STUDIES OF NEW MEXICO ANTS (HYMENOPTERA: FORMICIDAE). I. A NEW SPECIES OF MYRMICA

A. C. COLE

The University of Tennessee, Knoxville, Tennessee

MYRMICA striolagaster n. sp.

Holotype, worker (Cole Coll. No. N-116). Overall length, 6.14 mm.; alitrunk, 1.82 mm.; petiole and postpetiole combined, 0.95 mm.

Head, excluding mandibles, as long as broad (1.10 mm.) between the eyes, the sides moderately convex, the occipital border nearly straight, and the corners rounded. Frontal carinae broad, thin, directed upward, and with rounded apical border. Antennal scape with a right angle bend near the base and a shallow crescentic lamina at the bend. Labial palpi 3-segmented; maxillary palpi 6-segmented.

Thorax with its dorsal surface feebly convex when viewed in profile and with a rather broad and distinct mesoepinotal suture. Epinotal spines robust, pointed, nearly straight, deflected upward, outward, and backward, about as long as the distance between their bases. Petiole with a feebly concave anterior face and a convex dorsal surface, a little higher than the distance from the tip of the ventral tooth to the postpetiole. Postpetiole higher than

long, higher than the petiole, submoniliform when viewed from above. Head, alitrunk, petiole, and postpetiole coarsely rugo-reticulate. Antennal scapes and mandibles coarsely and longitudinally striate. Clypeus longitudinally and coarsely carinate. First gastric segment densely and coarsely punctate basally and with numerous, fine, longitudinal, basal striae. Pilosity of entire body coarse and very dense, the hairs golden, rather long, somewhat blunt, and quite uniform in length. Head, alitrunk, petiole, and postpetiole subopaque; gaster shining except at the striolate base of the first segment.

Color of head and alitrunk dark ferrugineous; petiole, postpetiole, and gaster darker.

Type locality-The nest was in soil beneath a stone on a moist, shaded, gentle, south-facing slope beside a stream in Cimarron Canyon, New Mexico, 5-1/2 miles west of Cimarron near highway U.S. 64. The collecting area was at an elevation of 6,700 feet. The holotype worker and 69 paratype workers were collected on August 29, 1951, by the writer.

Disposition of types—The holotype and a series of paratypes are in the writer's collection. Paratypes have been deposited in the U. S. National Museum and the Museum of Comparative Zoology (Harvard).

Variation in the paratype series—In the series of 69 paratype workers the overall length varies from 5.57 to 6.50 mm. Most characteristics seem to be remarkably uniform. Color variation is only relatively slight as is that of pilosity and sculpture.

Affinities—The new species is very distinctive, readily recognized, and in several respects wholly different from other known species and subspecies of Myrmica. In its gastric punctation the new species is somewhat similar to the members of the punctiventris group to which place it runs in present keys. But the new species is very much different from pinetorum Wheeler and punctiventris Poper of eastern and midwestern distribution. The gastric and punctiventris Roger of eastern and midwestern distribution. The gastric

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punctures are more numerous, coarser, and more extensive than those of the punctiventris group and they are accompanied basally by numerous, fine, longitudinal striae which are absent from the former. Other very distinctive features of the new species are the extremely coarse, rugo-reticulate sculpturing of the body, the abundant and coarse pilosity, and the laminate antennal scapes, none of which is characteristic of the punctiventris group.

Acknowledgement-The writer is grateful to Dr. M. R. Smith, of the U.S. National Museum, who examined a series of specimens of the new species and expressed the opinion that the specimens represent a new species of

Myrmica.

STUDIES OF NEW MEXICO ANTS. II. A DESCRIPTION OF A NEW SUBSPECIES OF APHAENOGASTER HUACHUCANA (HYMENOPTERA: FORMICIDAE)1

A. C. COLE The University of Tennessee, Knoxville

During my studies of ants in New Mexico in the summer of 1951 I was unable to find any nests of Aphaenogaster spp. However, during the following summer a total of eight nests at two different localities was discovered. It is my opinion that all eight of these colonies represent an undescribed subspecies of A. huachucana Creighton. A description follows.

Aphaenogaster (Allomyrma) huachucana subspecies crinimera n. subsp.

Holotype, worker (Cole Coll. No. J-185). Overall length, 6.3 mm.

Differing from the types of huachucana in the following respects: prominent transverse rugae on pronotum as well as on epinotum, longitudinal oblique rugae on mesonotum, posterior declivity of postpetiole longitudinally, irregularly, and rather coarsely rugose, posterior declivity of petiole with a few irregular longitudinal rugae; epinotal spines sharper and longer than one-half the distance between their bases; legs much more hairy; body color considerably darker (head, thorax, and appendages reddish brown, the petiole piceous reddish brown, the postpetiole darker than the petiole, and the gaster black).

The maxillary palpi are 5-segmented and the labial palpi 3-segmented.

Paratype, alate female (Cole Coll. No. J-185). Overall length, 9.3 mm. Differing from the female of the typical huachucana chiefly as follows: length of epinotal spines more than one-half the distance between their bases; postpetiole with rather dense and coarse wavy rugae, the crest being not at all shining; entire body dark reddish brown, the gaster infuscated dorsally except at the base of the first segment. Wing venation as in figure 1, b.

Paratype, male (Cole Coll. No. J-185). Overall length, 5.2 mm. Differing from the male of the typical species in the following respects: entire scutellum subopaque; body black, the coxae and femora rather densely and uniformly suffused with brown. Antennal segmentation as shown in figure 1, c, and wing

venation as in figure 1, d.

Type locality.—The type locality is herewith designated as the campground area at Bandelier National Monument, New Mexico, at an elevation of 6,050 feet. This was the location of nest J-185 where collections of large series of workers, males and females were made on July 30, 1952. Long series of

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