A NEW SPECIES OF MYRMECINA FROM CALIFORNIA

(HYMENOPTERA, FORMICIDAE)

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Ants of the genus Myrmecina are believed to occur in most, if not all of the States of this country, although not yet recorded from some of the Western States. The ant described in this article is of particular interest, not only because it is new to science, but because it is the first member of the genus to be recorded from California.

Although our forms of Myrmecina are greatly in need of revision, no one has undertaken the task. At present the following forms are listed for the United States: graminicola americana Emery, graminicola americana var. brevispinosa Emery, graminicola texana W. M. Wheeler, and graminicola quadrispina J. Enzmann. Both quadrispina and brevispinosa vary so slightly from the typical americana, that the validity of the names is questionable, and the forms are not included in the following key. It is the opinion of the author and of several of his colleagues, that our United States forms previously attached to graminicola may have to be dissociated from that species, mainly because of the difference in the shape of the clypeus and antennal scape. However, until a complete

revisional study is made it does not seem wise to change the present names.

KEY TO FORMS OF MYRMECINA OCCURRING IN THE UNITED STATES,

BASED ON THE WORKERS

1. Base of antennal scape broad and flat; anterior border of clypeal lobe distinctly tridentate; body weakly sculptured, the pronotum and mesonotum largely smooth and shining (body and appendages reddish brown, gaster blackish). California _____californica, new species Base of antennal scape slender, neither broad nor flat; anterior border of clypeal lobe seldom tridentate (if tridentate, almost imperceptibly so); body usually with well developed to strong sculpture; the pronotum and mesonotum never largely smooth and shining 2. Epinotal spines well developed, stout, with strongly recurved tips; much of first gastric segment shagreened, subopaque (thorax with unusually coarse, longitudinal rugulae); clypeus usually very weakly tridentate. Texas graminicola texana W. M. Wheeler Epinotal spines not as described; first gastric segment unusually smooth, if shagreened, almost imperceptibly so and never subopaque; clypeus almost always bidentate; if tridentate, never very distinctly so. Most common and widely distributed form -of the genus, occurring over most of the United States from Canada to the Gulf of Mexico, and from the East coast as far west as Arizona and Montana

graminicola americana Emery Myrmecina californica, new species

Worker. Length 2.2 mm.

Head, exclusive of mandibles, 1.06 times as long as broad when measured through its greatest diameter. Posterior border of head broadly but not deeply emarginate, posterior corners rounded, sides convex. Base of antennal scape curved, flattened dorsoventrally, without a lobe, the apex attaining the posterior border of the head; funicular segments 2 thru 8 distinctly broader than long, club 3-segmented, the last segment approximately one and one-third times the combined length of the two preceding segments. Eye composed of less than 15 ommatidia, situated anterior to the middle of the side of the head. Anterior border of clypeus produced medianally as an emarginate lobe, the border of which is tridentate, the two lateral teeth large and blunt, and the median tooth small and indistinct. Lateral border of clypeus forming a narrow, sharp, but not elevated ridge in front of the

¹M. graminicola quadrispina and graminicola americana var. brevispinosa are not included.

antennal fossa. Frontal carinae divergent posteriorly, almost twice as far apart as long. Frontal area indistinct or absent. Mandibles crossing each other when closed, forming a very large open space between themselves and the anterior border of the clypeus; each mandible with a long masticatory border, which is composed of two apical teeth, two smaller teeth at the junction of the masticatory and superior border, and five very small teeth between these. Thorax, from above, very much broader anteriorly than posteriorly, compressed, without promesonotal suture; mesoepinotal impression not strongly indicated. Pronotal humeri distinct. Base of epinotum with a pair of extremely small spines, which are approximately one-third as long as their interbasal distance. Epinotal spines also unusually small, not twice as long as the basal spines, the apex of each spine acute, directed upward, outward, and backward. Legs more slender than those of americana, with incrassated femora and tibiae, tibia of each middle and hind leg without a spur. Petiole, from above, non-pedunculate, subrectangular, with anteriorly sloping declivity; highest near the middle, constricted posteriorly. Postpetiole from above about one and one-third times as broad as long, the anterior half more convex than the posterior half. Gaster larger than head, oval, with narrow, feebly emarginate, almost truncate base; first segment occupying most of gaster.

Mandibles, clypeal lobe, frontal area, lower side of head, propleura, pronotum, mesonotum, legs, epinotal declivity and gaster largely smooth and shining; rest of body subopaque.

Dorsal surface of head minutely rugulose-punctate. Mesopleurae, epinotum, sides of petiole and postpetiole rugulose-reticulate.

Hairs grayish, simple, suberect, fairly abundant over body; more reclinate on appendages. A few long, erect, scattered hairs on the antennal scapes.

Body and appendages reddish brown; gaster blackish with lighter apex.

Type locality.—Santa Barbara, California, Wilda S. Ross, from beneath a stone in oak woods.

Described from a single worker specimen, the holotype, bearing U.S.N.M. No. 57,961 in the collection of the United States National Museum.

This species can be distinguished by the tridentate clypeal lobe, broad and flat base of the antennal scape, feeble sculpturing, two pairs of extremely small epinotal spines, and the color. In the shape of the clypeal lobe and antennal scape californica seems to have a closer affinity with the common Palaearctic graminicola (Latr.) than with any of the other forms occurring in the United States. M. graminicola differs from californica mainly in the larger teeth of the clypeal lobe, the lobed and sharper edged base of the antennal scape, the longer epinotal spines, and the coarser sculpturing and color.