

**A Second Species of *Stegomyrmex*, and the first Description
of a *Stegomyrmex* Worker (Hymenoptera: Formicidae).**

By Marion R. Smith

Bureau of Entomology and Plant Quarantine, Agricultural Research
Administration, United States Department of Agriculture.

The genus *Stegomyrmex* was described by Emery in 1912 (Soc. Ent. de Belg. Ann. 56: 99) to include a single new species, *connectens*, of which he had a female from Peru and a male from Bolivia. That the male might belong to a different species from that of the female was immediately recognized by Emery, who remarked that if such should prove to be the case, then the female must be considered as the type of the species. Since 1912, not only has no other species been recorded for the genus, but the worker caste has also remained unknown; furthermore, no additional specimens of *connectens* have been collected. In this article there is described a second species, *manni*, from a single worker specimen collected at Barro Colorado Island, Canal Zone. The distinctions between the female of *connectens* and the worker of the new species are given in the remarks following the description of *manni*.

Emery, impressed by the peculiar structures of the female and male *connectens*, states that this ant seemed to form a connecting link between the two tribes Dacetini and Attini. To him the form of the head of the two sexes and their "falciform"

crossing mandibles recalled the habitus of a *Cyphomyrmex* (Attini). Emery remarked, however, that the unusually large and well-developed stigma of each forewing (a character common to *Ceratobasis* and *Rhopalothrix* of the Dacetini) would exclude them from the Attini. Furthermore, he stated that *Stegomyrmex* differs from *Ceratobasis* and *Rhopalothrix* by its "falciform" mandibles, by the location of the eyes which are situated beneath the antennal scrobes, and by the lack of a lobe at the base of each scape. According to him, the presence of two closed cubital cells in the forewings of the male and female *Stegomyrmex* is a peculiar archaic character. He considered *Stegomyrmex* a representative of the primitive Dacetini (in which the eyes are located beneath the antennal scrobes) from which the Attini undoubtedly arose.

Emery, in 1922 (Genera Insectorum, Fasc. 174c: 313), placed *Stegomyrmex* in the tribe Dacetini, giving as the main generic characters of the female the 12-segmented antennae and the placement of the eyes beneath the very deep antennal scrobes. Wheeler, in 1922 (Amer. Mus. Nat. Hist. Bul. 45: 655), even established a new tribe, the Stegomyrmicini, with *Stegomyrmex* as its only genus. He separated this new tribe from the closely allied Dacetoniini mainly by the falcate mandibles and the presence in the forewings of the female and male of two closed cubital cells and a closed radial cell. In the Dacetoniini the forewings of these two sexes have a single closed cubital cell and one closed radial cell, but the venation of the wings is often much reduced. The present author agrees with Wheeler's placement. Emery and Wheeler however, erred in considering the mandibles falciform. Emery's figure of an oblique view of the head of the female *connectens* clearly shows the mandibles to be, not falciform, but subtriangular, and the mandibles of the worker of *manni* are also of this subtriangular shape.

Stegomyrmex connectens Emery

Stegomyrmex connectens Emery, 1912, Soc. Ent. de Belg. Ann. 56: 101, *female, male*. Fig. 5a, female in profile; b, head of female viewed obliquely; c, head of male viewed obliquely; d, head of male in profile.

Original localities: Vilcanota, Peru (female); Mapiri, Bolivia (male). Types presumably in Museo Civico, Genoa, Italy.

Stegomyrmex manni, new species

Worker. — Length 5 mm. Head, exclusive of mandibles, one and one-tenth times as broad as long when measured through its greatest breadth and length; resembling to a marked degree the head of *Cyphomyrmex rimosus* (Spinola). Frontal carinae forming a bifurcate plate which conceals the clypeus and a basal portion of each mandible, each frontal carina extending to approximately the posterior corner of the head and forming beneath itself a very deep scrobe for the reception of the antennal scape. Eye exceedingly small, oval, approximately as wide as two of the integumental punctures in its vicinity; placed on the side of the head immediately beneath the antennal scrobe, but not concealed when the head is viewed from above. Space between frontal carinae narrowest near the middle of the head. Dorsal surface of head with a median, irregular convexity or ridge running through much of its length, the ridge, however, slightly broken at the point where the space between the frontal carinae is narrowest. A groove on each side of the median ridge extending from the most anterior point of this ridge to approximately the posterior corner of the head, the two grooves together forming a rather definite V. Posterior border of head broadly but not deeply emarginate. Occiput with a very distinct flange or collar. Antenna 12-segmented; scape slender and curved basally, flattened dorsoventrally, and widened apically, appearing subclavate from above; last segment of funiculus longer than the combined lengths of the three preceding segments and approximately one-third as long as the entire funiculus. Mandibles crossing each other, each mandible large, subtriangular, strongly curved posteroventrally and with the masticatory border bearing a long apical tooth and a number of small, irregular teeth. Thorax from above, slender, widest at the inferior angles of the prothorax. Promesonotal suture present but not well-defined. In profile, dorsal surface of prothorax convex, dorsal surface of mesothorax almost straight and sharply declivous to the mesoepinotal constriction, base of epinotum convex. Spiracle borne on a prominent, subcylindrical protuberance. Epinotum bearing at its posterodorsal border a very short and narrow, bifurcate, horizontal lamella instead of a pair of spines; each side of epinotal declivity with a lamella which is larger ventrally than dorsally. Legs moderately long, the femora and tibiae moderately incrassated; anterior tibia with a well-developed, pectinate spur; tibia of

middle and of hind leg without a spur; tarsal claws simple. Petiole pedunculate, in profile the node convex above; ventral surface of peduncle with a distinct anterior tooth, and a concavity near the posterior border. Postpetiole, in profile, approximately as long as high, subglobular. From above, sides of petiolar node faintly convex, converging anteriorly to the point at which the dorsal surface of the peduncle meets the petiolar node. Postpetiolar node, from above, convex, broader than long, with the sides converging anteriorly to meet the subtruncate anterior border. Gaster, from above, oval, without basal humeri, the first segment occupying most of the gastric surface and concealing the remaining segments.

Body dark reddish brown, shining in most lights; the appendages more opaque because of the pubescence covering them. Prothorax bearing on each side and anteriorly a narrow, golden border which appears to be composed of lamella and pubescence. Dorsal surface of head with an impressed, smooth, subtriangular area, directly above each antennal insertion. Apex of each frontal lobe with a number of rather coarse, longitudinal rugulae. Body covered with numerous small to large pitlike impressions, these being coarsest on the head and somewhat less on the mesoepinotum. Body hairs abundant but not dense, erect, of unequal length, and clavate to capitate in shape.

Type locality: Barro Colorado Island, Canal Zone.

Description based on a single worker collected by James Zetek in September 1941. This specimen bears Zetek No. 4879 and United States National Museum No. 57305. The holotype has been placed in the United States National Museum collection.

The ant is named for William Mann, Director of the National Zoological Park, Washington, D. C., a distinguished formicologist.

The worker of *manni* differs from the description and figures of the female *connectens* in the following respects: Ventral surface of petiolar peduncle with only a single spine; dorsal surface of head above each antennal insertion with an impressed, smooth, subtriangular area; apex of each frontal lobe with a number of coarse, longitudinal rugulae; epinotum bearing a short, narrow, bifurcate lamella.