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A NEW, APPARENTLY PARASITIC ANT.

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The ant Leptothorax curvispinosus Mayr, which is distributed over most of the eastern half of the United States, is recorded as a host to two other species, Harpagoxenus americanus (Emery) and Leptothorax duloticus Wesson. The interesting relationship that exists between curvispinosus and americanus has been carefully studied by Sturtevant (Psyche 34: 1, 1927), Creighton (Psyche 34: 11, 1927), and Wesson (Amer. Ent. Soc. Trans. 65: 97, 1939); and that between curvispinosus and duloticus by Wesson (Bklyn. Ent. Soc. Bull. 35: 73, 1940).

A new ant, described below as Leptothorax minutissimus, is also believed to be associated with L. curvispinosus, since several workers of the latter which have been examined belong to the same collection series as the four minute females of minutissimus; and it was the habit of the collector to take ants only from colonies. The female has a general habitus somewhat similar to that of the female curvispinosus. The possibility that the new species may be a parasite is strongly suggested by its exceedingly small size. Unfortunately, the lack of sufficient specimens and of biological data prevents assignment of minutissimus to its proper subgenus.

Leptothorax minutissimus, new species.

(Fig. 1, A.)

Dealate female.—Length 3 mm. (with the gaster greatly distended).

Head approximately as broad as long when measured through the eyes, with distinctly emarginate posterior border, rounded posterior corners, and subparallel sides. Ocelli small, but clearly visible. Eye not large, but rather convex, approximately its greatest diameter from base of mandible. Antenna 11-segmented; scape rather robust, not attaining posterior border of head; antennal club 3-segmented, longer than remainder of funiculus. Clypeus broader than long, convex, with rounded anterior and posterior borders. Mandible with 2 prominent apical teeth and a number of smaller, indistinct teeth. Thorax short, stout, broadest anteriorly; pronotum with angular humerus posterior to which is a slight lateral concavity; epinotum with a pair of unusually long, bluntly pointed, posteriorly divergent, digitiform spines directed slightly

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dorsad. Petiole with a very high and short node narrower above than below, and with steeply descending anterior and posterior faces; postpetiolar node approximately twice as broad as long, broadest anteriorly, the node narrowed above and short, anterior and posterior faces also steeply descending; superior border of petiole, and postpetiole, slightly emarginate; petiole, in profile, appearing almost nonpedunculate and with the anterior and posterior faces meeting above to form a very sharply defined angle, which is much less than a right angle; postpetiole, in profile, with anterior and posterior faces meeting in a broadly rounded angle.

Dorsal surface of head covered with dense, minute alveoli; cheeks and region between eyes and frontal carinae also with very small longitudinal rugulae. Sculpturing on dorsal surface of thorax more indistinct than on head, the prothorax, however, with a tendency to rugulose-reticulate sculpturing, especially around the humeri. Petiole and postpetiole weakly alveolate except on their anterior faces, which are smooth and shining. Femora, tibiae, and gaster also smooth and shining.

Hairs rather sparse; coarser, longer, and more erect on head and thorax than on gaster.

Light brown or yellowish brown, with edge of mandible, head, sutures on dorsum of thorax, and gaster much darker.

The holotype and three paratype specimens, all females, bear the label Eastern Branch, District of Columbia, January 6, 1921, H. S. Barber. According to Mr. Barber they were collected at the edge of a marsh and presumably from a single colony.

Holotype and three paratypes, U. S. National Museum, No. 56210.

The paratypes range in length from approximately 2.3 to 2.5 mm. Two of the three specimens have shorter and more horizontally directed epinotal spines than the holotype. The anterior wing of the only alate paratype (Fig. 1, B) has a cubital cell but lacks a radial and a discoidal cell.

The female of *minutissimus* can be distinguished from that of *duloticus* by its smaller size (*duloticus*, 3.25 mm.), emarginate posterior border of the head, lack of an emargination on the anterior border of the clypeus, longer, digitiform epinotal spines, shorter thorax and legs, smaller eyes, differently shaped petiole and postpetiole, and absence of a discoidal cell in the anterior wing. (For a description of the female of *duloticus* see Ent. News 48: 125, 1937.) The female of *minutissimus* differs from that of *curvispinosus* in its smaller size (*curvispinosus*, 2.75–3.3 mm.), more slender head with posteriorly emarginate border, smaller and less convex eyes, longer, more digitiform epinotal spines, differently shaped petiole and postpetiole, and different sculpture and color.

EXPLANATION OF PLATE 6.

Fig. 1, A, Dealate female of Leptothorax minutissimus, new species; B, anterior wing of female.

(Female drawn from holotype specimen, wing from paratype specimen. The illustrations by Arthur D. Cushman.)

