

**NEIVAMYRMEX QUADRATOCCIPUTUS, n. sp.**  
**(FORMICIDAE: DORYLINAE) FROM**  
**EL SALVADOR**

by JULIAN F. WATKINS II

*Department of Biology, Baylor University*  
*Waco, Texas 76703*

ABSTRACT

*Neivamyrmex quadratoociputus*, n. sp. (Formicidae: Dorylinae) from San Salvador, El Salvador, collected in 1958 by O. L. Cartwright is described from 2 male specimens. Illustrations include a profile of the whole ant, frontal view of the head, and lateral views of the genitalia. The worker and queen are unknown.

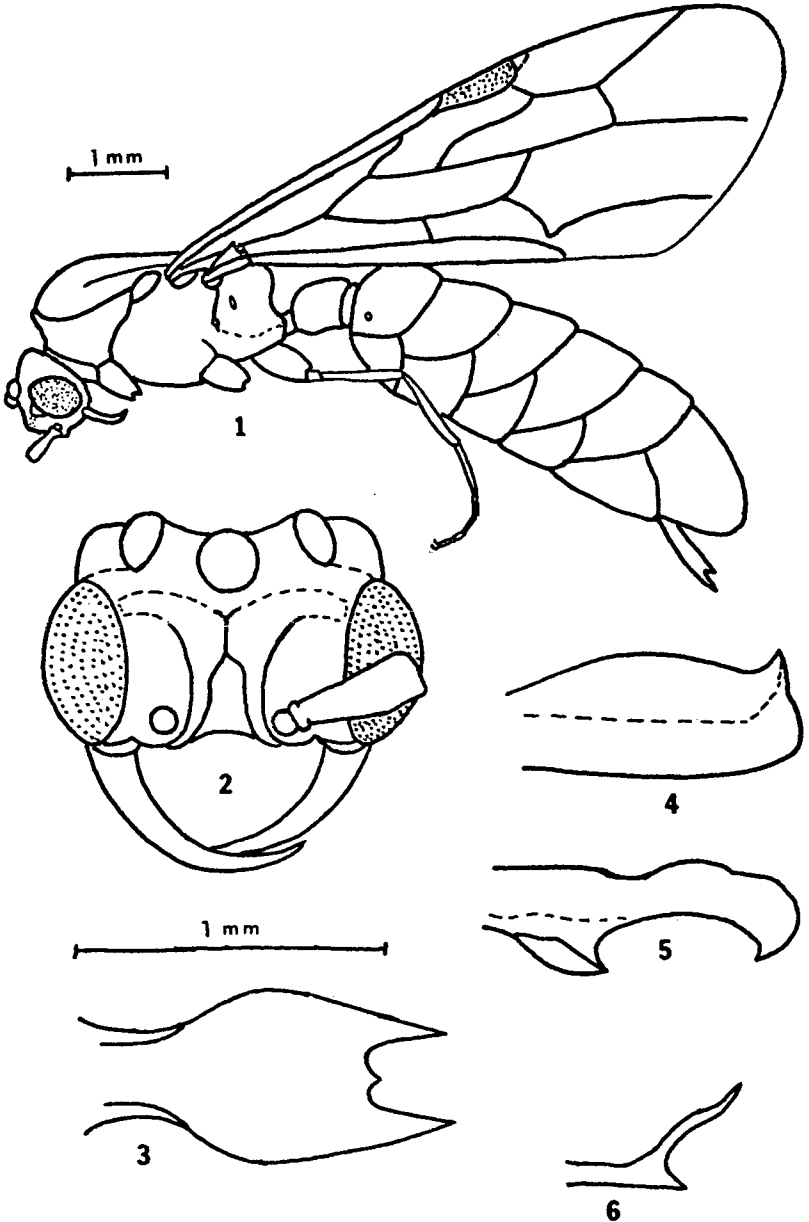
*NEIVAMYRMEX QUADRATOCCIPUTUS*, n. sp. ♂

(Figures 1-6)

MALE (Holotype, San Salvador, 1958, O. L. Cartwright). Length 7.7 mm. Head (Fig. 2) length 0.75 mm, width (including compound eyes) 1.25 mm. Ocelli large and positioned on an elevated protuberance which is concave between the lateral ocelli. Diameter of medium ocellus 0.2 mm, distance between dorsal borders of lateral ocelli 0.25 mm, distance between lateral ocellus and border of compound eye 0.125 mm. Occipital corners, viewed from the front between and behind the dorsal borders of the compound eyes and the lateral ocelli, strongly projecting and somewhat quadrate, although the corners are rounded. Posterior border of occiput, from a dorsal view, concave and not upturned. Compound eyes large, 0.575 mm in height. Anterior border of clypeus slightly concave. Frontal carinae sharp ventrally and rounding into prominent dorsolateral swellings above the antennal fossae and below the ocellar protuberance. Area between carinae broadly and deeply impressed, with a groove extending dorsally between the transverse swellings. Mandibles sickle-shaped and gradually tapering to pointed apices; length of mandible 0.7 mm (measured in a straight line from its outer base to apex). Scape moderately widened distally, length 0.7 mm, greatest width 0.15 mm. Flagellum filiform; length 2.2 mm, almost equally thick (0.10-0.14 mm) throughout its length; segments 1-3 slightly wider than long, 4-6 somewhat longer than wide, 7-9 2X longer than wide, 10-11 2.25X longer than wide, 12 3.25X longer than

wide.

Alitrunk (Fig. 1) length 2.5 mm, greatest height 1.4 mm, greatest width



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

1.0 mm. Pronotum extends forward over about  $\frac{1}{2}$  the thickness of the head and is somewhat compressed ventrolaterally. Promesoscutal suture visible; promesopleural suture prominent. Scutum, in profile, with anterior surface arching into a somewhat level posterior surface; from a dorsal view, length 1.6 mm, median width 1.0 mm, with a straight longitudinal line extending from the anterior border about  $\frac{1}{3}$  the distance to the posterior border, and with 2 thin lateral, weakly undulating ridges beginning about  $\frac{1}{3}$  the distance from the anterior border and extending to the posterior border. Paraptera well defined, narrowest mid-dorsally. Scutellum, viewed dorsally, about as wide as long, gradually narrowed and rounded posteriorly, below which can be seen the round posterior portion of the metanotum. Dorsal surface of propodeum 2X broader than long, with a shallow anteromedial depression. Anterior border of propodeum, in profile, separated from metaepimeron by a deep suture which ends ventrally at a deep "pin-hole-sized" depression; suture between ventral border of propodeum and metasternum barely visible (better defined on the paratype). Sloping surface of propodeum, in profile, steep and slightly concave.

Forewing (Fig. 1) length 6.9 mm, greatest width 2.5 mm, with brownish veins and well defined stigma; entire surface with short, thick setae; 2nd submarginal (cubital) cell 3.8X longer than wide; length 1.7 mm, width 0.45 mm. Hindwing length 5.0 mm, greatest width 1.1 mm.

Metaleg (Fig. 1): coxa conical, more than 2X longer than greatest width; trochanter short, well defined; femur straight, somewhat thicker distally; tibia almost straight, except very slightly upturned near the distal end which is twice as thick as the proximal end; tibial spur well developed and weakly pectinate; tarsal segments straight and about equal in diameter; length of coxa 0.72 mm, trochanter 0.17 mm, femur 0.95 mm, tibia 0.95 mm, tarsus 1.3 mm; tarsal segment 1 longer than segments 2-4 combined, segment 4 shortest; claw moderately curved with a small median tooth on inner margin.

Petiole length 0.6 mm, height 0.6 mm, width 0.8 mm; from a dorsal view, subquadrate with slightly concave posterior margin; in profile, anterior margin evenly curving into almost level dorsal margin.

Gaster (Fig. 1) elongate, cylindrical; length 4.6 mm, height 1.6 mm, width 1.1 mm. Subgenital plate (Fig. 3, ventral view) "shovel-shaped" with 2 long, sharp outer apical teeth and one very small median tooth. Stipes (Fig. 4) "leaf-like"; in profile, slightly convex dorsally with a tooth-like projection at the dorsoapical corner, almost straight ventrally with a rounded ventroapical corner. Volsella (Fig. 6) forked with a short triangular ventral projection and a slightly "S-shaped," long, thin, sharp-pointed dorsal projection. Saggita (Fig. 5), in profile, with the dorsal part extending "beak-like" beyond a short, somewhat triangular ventral portion, and with a slightly uneven dorsal surface. (The genitalia are illustrated and described from the paratype specimen.)

Entire body surface smooth, except for coarse, setae-bearing punctations

on the head and thorax. All body surfaces with abundant setae, which are usually moderately long and yellowish, except they are short on the flagellum and wings, and brownish on the wings. Color yellowish-brown, except for brownish infuscated wings, and a blackish-brown head.

WORKER AND QUEEN. Unknown.

#### TYPES

Holotype male and one paratype male with red labels, collected by O. L. Cartwright, 1958, San Salvador, El Salvador, deposited in the U. S. National Museum, Washington, D. C., U. S. A.

#### TYPE LOCALITY

San Salvador, El Salvador.

#### GEOGRAPHICAL DISTRIBUTION

Known only from the type locality.

#### SPECIMENS STUDIED

Holotype and paratype.

#### DISTINCTIVE CHARACTERISTICS

Male: small size (7.7-8.0 mm); strongly projecting occipital corners which appear somewhat subquadrate, although the corners are actually rounded; sickle-shaped mandibles; relatively large ocelli; diameter of the median ocellus greater than the distance from the lateral ocellus to the dorsal margin of the compound eye; strong transverse swelling above the antennal fossa; and the shapes of the genitalia (Figs. 4-6).

#### VARIATION

The paratype male (about 8.0 mm) is slightly longer than the holotype male (7.7 mm). Some sutures are slightly better defined on the paratype.

#### DISCUSSION

The male (*N. quadratoocciputus*) keys to *N. spoliator* in Borgmeier, (1955: 299), except "ocelli small" in the last couplet (67) does not fit. The shorter body length, larger ocelli, more strongly forked volsellae, and differently shaped stipites of *N. quadratoocciputus* will differentiate it from *N. spoliator*. The volsellae and stipites of *N. quadratoocciputus* are similar to those of

*N. macropterus* and *N. fuscipennis*; however, *N. quadratoocciputus* is smaller and has more expanded occipital corners than the latter 2 species.

ACKNOWLEDGMENT

Specimens for this study were provided by D. R. Smith, Systematic Entomology Laboratory, U. S. Department of Agriculture, U. S. National Museum, Washington, D. C. This manuscript was reviewed by H. W. Reno, Biology Department, Baylor University, Waco, Texas.

LITERATURE CITED

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