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A NEW *DASYMUTILLA* FROM ARIZONA

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Dasymutilla welltonensis, new species

FEMALE.—Uniformly bright ferruginous (Ridgway's Sanford's brown); apex of the mandibles infuscated; the disk of the second dorsal segment on each side posteriorly with a large, indefinite, paler yellowish spot (orange in the center, fading into the ground color). Spines on the tibiae and expanded tip of the hind femora infuscated. Tibial spurs white. Head, thorax, and dorsum of the abdomen with erect, rather long, sparse hairs, mostly dark in color, but those on the anterior part of the face and the ventral surface of head and body, white, as well as a few on the lateral surfaces; dorsal surface of the head and anterior part of the thorax with an appressed coppery red pubescence; the face, cheeks, temples, and middle of the vertex, the pleuræ, except the upper part of the pleural surface of the propodeum, with a silvery sheen due to appressed white pubescence; on the posterior lower part of the pleuræ, as well as on the coxæ, a median dorsal line on the propodeum, a median dorsal line on the first tergite, lateral border of the first tergite, a small lateral spot on each side of the third and fourth tergites, and a median tuft on the third, fourth, and fifth tergites, this pubescence becomes dense and tomentose; the legs have erect white hairs and also more or less appressed silvery pubescence; there is a patch of black hairs on the anterior part of the disk of the second tergite, distant from the anterior margin, and a fringe of black hairs along the apical margin, except on the extreme sides, of the same; a short fringe of black hairs connecting the silvery apical spots on the margins of the third and fourth tergites; a denser lateral fringe of black hairs on each side of the fifth tergite, merging into a lateral tuft on the sixth.

Length: 7 mm. (paratypes: 5.5 to 7.5 mm.).

Head large, wider than the thorax, subquadrate, but the hind angles rounded, similar to the head of *obscura*. Face very broad and short, the antennæ distinctly separated at their bases; antennal grooves shallow, with a delicate carina above them, not quite reaching the eyes. Clypeus on each side with an oblique, curved carina reaching to the base of the mandibles; the two carinæ uniting into an acute angle at the summit of a distinct elevation close below the antennæ; anterior to these carinæ there is a transverse, depressed, shiny, and polished area; anterior margin simple. Scape slender, clothed with long, white hairs; third antennal segment much longer than the fourth; the second and third segments slender, longer than in *obscura*. Eyes much larger than in *obscura*, their longer diameter approximately equal to their distance from the hind angle of the head. Minimum distance of the compound eyes from each other equal to 2.5 times the longer diameter of the eye. Head with regular, well separated punctures of moderate size, and presenting a somewhat shiny appearance.

Anterior margin of the prothorax almost truncate by reason of the acute humeral angles, but medially slightly convex. The sides of the thorax behind the humeral

angles are slightly rounded, almost parallel to the region of the scutellum, from which point to the apex of the propodeum they are narrowed and concave. Seen from the side the humeral angles are sharply carinate. Mesonotum more coarsely and closely punctured than the head. The dorsal surface of the propodeum coarsely reticulate laterally, but without sculpture in the middle, this area being occupied by a white band of pubescence. Pleuræ without sculpture, the upper half of the pleural regions of the propodeum smooth and highly polished.

First abdominal segment short and very nodose; as seen from above its outlines are nearly rectangular, with acutely dentate basal angles. Disk of the first tergite without sculpture medially, the area being occupied by a band of white pubescence; laterad of this pubescence the surface is coarsely reticulate. First sternite with a longitudinal keel, but without teeth. Second tergite laterally smooth and polished, with scattered punctures; medially the punctures are closer, and the area covered with black hairs is closely punctured; between the discal spot of black hairs and the base of the segment is a small, median, punctulate area bearing a few, short, white hairs. Remaining tergites closely punctured. Pygidium granular as in *obscura*. Second sternite polished and with a few scattered punctures.

The apices of the hind femora have on each side an expanded, concave area. Posterior tibiæ with long, coarse spines, rather longer than in *obscura*.

Holotype: Wellton, Yuma Co., Arizona, August 19, 1917, collected by Dr. Joseph Bequaert, accompanying the Cornell Biological Expedition [Cornell University, No. 578.1]. Five paratopotypes collected the same day [Collections of The American Museum of Natural History and Cornell University]; one paratype, Agua Caliente, Maricopa Co., Arizona, August 7, 1917 (Dr. J. Bequaert) [Collections of The American Museum of Natural History].

In one paratopotype the pale spots on the second tergite are of a brighter yellow, more sharply defined and elongated toward the base of the tergites.

This species finds its closest known relative in *pæcilonota* Melander. It differs from Melander's description in not having a lightly crenulate clypeal margin; in not having deep, subconfluent punctures on the disk of the second segment; in having a less dense covering of coppery, rather than golden yellow, pubescence on the dorsal surface of head and thorax; in lacking the two round patches of white hairs on the disk of the second tergite; and in the presence of silvery sheen and white spots of pubescence on the pleuræ, as well as the stripe of white pubescence on the dorsal surface of the propodeum. In all probability it may best be regarded as a subspecies of *pæcilonota*, but we hesitate to assign it that position without examination of Melander's type.

Next to *pæcilonota* the closest known ally of the species is *obscura* Blake (*scævola* Blake). From an eastern specimen of this species before us it differs in the shape of the clypeus, which in *obscura* is marked by a transverse, slightly undulating carina extending from the base of one mandible to that of the other, rather indistinct medially, and without a

prominently raised portion close beneath the antennæ. In *obscura* the antennal fossæ have no carina above them; the eyes are smaller; the puncturation of the head is much closer and finer; the thorax seen from above with less distinctly dentate humeri; its anterior margin more evenly rounded; the sides of the propodeum not shaped quite as in *welltonensis*, with more prominent spiracles; the petiole is much less nodose, as seen from above its outline is not at all rectangular, but expands towards the apex; its surface is not distinctly punctate, nor at all reticulate, and the white appressed pubescence of *welltonensis* is for the most part absent.

