

***Neivamyrmex curvinotus*, n. sp.**  
**(Hymenoptera: Formicidae: Ecitoninae) from South America**

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ABSTRACT: The worker of *Neivamyrmex curvinotus*, n. sp. (Hymenoptera: Formicidae: Ecitoninae) is described from ants collected from Parque Nacional Manu, Madre de Dios, Peru. This species appears to be most closely related to *N. pilosus* (Fr. Smith). The holotype worker is deposited in the National Museum of Natural History, Washington, D.C., U.S.A. The queen and male are unknown.

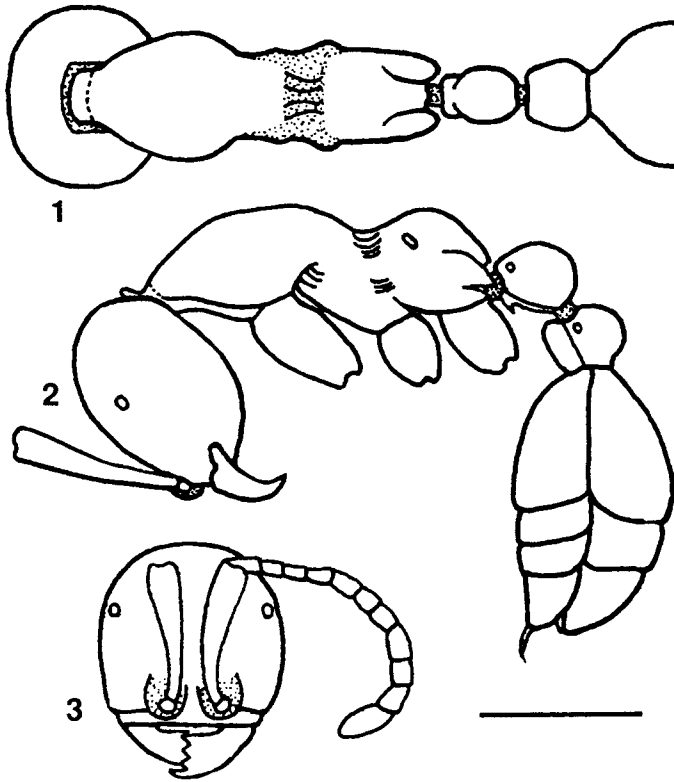
*Neivamyrmex curvinotus*, new species  
(Figs. 1-3)

MAJOR WORKER (HOLOTYPE): Length 5.2 mm. Entire body yellowish brown, except posterior half of mesosoma which is light reddish brown. Head, legs and gaster smooth. Posterior half of mesosoma granulated and rugated. Petiole and postpetiole finely granulated (25 $\times$ ). Erect, yellowish setae abundant on all surfaces.

*Head* (Figs. 1-3): Oval, from a frontal view (Fig. 3), and about as wide (1.15 mm) as long (exclusive of mandibles). Front and sides rounded, from a dorsal view (Fig. 1), with a posterior concavity about one-third as wide as head and distinctly narrower than greatest width of promesonotum. Eyes yellowish and ocellus-like with distinct corneas. Frontal carinae (Fig. 3) short and very narrow below antennal fossae. Antennal scape 1.10 mm long, gradually thickened distally and moderately bent outwards; proximal width 0.10 mm, distal width 0.18 mm. Antennal funiculus (11 segments) 2.0 mm long and slightly thickened distally; width of proximal segment 0.10 mm, width of distal segment 0.15 mm. Mandibles (Fig. 3) with straight upper margin which forms a sharp corner with the masticatory surface which has three small teeth.

*Mesosoma* (Figs. 1, 2): Length 2.25 mm, greatest width 0.78 mm, greatest height 0.70 mm. Dorsum, in profile (Fig. 2), double-arched; i.e., dorsum of promesonotum broadly arched, followed by a concave mesopropodeal juncture, followed by an arched propodeum whose dorsum curves into the declining surface without a distinct corner or projection. Promesonotum about twice as long as propodeum. Front of promesonotum, from a dorsal view (Fig. 1), about one-third as wide as head and with a very fine, indistinct transverse ridge. Sides of promesonotum rounded. Sutures mostly indistinct; however, the mesopropodeal junction is concave with longitudinal rugae. Length of hind leg 6.69 mm (coxa 0.65 mm, trochanter 0.18 mm, femur 1.80 mm, tibia 1.75 mm, tarsus: seg. one 1.15 mm, seg. two 0.38 mm, seg. three 0.30 mm, seg. four 0.18 mm, seg. five 0.30 mm). Coxa slightly oval. Femur and tibia straight.

*Petiole* (Figs. 1, 2): Length 0.48 mm, width 0.38 mm, height 0.43 mm. One and one-fourth times longer than wide, from a dorsal view (Fig. 1), with slightly convex sides. Dorsum, in profile (Fig. 2), convex. Ventral surface almost straight and with a very small, thin, sharp anteroventral tooth (Fig. 2) which is difficult to see and usually concealed by the hind coxa.



Figs. 1-3. Major worker (Holotype) of *Neivamyrmex curvinotus*, new species. 1. Dorsal view of whole ant without antennae and legs. 2. Lateral view of whole ant without funicula and legs. 3. Frontal view of head without right funiculus. Scale line equals 1.0 mm.

*Postpetiole* (Figs. 1, 2): Length 0.39 mm, width 0.43 mm, height 0.45 mm. Subquadrate, from a dorsal view (Fig. 1), with convex sides. Dorsum, in profile (Fig. 2), convex. Venter almost straight. Tergosternal suture distinct.

*Gaster* (Fig. 2): Length 1.60 mm, width 1.02 mm, height 1.0 mm. Oval with well developed, slightly curved sting. Sutures distinct.

VARIATIONS: Major and minor workers are very similar. Body lengths vary from 2.5 to 5.5 mm and the smaller workers tend to be slightly lighter in color (yellowish brown) than the larger workers (light reddish brown). Heads of smaller workers are more elongated and their antennal scapes are relatively longer. The masticatory surfaces of the mandibles are finely serrated (50 $\times$ ) on the smaller workers, but have three or four distinct teeth on the larger workers.

DISTINCTIVE CHARACTERISTICS: Dorsum of mesosoma, in profile, double-arched ("curvinotus"). Head oval with a posterior concavity that is about one-third as wide as head and narrower than the greatest width of the promesonotum. Mandible with a straight upper margin which forms a sharp corner with the masticatory surface. Petiole longer than postpetiole and with a convex dorsum. Petiole with a small, sharp anteroventral tooth. Color yellowish to light reddish brown.

QUEEN AND MALE: Unknown.

TYPES: Workers with red determination labels and white locality labels. Col-

lected by Donald Feener and Brian Brown, 28 February 1992, 1, 4 March 1992, Peru, Madre de Dios, Parque Nacional Manu, Pakitza. Holotype and 6 paratypes deposited in the National Museum of Natural History, Washington, D.C., U.S.A. Additional paratypes deposited in the American Museum of Natural History, New York; Museum of Comparative Zoology, Harvard; Natural History Museum of Los Angeles County; Watkins Collection, Baylor Univ., Waco, Texas.

GEOGRAPHICAL DISTRIBUTION: Colombia, Meta; Peru, Madre de Dios.

SPECIMENS EXAMINED (*N. curvinotus*, n. sp.): Thirty-seven workers from the type locality collected by Donald Feener and Brian Brown on 28 February 1992 and 1, 4 March 1992. Twenty-five workers from PNN La Macarena, Meta, Colombia, collected by Edgard Palacio on 16 July 1992.

### Discussion

*Neivamyrmex curvinotus*, n. sp. belongs to Borgmeier's "Group III" (Borgmeier, 1955, p. 360) and its workers are most similar to those of *N. pilosus* (Fr. Smith); however, they can be distinguished from workers of all the other species in Group III by their more arched propodea and more concave mesopropodeal junctions. Workers of *N. curvinotus* are yellowish brown to light reddish brown, whereas those of *N. pilosus* are usually dark reddish brown to black. Pinned black specimens fade to reddish brown as they age. Workers of *N. curvinotus* will key to *N. impudens* (Mann) in Watkins (1976); however, the node of the petiole of *N. curvinotus* is not flattened dorsally as stated in couplet 44b. Also, the dorsum of the propodeum of *N. curvinotus*, in profile, is more arched and the lamella in front of the antennal fossa is narrower.

### Acknowledgments

Workers of *N. curvinotus*, n. sp. for this study were provided by Donald Feener, University of Utah, and Edgard Palacio, Santafe de Bogota, Colombia. This study was supported by the Department of Biology, Baylor University, Waco, Texas.

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