from type locality.

SPECIMENS STUDIED

Holotype.

DISTINCTIVE CHARACTERISTICS

Male: small size (6.8 mm); clypeus without teeth; first gastric tergite as long as 2nd; subgenital plate with 3 teeth; mandible sickle-shaped; dorsoapical projection of saggita slightly shorter than ventroapical projection; distance from lateral ocellus to margin of compound eye about $1 \frac{1}{3}$ X diameter of median ocellus; posterior corners of head strongly swollen; narrow, somewhat sword-shaped, volsella; and stipes, in profile, with broad base which abruptly narrows into a ventroapical "finger-like" projection.

DISCUSSION

The *N. digitistipus* male may be keyed to *N. cloosae* in Borgmeier, (1955: 298), except the lateral ocelli of *N. digitistipus* are about 1.3 times their diameters from the margins of the compound eyes rather than "at least twice their diameters" as stated in couplet 44a, and the mandibles are not "thin" as stated in couplet 47a. The broader mandibles, narrow, sword-shaped volsellae, and unusual stipites of *N. digitistipus* will readily differentiate it from *N. cloosae*.

ACKNOWLEDGMENT

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LITERATURE CITED

- Borgmeier, T. 1955. Die Wanderameisen der neotropischen Region (Hym. Formicidae). *Stud. Entomol.*, Nr. 3: 1-716.