

*Neivamyrmex crassiscapus*, n. sp.  
(Hymenoptera: Formicidae: Ecitoninae) from MexicoJULIAN F. WATKINS II  
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**ABSTRACT:** The male of *Neivamyrmex crassiscapus*, n. sp. (Hymenoptera: Formicidae: Ecitoninae) is described from specimens collected in a light trap near Palenque, Chiapas, Mexico. Males of this species have been collected from the following states in Mexico: Campeche, Chiapas, Quintana Roo, Tamaulipas, Veracruz, Yucatan. These specimens were incorrectly referred to as *Neivamyrmex guerini* (Shuckard) in an earlier article. The holotype is deposited in the National Museum of Natural History, Washington, D.C., U.S.A. The worker and queen are unknown.

*Neivamyrmex crassiscapus*, new species  
(Figs. 1-8)

**MALE (HOLOTYPE):** Length about 9.5 mm (apex of gaster dissected). Body reddish-brown, except for a blackish-brown head dorsum. Wings transparent with brown veins. Body surfaces smooth, except for seta-bearing punctations. All body surfaces with abundant yellowish setae.

**Head** (Figs. 1, 7, 8): Height (exclusive of mandibles) 0.90 mm, width (including compound eyes) 1.75 mm. Prominent frontal carinae (Fig. 7) extend downward from just below the median ocellus, then curve laterally below the antennal fossae, and form two angular projections with a concave border between them at the lower margin of the clypeus. Area between frontal carinae contains a triangular impression from which a groove extends upward almost to the median ocellus. Large concavities for receiving antennal scapes present between frontal carinae and lateral borders of head. Sharp ridges extend laterally from the lateral ocellus along the head dorsum, then curve downward along the inner margins of the upper portions of the compound eyes. Posterior vertex concave in profile (Fig. 1) and somewhat quadrate from a dorsal view (Fig. 8). Ocelli elevated on a triangular protuberance. Diameter of each ocellus 0.25 mm. Distance between lateral ocelli 0.37 mm. Distance from lateral ocellus to border of compound eye 0.20 mm. Compound eyes large, 0.60 mm in height, bulge laterally. Each mandible (Fig. 7) 0.78 mm long (measured in a straight line from outer base to tip), sickle-shaped and gradually tapered to a pointed apex. Antenna (Fig. 6) with an unusually thick scape (greatest width 0.33 mm; length, exclusive of basal condyle, 0.75 mm) and filiform flagellum (greatest width 0.15 mm, length 3.25 mm).

**Alitrunk** (Fig. 1): Length 3.10 mm, greatest height 2.10 mm, greatest width 1.50 mm. Pronotum extends forward above the head, has a prominent indentation above the posterior vertex, and is compressed ventrolaterally. Promesoscutal and promesopleural sutures prominent. Anterodorsal surface of scutum, in profile, arches into a somewhat straight posterodorsal surface. Scutum, viewed dorsally, length 2.0 mm, greatest width 1.45 mm. Paraptera well defined but very narrow in the middle. Scutellum, viewed dorsally, slightly wider (0.77 mm) than long (0.67 mm), gradually narrowed and rounded posteriorly. Propodeum, in profile, separated from thorax by shallow indentations without distinct sutures, and with a steep, slightly concave posterior surface. Ventral surface of mesosternum convex.

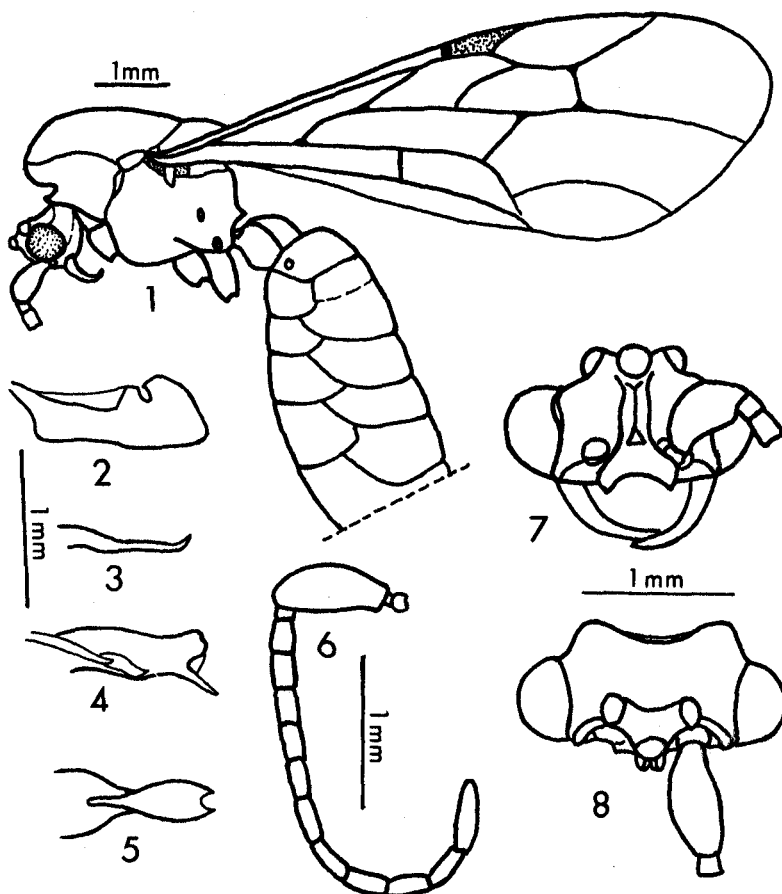
**Wings:** Transparent with brownish veins and numerous short setae. Forewing (Fig. 1) length 8.70 mm, greatest width 3.15 mm, stigma well defined. Hindwing length 6.40 mm, greatest width 1.85 mm.

**Petiole:** Subquadrate, from a dorsal view, and wider (1.07 mm) than long (0.62 mm); dorsum, in profile (Fig. 1), convex.

**Gaster** (Fig. 1, terminal segments were dissected to remove genitalia for description): Elongate, cylindrical; length about 5.5 mm; greatest height 2.1 mm; greatest width 1.5 mm.

**Genitalia** (Figs. 2-5): Stipes (paramere) (Fig. 2) "blade-shaped", with a notch in its posterodorsal surface, and a steeply sloping posterior surface which forms a rounded corner at its juncture with the ventral surface. Volsella (Fig. 3) "needle-shaped", with a sharp pointed, slightly upturned apex. Sagitta (aedeagus) (Fig. 4), in profile, with a blunt dorsoapical projection, with slightly longer, slender, pointed, out-turned ventroapical projections, and with slightly curved dorsal and ventral surfaces. Distal portion of subgenital plate (Fig. 5, ventral view) "shovel-shaped" with two sharp apical teeth.

**VARIATIONS:** Total body lengths vary from 9.5 to 10.0 mm. The apex of the subgenital plate



Figs. 1-8. Male of *Neivamyrmex crassiscapus*, new species. 1. Profile of whole ant. 2-4. Lateral views. 2. Stipes. 3. Volsella. 4. Sagitta. 5. Ventral view of subgenital plate. 6. Antenna. 7. Frontal view of head. 8. Dorsal view of head.

sometimes has a short, blunt, median projection which resembles a broken middle tooth between the two outer teeth.

**DISTINCTIVE CHARACTERISTICS:** Thick antennal scapes ("*crassiscapus*"); anterior border of clypeus with two triangular teeth; prominent frontal area of head; subgenital plate with two apical teeth; stipes with a posterodorsal notch; total body length 9.5-10.0 mm.

**WORKER AND QUEEN:** Unknown.

**TYPES:** Males with red determination labels and white locality labels. Collected in a light trap by J. F. Watkins, 12-16 June 1979, Mexico, Chiapas, Palenque. Holotype and two paratypes deposited in National Museum of Natural History, Washington, D.C., U.S.A. Two paratypes also deposited in each of the following: American Museum of Natural History; Los Angeles County Museum of Natural History; Museu de Zoologia, Universidade de São Paulo; Watkins Collection, Baylor Univ., Waco, Texas, U.S.A.

**TYPE LOCALITY:** Archeological Zone, Palenque, Chiapas, Mexico.

**GEOGRAPHIC DISTRIBUTION:** Mexico: Campeche, Chiapas, Quintana Roo, Tamaulipas, Veracruz, Yucatan.

**SPECIMENS STUDIED:** Fifty males of *N. crassiscapus*, new species from Mexico: Campeche, Chiapas, Quintana Roo, Tamaulipas, Veracruz, Yucatan.

**DISCUSSION:** Although closely related to *N. guerini* (Shuckard, 1840), *N. clavifemur* Borgmeier (1953),

*N. gracilis* Borgmeier (1955), *N. radoszkowskyi* (Emery, 1900), *N. pulchellus* Borgmeier (1955), and *N. puerulus* Borgmeier (1955), the male of *N. crassiscapus*, new species can be readily distinguished by its unusually thick antennal scapes (Figs. 1, 6–8). The scapes of *N. guerini* are also unusually large; however, they are relatively longer than those of *N. crassiscapus*. *Neivamyrmex guerini* is also larger (12–13 mm) than *N. crassiscapus* (9.5–10 mm), has a more rounded posterior vertex (viewed dorsally) and has three apical teeth on its subgenital plate rather than two.

The males which were referred to as *N. guerini* in Watkins (1982, "The Army Ants of Mexico") are *N. crassiscapus*, and key couplet 2 (p. 212) can be improved as follows:

2. Antennal scape unusually thick (Pl. 9, Fig. 15); stipes with a dorsal subapical notch and a blunt apex (Pl. 14, Fig. 12) ..... *crassiscapus* (18)  
 – Antennal scape not unusually thick (Pl. 9, Fig. 13); stipes without a dorsal subapical notch, but with a broad subapical dorsal projection and an apical hook-shaped tooth (Pl. 14, Fig. 11) ..... *klugi* (17)

Also, the subgenital plate (Pl. 12, Fig. 9) in Watkins (1982) is incorrectly illustrated for *N. crassiscapus*—it should not have a median apical tooth. It now appears that *N. guerini* is confined to South America, while *N. crassiscapus* has only been collected from Mexico.

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