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## New South American Oxybelus (Hymenoptera: Sphecidae)

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Descriptions of the following new and distinctive Neotropical species of *Oxybelus* are presented here in order that the names may be available in connection with other investigations. The types are preserved at present in my own collection.

## Oxybelus callani1, new species

The present species superficially resembles argentinum Bréthes from which, however, callani is readily distinguished by the markedly different conformation of the clypeus and the simple, unforked lateral propodeal carinae.

Type. — Female; Talparo, Trinidad, British West Indies. December 25, 1941. (E. McC. Callan).

Female 4 mm. long. Black; the following deep stramineous: mandibles except red apices, scapes anteriorly, pedicel, pronotum dorsally to and including the tubercles, axillary sclerites, scutellum, postscutellum, fore and middle femora beneath, fore and middle tibiae entirely, hind tibiae broadly annulate at base, first abdominal tergite with a large spot laterally on each side and second with a smaller linear one. Flagellum obscure fulvous apically. Tegulae and fore and middle tarsi fulvous. Last abdominal segment ferruginous. Wings clear hyaline, iridescent; veins and stigma light brunneous.

Head suborbicular in anterior aspect; fulgid; with a moderate vestiture of hair which is silvery and appressed on clypeus, lower front, and temples, and aeneous and suberect on upper front and vertex. Front gently convex except for a shallowly concave area below behind scapes, with moderately fine and close punctures, width at distal end of scapes three-fifths the vertical eye length;

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<sup>1)</sup> Dedicated to Dr. E, McC. Callan of the Imperial College of Tropical Agriculture, Trinidad, B. W. I.

vertex somewhat more coarsely punctate than front; ocellocular line one-third the postocellar distance; temples weakly striatopunctate, temporal carinae rather well developed. Antennal scapes obterete, two-fifths the vertical eye length; pedicel obterete, four-thirds the length of first flagellar article; flagellum somewhat incrassate distad, first two segments subequal in length, ultimate article twice the length of penult segment; interantennal line six-sevenths the antennocular distance. Clypeus with median length one-fifth the vertical eye length; flat laterally, tuberculate discally; median lobe with a narrow, transverse, linear, glabrous, perfulgid, nitidous, declivent bevel immarginate above, the apical margin shallowly bisinuate and thus obscurely tridentate, and laterad on each side and separated by a rounded emargination with but one lateral tooth. Mandibles falcate.

Thorax perfulgid; with a moderate vestiture of decumbent puberulent hair which is aeneous dorsally and silvery on pleura. Pronotum dorsally with anterior margin sharply carinate to and including the tubercles, not interrupted at acute lateral angles. Mesonotum gently arched, with moderately coarse, close punctures, posterior margin finely foveolate; axillae small, immarginate laterally; scutellum transversely subsemicircular, gently tumid, more coarsely and sparsely punctate than mesonotum, bisected by a longitudinal carina, lateral margins with broad pellucid flanges; postscutellum transversely subrectangular, one-half the length of scutellum, finely rugose, bisected by a high cristate keel; squamae subequal in length to scutellum, flat, pellucid, transversely carinulate, apices acute, inner (posterior) margins concave, not lobed. Mucro almost seven-eighths (.85) the length of scutellum; elongate subrectangular, gently divergent from base (width there seven-tenths the length) to apex (width subequal to length) which is broadly excised; concave above. Mesopleura with moderate subcontiguous punctures; prepectus anteriorly with a sharp margin continuous ventrally with a sharply margined anterior edge of mesosternum; episternal suture foveolate; mesopleural pit evident; hypersternauli and sternostirae obsolescent; metapleura horizontally costulate. Propodeum fulgid; dorsal face traversed by fine oblique parallel carinules, separated from posterior face by a sharp carina; posterior face with discal areole lyriform, glabrous, subnitidous within, not strongly closed above, long-stalked ventrally; lateral carinae strong throughout, simple not forked below; lateral faces nitidous discally, horizontally costulate marginally.

Legs: Fore tarsi with a pecten of five spines. Outer faces of middle and hind tibiae with several rows of rather long, stout, declivent testaceous spines; hind tibiae also serrate; longer hind tibial calcar aciculate, four-fifths the length of hind metatarsi; hind femora with a sharp subfornicate keel above at apex.

Abdomen fulgid; with a thin vestiture of short decumbent hair; very weakly constricted between segments. Tergites with a moderate, separated puncturation throughout; first bisected by a moderate impression; chromatorachides weakly developed laterally on first two tergites which also have subpellucid apical flanges; pygidium subequilaterally trigonal, disc with coarse setigerous punctures bearing decumbent aeneous setulae, apex notched. Sternites more sparsely punctate than tergites, the apical ones subnitidous.

Allotype. — Male; Vista Alegre on the Rio Branco, Amazonas, Brazil. September 6, 1924. (J. C. Bequaert.).

Male. 4 mm. long. Agrees with the type (female) except in the following features: Livery in general the same but scapes and pedicel wholly citrinous; pronotum black medially; scutellum and postscutellum black; all tibiae and tarsi yellow; last abdominal segment black. Head in general the same but width of front at distal end of scapes only one-half the vertical eye length; ocellocular line one-third the postocellar distance; temporal carinae very strong. Antennal scapes one-third the vertical eye length; interantennal line five-fourths the antennocular distance. Clypeus transverse; median length one-fourth the vertical eye length; flat laterally to gently tumid discally, bisected by a low rounded keel; median lobe apically with a transverse, linear, concave, sharply deflexed, glabrous nitidous bevel, the dorsal edge of which is margined and trirepando-undulate, the apical margin bisinuate and thus tridentate, laterad of which on each side is a small mucronate tooth. Thorax and propodeum as in female but sternostirae well developed; postscutellum one-half the length of scutellum; squamae subequal in length to scutellum, the inner (posterior) margins straight, truncate, but not lobed. Mucro subequal in length to scutellum; broadly concave above, width at base one-half the length, gently divergent to apex (width there seven-tenths the length) which is broadly excised for one-fifth the length. Legs: Fore metatarsi with four spines. Middle and hind tibiae not quite as strongly spinose; longer hind tibial calcar three-fourths the length of hind metatarsi; hind femora with

fornicate keel strongly developed above at apex. Abdomen somewhat more coarsely and closely punctate than in female; chromatorachides better developed on first two tergites; rudimentary latero-apical spines on fifth and sixth tergites; penult tergite with dorsolateral apical carinules; pygidium elongate subrectangular, width at base three-fourths the length, tapering to truncate apex the width of which is two-fifths the length, the disc coarsely punctate.

Paratypes: Vista Alegre on the Rio Branco, Amazonas, Brazil; September 6, 1924; (J. C. Bequaert): 1 female, 5 males. The paratypes agree with the typical pair in all essential details of livery and structure, except that the female from Vista Alegre has merely two yellow spots on the scutellum, the yellow maculation of the legs is more extensive, and the antennal flagellum is largely rufous.

## Oxybelus polyceros2, new species

The present widespread northern South American form polyceros is a member of the Frontale Group, and is readily distinguished from all other known New World species by its multituberculate vertex.

Type. — Male; San Esteban, Estado Carabobo, Venezuela. January 14, 1940. (Pablo Anduze.)

Male 5 mm. long. Black; the following stramineous; mandibles except red apices, scapes anteriorly and annulate at apex, pronotum at lateral angles and tubercles, squamae along inner margins, fore and middle femora at apex and beneath, all tibiae with a longitudinal stripe on outer faces, first four abdominal tergites with narrow preapical fasciae broadly interrupted medially. Fulvous: fore and middle tibiae beneath and above, all tarsi; flagellum fulvescent apically. Tegulae pellucid dark castaneous. Squamae pellucid pale testaceous. Wings clear hyaline, iridescent; veins and stigma dark brunneous.

Head subfulgid; suborbicular in anterior aspect; clypeus and front with a moderate vestiture of decumbent silvery pile becoming light golden above and on vertex; temples with a thin clothing of decumbent puberulent aeneous hair. Clypeus and front with moderate subcontiguous puncturation; front moderately angulate medially in lateral aspect; width at distal end of scapes about one-half (.526) the vertical eye length; inner orbits subparallel to slightly divergent above and below. Vertex more coarsely punctate

<sup>2)</sup> From polukeros, many horned; in allusion to the many tubercles on the vertex.

than front; ocelli in a low triangle, the postocellar line twice the ocellocular distance; with a small compressed acute tubercle before, and a larger rounded subnitidous and subglabrous one behind, each posterior ocellus, and also another similar to the latter behind each upper hind margin of compound eye. Temples rather finely striatopunctate; temporal and occipital carinae both strong, sharp and well developed; post-temporal region sparsely punctate. Antennal scapes obterete, almost three-eighths (.3662) the vertical eye length; pedicel obterete, subequal in length to first flagellar article; flagellum simple, finely puberulent, first two segments subequal in length, ultimate article simple, terete, one and a half times as long as penult segment; interantennal and antennocular distances subequal. Clypeus transverse; median length almost one-fourth (.2367) the vertical eye length; flat laterally, bisected discally by a rounded keel which ends distally in the median tooth of the preapical quinquedentate margin of median lobe, beneath which is an inflexed, transversely linear, concave, glabrous, nitidous bevel, the apical margin of which is broadly and shallowly bisinuate. Mandibles falcate; inner margins on basal third with a low obtuse dentiform angle.

Thorax subfulgid; with a thin vestiture of short decumbent aeneous pubescence throughout. Pronotum along anterior dorsal margin with a sharp, transverse, erect, sublaminate carina, notched medially, weakly interrupted at lateral angles, then continued onto tubercles. Mesonotum with moderately coarse subcontiguous punctures, posterior margin foveolate; axillae small, lateral edges sharply margined; scutellum flatly tumid, rugosely punctured, bisected by a strong carinule, lateral margins with wide pellucid flanges, posterior margin foveolate; postscutellum almost six-tenths (.581) the length of scutellum, rugose, bisected by a cristate carina; squamae three-fourths the length of scutellum, transversely carinulate, broad, inner (posterior) margins with a large rounded to angulate lobe separated outwardly by a rounded emargination from, and reaching as far caudad as, the subacute apices. Mucro one and a fourth times as long as scutellum; slender, flaring from base (width there one-fourth the length) to apex (width there one-half the length) which is deeply and roundly excised; concave above. Mesopleura with puncturation somewhat similar to but finer than mesonotum; prepectus sharply margined anteriorly; episternal suture impressed, foveolate; hypersternauli distinct, foveolate; mesopleural pit moderate; subrugulose between hypersternauli and the bisinuate sternostirae; mesosternum sharply margined anteriorly; metapleura with subhorizontal, subparallel, fine costulae. Propodeum subfulgid; dorsal and posterior faces with an inconspicuous short fine pile; dorsal face with lateral areas traversed with somewhat irregular, oblique, subparallel carinules and bisected by an oblique carinule on each side; posterior face discally with a large trigonal areole, closed above, strongly margined, concave, glabrous, nitidous, perfulgid within, long-stalked ventrally, laterad of which the surface is finely punctate and with a few subparallel subhorizontal fine rugulae; lateral carinae strong and well developed throughout, simple not bifurcate below; lateral faces fulgid, with fine subparallel horizontal costulae.

Fore legs with tarsi not appreciably flattened; metatarsi with four short stout spines. Middle tibiae moderately spinose on outer faces. Hind tibiae serrate on outer faces and with three rows of stout, declivent, testaceous spines; longer calcar seven-tenths the length of hind metatarsi; hind femora with a sharp subcristate keel above at apex.

Abdomen with a moderate vestiture of short decumbent aeneous hair dorsally; moderately constricted between segments. Tergites with a moderate, close puncturation throughout; apical margins with a testaceous flange; chromatorachides developed laterally on first four and with their caudal margins irregularly serrate; first bisected by a weak impression; second to sixth inclusive with strong latero-apical spines; penult with weak dorsolateral carinules; pygidium as wide at base as long and tapering toward truncate apex which is about one-half (.55) the basal width, the disc coarsely punctate. Sternites fulgid, more sparsely punctate than tergites.

Allotype. — Female; St. Jean du Maroni, French Guiana. April-May, 1914. (R. Benoist.) [Museum d'Histoire Naturelle, Paris.]

Female. 6 mm. long. Agrees with the male (type) except in the following features: Livery in general the same but pronotal dorsum entirely to and including tubercles yellow; tibiae not as extensively maculated; abdomen with spots on first tergite much larger. Head in general the same but width at distal end of scapes three-fourths the vertical eye length; occllocular line almost three-fifths (.581) the postocellar distance; postocellar and postocular tubercles not as pronounced as in male. Antennal scape four-tenths the vertical eye length; pedicel subequal in length to first flagellar article; flagellum with first segment five-fourths as long as second;

interantennal distance seven-ninths the antennocular line. Thorax the same but postscutellum one-half the length of scutellum; squamae with inner lobe acute and surpassing apices. Abdomen with a coarsely punctate trigonal pygidium.

Specimens examined: [Types and paratypes] 36; 10 males; 26 females; as follows: French Guiana: St. Jean du Maroni; April-May, 1914; (R. Benoist); 5 males, 26 females; [Paris]. — Trinidad: Caroni River; elevation 757 ft.; October 12, 1918; (Harold Morrison): 1 male; [U. S. N. M.] — Venezuela: San Esteban, Estado Carabobo; January 14, 1940; (Pablo Anduze): 2 males. — Colombia: Sevilla, Departamento de Magdalena; December 1, 1926; (G. Salt): 1 male. — Ecuador: Alausi, Province of Chimborazo; elevation 9459 ft.; June 18, 1914; (H. S. Parish): 1 male; [Cornell].

The paratypes agree with the typical pair in all essential

features of livery and structure.