

SYNONYMICAL NOTES ON NORTH AMERICAN  
SPHECOID WASPS. IV.<sup>1</sup> SOME SYNONYMY  
IN *OXYBELUS* AND DESCRIPTION OF A  
NEW SUBSPECIES (HYMENOPTERA).

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Synonymy in most of the following species of *Oxybelus* was established as a result of a critical study of type material of North American species in the collection of the United States National Museum. This study was initiated when R. M. Bohart, of the University of California at Davis, requested specific determinations for some species from California. The opportunity is also taken at this time to describe a new subspecies of *sericeus* Robt., for which a name is needed in connection with some biological observations.

*Oxybelus cornutus* Robertson

*Oxybelus cornutus* Robertson, 1889. Trans. Amer. Ent. Soc. 16: 80. Male.

*Oxybelus quadricolor* Cockerell and Baker, 1896. Psyche 7 (sup.): 21. Female. NEW SYNONYMY.

*Oxybelus polygoni* Rohwer, 1909. Trans. Amer. Ent. Soc. 35: 116. Female. NEW SYNONYMY.

*Oxybelus cornutus* var. *quadricolor* Cockerell and Baker, Rohwer, 1909. Trans. Amer. Ent. Soc. 35: 117. Female.

There are in the U. S. National Museum collection the female type of *quadricolor* from Santa Fe, New Mexico, and the female paratype from Fort Collins, Colorado, the unique female type of *polygoni* from Boulder, Colorado, and a female from Cope, Colorado, determined as *cornutus* var. *quadricolor* by Rohwer. These specimens agree in such important details as having the mesonotum red anteriorly, a large impunctate tubercle on the middle of the vertex, a rather large impunctate swelling along inner anterior margin of posterior ocellus, the pronotal carina interrupted at anterolateral angle, and the shape of the squamae which taper to an acute, curved point. The mucro in the type of *polygoni* is more robust than in the other specimens. The type of *quadricolor* was damaged

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by museum pests at some time in the past, and the head, thoracic sternum and all of the abdomen except first two tergites are missing. What is left agrees with the paratype of *quadricolor* in all essential respects except that the mucro is extremely short. It appears that the mucro in this species is subject to more variation than is normal for species of *Oxybelus*, and that its exact shape cannot be depended upon for differentiation of this species.

The male is similar to the female in the ocellar and vertexal tubercles, pronotal carina, and squamae. The chief differences between the two sexes, other than those of a sexual nature, are the shape of the mucro, which is more or less parallel-sided with rounded apex in the male and tapering to an acute point in the female, and in the male the red is usually lacking on the mesonotum.

### *Oxybelus laetus* Say

*Oxybelus laetus* Say, 1837. Boston Jour. Nat. Hist. 1: 375. Male.

*Oxybelus Packardii* Robertson, 1889. Trans. Amer. Ent. Soc. 16: 80. Female, male. NEW SYNONYMY.

*Oxybelus Packardii* var. *texanus* Robertson, 1889. Trans. Amer. Ent. Soc. 16: 81. Female, male. NEW SYNONYMY.

*Oxybelus heterolepis* Cockerell and Baker, 1896. Psyche 7 (sup.): 22. Male. NEW SYNONYMY.

*Oxybelus heterolepis* var. *defectus* Cockerell and Baker, 1896. Psyche 7 (sup.): 23. Male. NEW SYNONYMY.

*Oxybelus unicus* Mickel, 1918 (1917). Nebr. Univ. Studies 17: 323. NEW SYNONYMY.

This widely distributed species is quite variable with respect to the color and extent of the pale markings, the color varying from white to yellow, and the extent varying as indicated in Robertson's descriptions of *packardii*, the variety *texanus*, and *laetus*. The types of *heterolepis* and the variety *defectus* are in the U. S. National Museum—both fall within the normal limits of variation. There is also in the Museum collection a topotypic paratype of *unicus* from Mitchell, Nebraska, and topotypic material of *packardii* and *packardii* var. *texanus*, all of which fall as synonyms of *laetus*.

### *Oxybelus robertsonii* Baker

*Oxybelus robertsonii* Baker, 1896. Ent. News 7: 156. Male.

*Oxybelus varicoloratus* Baker, 1896. Ent. News 7: 157. Female. NEW SYNONYMY.

*Oxybelus hirsutus* Baker, 1896. Ent. News 7: 157. Female. NEW SYNONYMY.

The types of the three names listed above are in the U. S. National Museum. Those of *varicoloratus* and *hirsutus* (head lacking) from Fort Collins, Colorado, are separated by only a few minor color differences which hardly merit nomenclatorial recognition. These females are certainly the opposite sex of *robertsonii* males (type from vicinity of Fort Collins). The two sexes agree in the shape of the squamae and mucro, the presence of moderately dense silvery pubescence on dorsum of scutum and propodeum, development of pronotal carina, postscutellum not carinate in middle but with broad, shallow groove, and carina almost evanescent laterally on posterior surface of propodeum. The name *hirsutus* was inadvertently omitted in the Synoptic Catalog of North American Hymenoptera.

*Oxybelus fossor* Rohwer and Cockerell

*Oxybelus fossor* Rohwer and Cockerell, 1908. Ent. News 19: 179. Female.

*Oxybelus umbrosus* Mickel, 1916. Trans. Amer. Ent. Soc. 42: 432. Male.

This synonymy was established by Pate (Pan-Pacific Ent. 19: 125, 1943), but was overlooked in the Synoptic Catalog of North American Hymenoptera.

*Oxybelus intermedius* Baker

*Oxybelus intermedius* Baker, 1896. Ent. News 7: 160. Female.

*Oxybelus coloradensis* Baker, 1896. Ent. News 7: 160. Male. NEW SYNONYMY.

*Notoglossa incisura* Mickel, 1916. Trans. Amer. Ent. Soc. 42: 430. Male. NEW SYNONYMY.

The types of *intermedius* and *coloradensis*, both from Fort Collins, Colorado, are in the U. S. National Museum, and are obviously opposite sexes of the same species. They agree in such characters as the general sculpture, shape of squamae and mucro, microtrichiae present only anteriorly in basal cell, presence of a small swelling along inner anterior margin of posterior ocellus, and the well-developed, rounded distal lobe on hind femur. There are also two topotypic paratypes of *incisura* from Harrison, Nebraska, in the Museum collection which differ in no significant details from the type of *coloradensis*.

*Oxybelus emarginatus* Say

*Oxybelus emarginatus* Say, 1837. Boston Jour. Nat. Hist. 1: 375. Male.

*Oxybelus parvus* Cresson, 1865. Proc. Ent. Soc. Phila. 4: 476. Female.

*Notoglossa pacifica* Rohwer, 1909. Trans. Amer. Ent. Soc. 35: 119. Male. NEW SYNONYMY.

The unique type of *pacifica* from Pullman, Washington, is in the U. S. National Museum. It falls easily within the normal limits of variation of the common and widely distributed *emarginatus*.

*Oxybelus sericeus* **crocatus** n. subsp.

This subspecies is described at this time so that some biological observations can be published which were made by H. E. Evans of Cornell University and two of his students. At present it is known only from the type series from Pascagoula on the Gulf Coast of Mississippi. The color differences which separate it from typical *sericeus* are of the character which distinguish the Florida races of many other aculeates. Many of these Florida races occur also along the Gulf Coast and in Georgia, so it seems very probable that *sericeus crocatus* should be found also in Florida and perhaps as far west as New Orleans.

It may be distinguished from typical *sericeus* by the replacement by orange of the normal pale yellow markings on thorax, legs and abdomen. It is separated from *fulvipes* Robt. and *floridanus* Robt., the only two species from Florida which are at all similar in general coloration and sculpture, by the following combination of characters: male with apical margin of clypeus quinquedentate, apical tergites without posterolateral teeth, and last two tergites lacking lateral carinae; female with the clypeus densely punctate except for very narrow apical rim; both sexes with very dense silvery vestiture on clypeus and face, punctuation of thorax and abdomen more delicate, pronotal carina interrupted laterally, and basal cell of forewing with microtrichiae evenly distributed.

*Type.* Male; Pascagoula, Jackson County, Mississippi; August 4, 1953 (H. E. Evans, C. M. Yoshimoto, and C. S. Lin) [U. S. National Museum, Type No. 62537].

*Male.* Length 6.9 mm. Punctuation and vestiture as in typical *sericeus*. Mandible yellow except at extreme base and the apical fourth. Other pale maculations orange instead of pale yellow as follows: small spot laterally on pronotum, tubercle, a pair of large ovoid spots on first tergite, a pair of narrow elongate streaks along apical margin of second tergite, tip of fore femur, short stripe on outer surface of mid femur on apical half, fore tibia on outer surface, anterior edge of outer surface of mid tibia, basal fourth of posterior



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