

South American *Oxybelus* I. Notes on types of Spinola, F. Smith, Brèthes, Pate, and Schrottky (Hymenoptera, Sphecidae, Crabroninae).

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Abstract

The names of previously described South American species of *Oxybelus* are listed, annotated, and synonymy given. Nomenclature changes are: *brethesi* is a new name for *interruptus* Brèthes 1913; *decipiens* Brèthes 1913 and *pamparum* Brèthes 1913 are synonyms of *catamarcensis* Schrottky 1909; *fritzi* is a new name for *modestus* Brèthes 1913; *agnitus* Brèthes 1913 is a synonym of *marginatus* F. Smith 1856; *joergenseni* Brèthes 1913 is a synonym of *paraguayensis* Brèthes 1909; and *tarijensis* Brèthes 1913 is a synonym of *platensis* Brèthes 1901. Neotypes are established for *platensis* and *catamarcensis*, and lectotypes for *americanus*, *argentinus*, *modestus*, *marginatus*, and *tarijensis*.

Introduction

In a study of the *Oxybelus* fauna of South America, excluding that of Chile, I have recognized about 40 species. Twelve of these have been described by previous authors, and the type status, synonymy, and homonymy of these need clarification. I have been fortunate in being able to examine all of the extant types listed below. Cooperators in this respect have been Jorge Genise (Argentine National Museum, Buenos Aires), types of Juan Brèthes; R. A. Ronderos (Museum of La Plata, Argentina), Brèthes material; A. Roland (Turin Museum, Turin, Italy), types of M. Spinola; G. C. Eickwort (Cornell University, Ithaca, New York), types of V. S. L. Pate; and Colin Vardy (British Museum of Natural History, London), types of Francis Smith. Additional study material amounting to several thousand specimens is on hand from many museums and private individuals.

Type depositories are indicated by the relevant museum cities in capital letters. Structural abbreviations are: puncture diameter, PD; terga after propodeum, T-I, II, etc. Unusual characters: post-tegula, flat plate at base of forewing following tegula; mucro, spadelike projection from propodeum just behind metanotum; squamae, pair of wing-like projections on metanotum.

Oxybelus americanus Spinola 1841:114. Lectotype male and paralectotype male (here designated), French Guiana (TURIN).

The first *Oxybelus* species to be described from South America, it belongs to a small subgroup which includes *sparideus* Cockerell (from North America), and *paraguayensis* Brèthes. These have the mucro (propodeal projection) flattened as well as medially expanded. *Oxybelus americanus* is smaller than *paraguayensis* and the legs are extensively reddish in the male. The range extends in South America north from northern Brazil.

Oxybelus andinus Brèthes 1913:143. Holotype female, Salta Province, Argentina (BUENOS AIRES).

This is one of several South American species with extensively polished female mesopleuron, all or nearly all black male flagellum, and male T-VI with a lateral black hair tuft. The post-tegula and pygidium are black. In *andinus* the squamal point does not exceed the inner lobe posteriorly, and thoracic markings are yellow. The range includes much of South America (except Chile), Costa Rica and Mexico.

Oxybelus argentinus Brèthes 1913:140. Lectotype female (here designated), "Prov. de Salta", Argentina (BUENOS AIRES).

Both sexes have the squama elongate posteriorly and incurved along the inner edge. Pale markings are

yellow, with tergal bands interrupted medially and much less extensive in the female. The pygidium is black and the scape is orange. The scutellum and metanotum of the female lectotype is yellow all across, but this is apparently the extreme color form. The mesopleuron of the female is extensively polished but it is considerably more punctate in the male. The male flagellum has the terminal article only slightly darker than preceding ones. The species is known only from Argentina.

Oxybelus aurifrons F. Smith 1856:389. Holotype female, Brazil (LONDON).

This species is medium-sized (female about 6 mm long) with polished mesopleuron bearing scattered punctures in the female and closer ones in the male. Both sexes have the squama about as long as broad and the point does not exceed the inner lobe posteriorly. The mucro is black with the sides parallel or slightly diverging. Tergal pale bands are usually incomplete medially. The scape is often yellow in front. The post-tegula may be black, brown, or red. The male has the last flagellomere black in contrast to the previous articles, and mesopleural punctures fine to coarse. The female has a red, or mostly red, pygidial plate, and dark hindleg. *O. aurifrons* is widespread in South America, except Chile.

Oxybelus brethesi Bohart, new name for *interruptus* Brèthes; nec Cresson 1865.

Oxybelus interruptus Brèthes 1913:145. Holotype female, "La Pampa", Argentina (BUENOS AIRES).

The type of *interruptus* is a female without an abdomen. According to the description and the partial type, the following synopsis can be given: length 6.5 mm; mandible partly reddish; pronotal collar, post-tegula, and pygidial plate black; legs with yellow basal spots on forefemur and midfemur, and basally on hindtibia; interrupted yellow bands on T-I-IV; mesopleuron closely and rather finely punctate; scutum with close, moderate punctures; frons less broad than eye, narrowed below, squama long oval; mucro short, broad, obtusely emarginate apically. I have studied males which agree with the type and the description. These were from Argentina: Jujuy, Salta, and Catamarca.

Oxybelus callani Pate 1943:281. Female holotype, Talparo, Trinidad (ITHACA).

This small species (3-4 mm long) belongs to the *emarginatus* group with simple male clypeus. The female pygidial plate is red. The squama has its point

plainly posterior to the undeveloped inner lobe. Also, both sexes, but particularly the female, have reduced tergal markings. The species seems to be restricted to northern South America, including northern Brazil.

Notoglossa catamarcensis Schrottky 1909:251. Holotype female, "Catamarca", Argentina (LOST).

Oxybelus decipiens Brèthes 1913:142. Holotype male, "Paraná," Entre Rios Province, Argentina (BUENOS AIRES). New synonym.

Oxybelus pamparum Brèthes 1913:143. Holotype female, "La Pampa?", Argentina (BUENOS AIRES). New synonym.

According to Schrottky's description, *catamarcensis* is a large species with coarse punctation, black legs and terga, except for a red pygidial plate. This description agrees with that of a fairly common and large Argentine species, *decipiens*, that appears to be simply the male. Since the pygidial plate of the female may be partly red or wholly black, *pamparum* is certainly the same species. To help establish identity of *catamarcensis*, a neotype female is here designated, and deposited in the Miguel Lillo Museum (TUCUMAN). Data on this specimen are Santa Maria, Catamarca Province, Argentina, VIII-16-76 (R. M. Bohart). The neotype agrees in all important respects with the original description. Other features not mentioned by Schrottky are the broad, silvery pubescent face; black post-tegula; shiny mesopleuron with coarse punctures separated by 1-3 PD; broad squama; and rather short, black mucro. The species is widely distributed in South America, except for Chile.

Oxybelus fritzi Bohart, new name for *modestus* Brèthes; nec *Oxybelus modestus* Kohl 1892 (now in *Belomicrus*).

Oxybelus modestus Brèthes 1913:142. Lectotype male (here designated), "Mendoza", Argentina (BUENOS AIRES).

The lectotype has the characteristic red legs, including most of the hindfemur. It belongs in the group with simple (not tridentate) male clypeus. In addition to leg color, this small species has a long oval squama, short and broad mucro, rather closely and finely punctate mesopleuron, red post-tegula, medially broken pale yellow tergal bands which diminish on posterior segments, and a red pygidium. Two other syntypes are in poor condition and may represent other species. *O. fritzi* is named for my friend, Manfredo Fritz, who has contributed much to the knowledge of Argentine aculeate Hymenoptera. The

species is widely distributed in South America, except Chile.

Oxybelus marginatus F. Smith 1856:389. Lectotype female (here designated), "Villa Nova", Brazil (LONDON).

Oxybelus agnitus Brèthes 1913:144. Holotype female, "Prov. de Salta", Argentina (BUENOS AIRES). New synonym.

O. marginatus is a medium-sized species (female 5-6 mm long) with fine and rather close mesopleural punctures, black post-tegula, yellow outer basal spots on fore and midfemora, dark female hindleg, broad squama with short lateral point, yellow bands usually complete on T-I-V, and black pygidium. The type of *agnitus* does not differ materially. This is a common species in South America, except Chile. It occurs also in Costa Rica, Puerto Rico, and Hispaniola.

Oxybelus paraguayensis Brèthes 1909:239. Holotype female, "San Bernardino", Paraguay (BUENOS AIRES).

Oxybelus joergenseni Brèthes 1913:141. Holotype female, "Mendoza", Argentina (BUENOS AIRES). New synonym.

This medium-sized species (female 5-7 mm long) is fairly abundant in Argentina and Paraguay, less so farther north. Recognition characters are: red post-tegula, somewhat shiny mesopleuron with medium-sized punctures 1-2 PD apart, long oval squama, large and flattened mucro, nearly complete yellow bands on T-I-IV, and red pygidium with the plate convex laterally in the female.

The type of *joergenseni* has both T-V and VI red, whereas that of *paraguayensis* has this color on VI only. However, I have seen a number of intermediate female specimens with some red on V. Males associated with the two forms seem to be identical. A related species is *americanus*, which is somewhat smaller and with redder legs. *O. paraguayensis* occurs from Brazil, Peru, and Bolivia, south to Argentina and Paraguay.

Oxybelus platensis Brèthes 1901:195. Syntypes, "San Martin", Buenos Aires Province, Argentina (LOST).

Oxybelus tarijensis Brèthes 1913:144. Lectotype female (here designated), "Tarija, number 906", Argentina (BUENOS AIRES).

Of the 2 females of *tarijensis* labeled "type" in the Argentine National Museum collection, I have selected the better preserved one as lectotype. With respect to *platensis*, Brèthes conducted a biological

study near La Plata. He may have neglected to label types but in any case they appear to be lost. Since this may be one of the most abundant Argentine species, I am designating a neotype female from material sent to me from the La Plata Museum collection by R. A. Ronderos. It bears the data: "Lonacepin, Tanolil, iii, 1913", and is labeled *platensis*.

This medium-large species (female 6-7.5 mm long) can be recognized by its silvery pubescent face, black mandible, red post-tegula, complete yellowish bands on T-I-IV, black middle and hindlegs in female, and black pygidium. Also significant are the long oval squama and rather closely punctate mesopleuron. The tergal bands commonly have a "warty" appearance, sometimes seen in other species. The range includes most of South America except Chile.

Oxybelus polyceros Pate 1943:284. Male holotype, San Esteban, Carabobo, Venezuela (ITHACA).

This small species (3-4 mm long) is readily recognized by its quadrituberculate vertex. The male has a rather simple clypeus. The range includes Venezuela, Colombia, Ecuador and Cayenna.

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