

**NEIVAMYRMEX BAYLORI, n. sp. (FORMICIDAE:  
DORYLINAE) FROM WACO, TEXAS, U. S. A.**

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*Reprinted from the*  
JOURNAL OF THE KANSAS ENTOMOLOGICAL SOCIETY  
Vol. 46, July, 1973, No. 3  
pp. 430-433  
*Made in United States of America*

**NEIVAMYRMEX BAYLORI, n. sp. (FORMICIDAE:  
DORYLINAE) FROM WACO, TEXAS, U. S. A.<sup>1</sup>**

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ABSTRACT

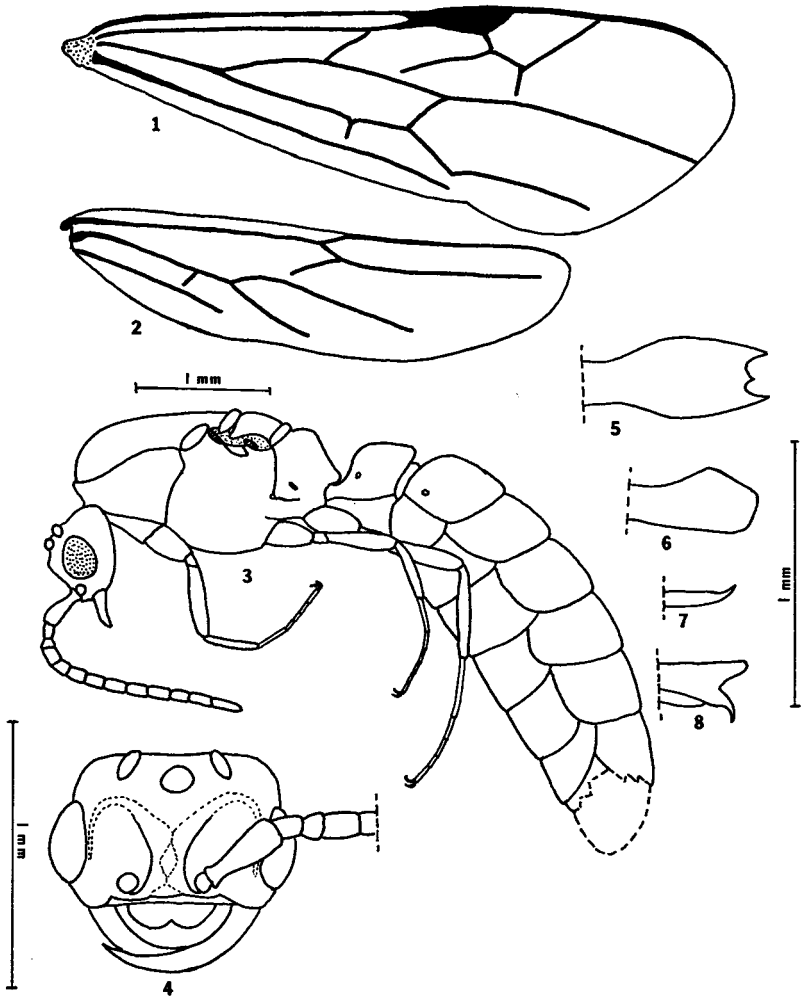
*Neivamyrmex baylori*, n. sp. (Formicidae: Dorylinae) from Waco, Texas, U. S. A., collected 3 October 1972 in a blacklight trap by J. F. Watkins is described from one male specimen. Illustrations include a profile of the whole ant, fore and hind wings, frontal view of head, ventral view of subgenital plate, and lateral views of stipes, volsella and sagitta.

*Neivamyrmex baylori*, n. sp. ♂  
(Figs. 1-8)

MALE (Holotype; U.S.A., Texas, McLennan County, Waco; 3 October 1972; J. F. Watkins). Length 5.8 mm. Head (Fig. 4) height 0.575 mm; width (including compound eyes) 0.925 mm. Posterior margin of head, viewed from the front, with rounded corners strongly projecting posterolateral from the ocelli and dorsal from compound eyes. Border between lateral ocelli slightly indented, almost straight. Median and lateral ocelli 0.12 mm in diameter. Distance between lateral ocelli 0.225 mm. Distance from lateral ocellus to border of compound eye 0.175 mm. Height (diameter) of compound eye (lateral view) 0.325 mm. Labrum bilobed. Anterior border of clypeus between frontal carinae straight. Edges of frontal carinae between antennal fossae sharp, then becoming more rounded as they curve laterally to form strongly projecting ridges above the antennal fossae and below the ocelli, then curving downward to form smaller ridges between the outer borders of the antennal fossae and the compound eyes. Area be-

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<sup>1</sup> Received for publication March 3, 1973.



FIGS. 1-8. Male of *Neivamyrmex baylori*, n. sp. 1, forewing; 2, hindwing; 3, profile; 4, frontal view of head; 5, ventral view of subgenital plate; lateral views of 6, stipes; 7, volsella; and 8, sagitta.

tween frontal carinae with a very shallow diamond-shaped depression. Mandibles sickle-shaped, gradually tapering from bases to pointed apices. Scape length 0.375 mm, moderately widened distally. Flagellum length 1.8 mm, filiform; segment 1 narrowest (0.087 mm), 2 shortest (0.075 mm), apical segment longest (0.25 mm). Segment

1 longer than wide, 2 wider than long, 3 and 4 equal in length and width, 5-12 longer than wide (apical segment 2.5 times longer than wide).

Alitrunk (Fig. 3) length 1.9 mm, greatest height 1.1 mm, greatest width 0.8 mm, arched anteriorly over about one-half the thickness of the head. Pronotum strongly compressed. In profile, promesoscutal and promesopleural sutures prominent; dorsal surface of scutum anteriorly rounding into a level posterior surface. Ventral surface of mesosternum convex. Vertical suture between metaepimeron and propodeum distinct and ending ventrally in a deep, pin-hole sized depression. Narrow horizontal depression below propodeum extends about one-half the distance to the posterior border. In profile, dorsal surface of propodeum 0.2 mm long, rounded and depressed below the dorsal surface of the thorax; posterior surface 0.35 mm long, steeply sloping, slightly concave, almost straight.

Forewing (Fig. 1) length 5.0 mm, greatest width 1.7 mm, second submarginal (cubital) cell 2.5 times longer than wide, veins brown with darker stigma, entire surface thickly covered with short brownish setae. Hindwing (Fig. 2) length 3.8 mm, greatest width 0.9 mm.

Metaleg (Fig. 3): length of coxa 0.5 mm, trochanter 0.1 mm, femur 0.675 mm, tibia 0.725 mm, tarsal segment one 0.45 mm, two 0.175 mm, three 0.15 mm, four 0.1 mm, five 0.175 mm. Coxa 2.5 times longer than wide, trochanter as wide as long, femur gradually widened distally (proximal width 0.1 mm, distal width 0.15 mm), tibia straight; tarsal segment one longest, four shortest; claws curved, without teeth.

Petiole, from dorsal view, about 1.5 times wider than its median length (width 0.625 mm, median length 0.4 mm); lateral borders straight; posterior border concave; dorsal surface transversely concave. Node of petiole, in profile (Fig. 3), higher than long (height 0.475 mm, length 0.4 mm); anterior surface gradually rounding into dorsal surface which forms a prominent corner with anteriorly sloping posterior border; ventral surface almost straight.

Gaster (Fig. 3) elongate, cylindrical; length 3.1 mm, height 1.1 mm. Subgenital plate (Fig. 5) "shovel-shaped" with two outer apical teeth and one shorter median tooth. Stipes (Fig. 6), in profile, with truncate apex and broad, somewhat triangular dorsal projection. Volsella (Fig. 7), in profile, narrow "blade-shaped" with pointed, slightly upturned apex, not forked. Sagitta (Fig. 8), in profile, with a short, apically rounded, posterodorsal projection and a slightly shorter, down-turned, sharp-pointed posteroventral projection.

Head, alitrunk and petiole black. Antennae, legs and gaster reddish-brown with blackish mottling. All surfaces smooth, except for setae bearing punctations especially prominent on the head and alitrunk.

WORKER AND QUEEN. Unknown.

TYPES. Holotype male with red label, collected by J. F. Watkins, 3 October 1972, Waco, McLennan County, Texas, U. S. A., deposited in Watkins's collection, Baylor University, Waco, Texas.

TYPE LOCALITY. Waco, McLennan County, Texas, U. S. A.

GEOGRAPHICAL DISTRIBUTION. Known only from type locality.

SPECIMENS STUDIED. Holotype.

DISTINCTIVE CHARACTERISTICS. *Male*: small size (5.8 mm); clypeus without teeth; first gastric tergite as long as second; subgenital plate with 3 teeth; mandibles sickle-shaped; dorsoapical projection of sagitta rounded at apex and only slightly longer than the sharp-pointed, down-turned ventroapical projection; distance from lateral ocellus to margin of compound eye almost one and one-half times the diameter of median ocellus; posterior corners of head strongly swollen; volsella narrow, blade-shaped; stipes, in profile, somewhat truncate at apex, with a broad, low, triangular dorsal projection; head, alitrunk and petiole black; antennae, legs and gaster reddish-brown with blackish mottling.

#### DISCUSSION

The male of *N. baylori* may be keyed to *N. cloosae* in Borgmeier (1955: 298), except the lateral ocelli of *N. baylori* are almost 1.5 times their diameters from the margins of the compound eyes rather than "at least twice their diameters" as stated in couplet 44a. The smaller body size, truncate sagitta, and blade-shaped volsella of *N. baylori* will distinguish it from *N. cloosae*. The male of *N. digitistipus* Watkins (1973) may also be keyed to *N. cloosae* in Borgmeier (1955), but *N. digitistipus* can be readily distinguished from *N. baylori* and *N. cloosae* by its yellowish-brown coloration and distinctly different stipes.

#### LITERATURE CITED

- Borgmeier, T. 1955. Die Wanderameisen der neotropischen Region (Hym. Formicidae). Stud. Entomol., Nr. 3:1-716.  
Watkins, J. F., II. 1973. *Neivamyrmex digitistipus*, n. sp. (Formicidae: Dorylinae) from Costa Rica. Tex. J. Sci. (submitted for publication 2 November 1972).