

THE FEMALE SEX OF THE MUTILLIDAE SUBFAMILY EOTILLINAE (HYMENOPTERA)¹

BY CLARENCE E. MICKEL

University of Minnesota, St. Paul

The subfamily Eotillinae was proposed by Schuster (1949) to include two new genera, *Prototilla* from the Argentine Republic and *Eotilla* from Chile, both based only on the male sex. A female of this subfamily was recently sent to me by Dr. Howard E. Evans, Museum of Comparative Zoology, Cambridge, Mass., with the comment that it had been included in a shipment of ants sent by the Instituto Miguel Lillo, Tucumán, Argentine Republic. The data label on the specimen listed only "Covunco" as the locality, without indication of province or country. Covunco is situated in the province of Neuquén, Argentine Republic, at 70.15 W and 38.31 S.

Four possibilities present themselves for the identification of this specimen, there being no biological or other evidence to correlate this female with any described male: (1) it may be the female of *Eotilla mickeli* Schuster, which was recorded from a number of localities in Chile in the original description; it agrees with this male in having unarmed tarsal claws, but it differs in lacking a distinct petiole, in having the pedicel of the antennae longer than the first flagellar segment and in the distribution pattern of the waxy-white plumose scales on the thorax and abdomen; (2) it may represent an undescribed species of the genus *Eotilla*; without any information as to the specific characters of *Eotilla* females and in particular of *Eotilla mickeli* Schuster, there is no basis for making a decision on this alternative; (3) it may be the female sex of *Prototilla anomala* Schuster described from "Argentina", but without any other information as to locality; it differs from the male *Prototilla anomala* in having the claws unarmed, in having the abdomen entirely black, and in lacking any white subplumose vestiture; (4) it may represent an undescribed species of the genus *Prototilla*; here again, without any information as to the specific characters of *Prototilla* females, there is no basis for making a decision; in fact, the only circumstance that would justify placing this specimen in the genus *Prototilla* is that both come from the Argentine Republic, while *Eotilla* is only recorded from

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Chile. It may be that the genus *Eotilla* is limited to Chile and that the genus *Prototilla* is limited to the Argentine Republic, but there is no factual evidence to support this view and the evidence from the geographical distribution of other Chilean and Argentine insects suggests that either genus could have a wider distribution than the country of the type locality.

Alternative (1) appears to be preferable to the others because it seems the most likely, considering available evidence, and if it should prove incorrect the nomenclatorial changes necessary would not be of major import.

Eotilla mickeli Schuster.

Eotilla mickeli Schuster, Ent. Amer. (n.s.), 29: 77-80, Pl. xii, figs. 1-5, Pl. xiii, figs. 6-11, Pl. xiv, fig. 17, Pl. xv, figs. 18 and 19, ♂. 1949

Female. Black, except antennae, mandibles, trochanters, anterior third of front, and pronotum, stramineous to castaneous; vestiture consisting of black subplumose setae and waxy-white plumose scales as described and figured by Schuster for the males; antennae 12-segmented; labial palpi 4-segmented, maxillary palpi 6-segmented; eyes ovate, strongly faceted; thorax tripartite, superficially bipartite, the mesonotum very narrow, inconspicuous, transverse, but visible; felt lines of second tergum present, but narrow and inconspicuous, approximately half the length of the tergum. Length, 4.5 mm.

Head wider than the thorax, one and one-third the width of the pronotum anteriorly; mandibles falcate, simple, slender, edentate at the tip and with a small tooth within near the tip; proximal half of mandibles stramineous, the distal half castaneous; clypeus small, convex, its anterior margin entire, straight, clothed with black setae and waxy-white scales; antennal tubercles simple; scape terete, slightly arcuate, without carinae beneath, slightly longer than the pedicel, the latter slightly longer than the first flagellar segment; scape and pedicel testaceous, the flagellum somewhat infuscated and darker; front and vertex, except the posterior margin of the latter, clothed throughout with sparse black setae, and waxy-white scales, the latter close and largely obscuring the sculpture of the integument, which appears to be finely granulose.

Pronotum narrowed from front to rear, the anterior margin one and one-half times the width of the posterior margin, weakly, finely granulose, clothed with sparse black setae and with separated waxy-white scales at the anterior margin, and a few scattered ones along the lateral margins; mesonotum narrow, transverse, inconspicuous; propodeum wider than the mesonotum, thus the thorax appearing

constricted at the middle; dorsum, posterior face and sides of propodeum weakly, finely granulose, with sparse black setae, and the dorsum with a U-shaped mark of waxy-white scales, the sides of the U at the lateral margins and the base at the posterior margin, thus the anterior and lateral margins of the pronotum and the lateral and posterior margins of the dorsum of propodeum outlined by an irregular line of waxy-white scales, the lateral marginal lines only very slightly discontinuous on account of the very narrow, transverse mesonotum; pleural areas weakly, finely granulose, clothed with scattered waxy-white scales, but the latter more numerous on the meso-metapleural area; legs clothed with sparse black setae and with scattered waxy-white scales on the coxae, trochanters, femora and tibiae; tarsal claws simple, not toothed; pulvillus absent; calcaria 1-1-2, white.

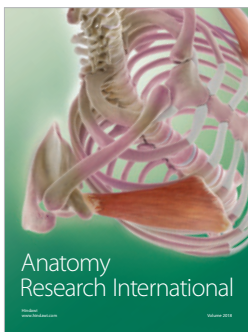
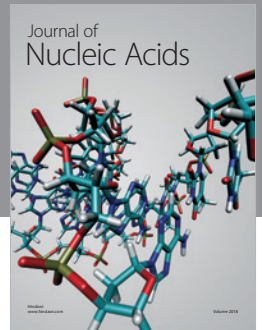
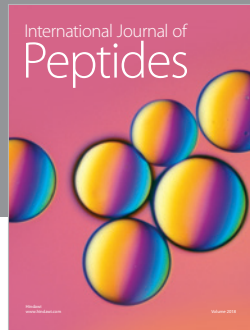
Abdomen without a distinct petiole, the first segment greatly narrowed anteriorly, triangular in outline, nodose, but approaching subsessile to the second segment; first tergum finely, weakly punctate, clothed with sparse black setae and with a pair of spots at the postero-lateral margins of close, waxy-white scales, the two spots separated by a distance equal to one-third the width of the posterior margin of the tergum; second tergum shining, with fine, weak, separated punctures, clothed with sparse, black setae, and with a pair of spots at the postero-lateral margins of close, waxy-white scales, the two spots separated by a distance equal to half the width of the posterior margin of the tergum; felt lines of second tergum composed of fuscous hairs, inconspicuous; remaining terga shining, with weak, fine, separated punctures and clothed only with sparse, black setae; pygidial area undefined.

Female, Covunco, (Argentine Republic), January 18, 1949. In Instituto Miguel Lillo, Tucumán, Argentine Republic.

REFERENCE

SCHUSTER, RUDOLF M.

1949. Contributions Toward a Monograph of the Mutillidae of the Neotropical Region. III. A Key to the Subfamilies Represented and Description of Several New Genera (Hymenoptera). *Entomologica Americana*, 29 (n.s.): 59-140.



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