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MISCELLANEOUS SYNONYMY AND NEW SPECIES AMONG THE LAMIINAE (CERAMBYCIDAE)

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Owing to the lack of interchange of publications and communications among the enemy nations during the past war, it was inevitable that some duplication of effort and synonymy should occur that normally would have been avoidable. In the following paper, some instances of this sort that have come to the authors' attention are pointed out. The appended descriptions of new species are mostly of specimens that were received too late to be included in the monographs of their respective tribes; the types of these have been deposited in the collections of the American Museum of Natural History, unless otherwise indicated. Thanks for the loan of this material are extended to Dr. Mont A. Cazier. For other specimens the authors are indebted to Mr. Lionel Lacey, of New Rochelle, New York, and to Dr. P. J. Darlington, of the Museum of Comparative Zoölogy, Cambridge, Massachusetts.

In his studies on the Lamiinae, Stephen Breuning (1943-1945) of Vienna included a monograph of the Monochamini, unaware of the treatment given its Western Hemisphere components by the present writers in 1941. Some comments and corrections are therefore necessitated:

Taeniotes insularis Thomson. As Breuning placed Ptychodes insularis Fairmaire in the genus Taeniotes, T. insularis Thomson became a secondary homonym, which hence was renamed thomsoni by Breuning. However, as Fairmaire's species is cor-

rectly placed in a separate genus, *Neoptychodes*, Breuning's name is unnecessary and falls as a synonyn of *T. insularis* Thomson.

Ptychodes lecontei batesi Breuning appears to be an intergrade between lecontei and politus, many variants occurring in the type locality (Nicaragua) of this new name, which accordingly should be placed as a synonym of lecontei.

Ptychodes taeniotoides Thomson (1865) is placed as a subspecies of niveisparsus Bates (1872) by Breuning. The two are actually distinct species.

Parataeniotes Breuning (January, 1943; genotype: Ptychodes dejeani Thomson) unfortunately must be placed as a synonym of Chyptodes Dillon and Dillon (1941) with identical genotype. Parataeniotes Dillon and Dillon (1943) (genotype: P. mimus Dillon and Dillon), being a homonym, must be altered; the authors propose that it be called Pseudotaeniotes, new name.

Deliathis poecilodryas Bates. From Breuning's figures of this species and of Hammoderus impluviatus Lacordaire, it is obvious that the two are identical. Bates' name hence must fall as a synonym; the species, however, belongs in Deliathis.

Hammoderus strandi Breuning. This species appears from the description to be identical to *Plagiohammus olivescens* Dillon and Dillon, but it is impossible to ascertain this at present. The latter name would fall as a synonym.

In an earlier paper, Breuning (1942) described the genus Pachypezomorpha (p. 164), with P. strandi Breuning as its genotype, stating that it was related to Pachypeza. From the description it is evident that this is a synonym of Helvina Thomson, which at that time was incorrectly listed among the Onciderini and which Breuning consequently overlooked (see Dillon and Dillon, 1945). For his species strandi he gives only characters of surface sculpturing in his brief description, failing to mention coloration or maculation of any sort. As the characters given can apply to any of the three known species, it is impossible to identify it. Therefore, as no "summary of characters—differentiating it from other species" (Article 25, section c1, of the International Rules of Zoological Nomenclature) is given, it should be treated as a nomen nudum.

Monochamus maculosus Haldeman. As Breuning has pointed out, this name is preoccupied by M. sutor maculosus Voet (1778) and hence the species should be called by the next available name, M. clamator LeConte.

Plagiohammus camillus, new species

Close to *P. sallei* Thomson and *P. confusor* Dillon and Dillon. From the former it is distinct in having the elytral maculae contrasting in color with the general pubescence. From the latter it is distinct in having the elytral maculae orange ochraceous, more sharply defined and more numerous, the elytra have a shorter spine at apex, and the pronotal disk is less roughly sculptured, with a small tubercle medially before basal sulcus.

Male: Elongate-ovate, rather robust, subcylindrical, elytra subconvex; head and pronotum dark reddish brown, elytra slightly paler; entirely tawny pubescent, with orange ochraceous markings as follows: head on vertex and margins of lower lobe of eye. Pronotum with two rather indistinct fasciae, one behind apical sulcus and one preceding basal sulcus. Elytra with many irregular, moderate-sized maculae on disk, sometimes somewhat coalesced; at extreme base each elytron with a large macula. Beneath and legs dark reddish brown, densely clothed with tawny pubescence, mesosternal side-pieces tinged with orange ochraceous. Antennae with scape and third segment dark reddish brown, remaining segments paler; scape heavily, remaining segments thinly, clothed with tawny pubescence.

Head above finely, densely punctate, with a median impressed line from occiput, extending between antennal tubercles to epistoma on front; front finely, densely punctate, with a few coarse punctures laterally; antennal tubercles approximate basally, divergent apically. Pronotum slightly transverse; sides feebly arcuate; disk, laterally behind apical sulcus, with two short carinae, and at middle, just before basal sulcus, a small but distinct tubercle; surface with a few scattered punctate granules; lateral tubercles broad, well elevated, with a robust, blunt spine Scutellum feebly transverse, sides nearly straight, oblique, apex narrowly arcuate. Elytra broadly arcuate, apices narrowly rounded and with a moderate spine at tip; extreme base smooth, thence to basal quarter finely, moderately densely granulate, thence to apex with coarse, glabrous punctures which are well separated. Mesosternum with a well-elevated, rounded tubercle; fifth sternite broadly emarginate at apex. Antennae with middle of sixth segment reaching to tip of elytra (remainder missing).

Length 30 mm., width 9.5 mm.

HOLOTYPE: Male; Peru; F. Woytkowski, collector; in authors' collection.

Truncatoides caviunas, new species

Superficially resembles *Lesbates acromii* Dalman, but with a large, dark brown, irregularly shaped macula, the posterior margin deeply bidentate behind the crested humerus; the antennae more slender and capitate instead of being robust and strongly clavate; the abdomen medially is broadly dark brown, glabrously vittate.

Elongate-ovate, robust, convex; dark reddish FEMALE: brown or piceous, entirely covered with mottled white and dark gravish brown pubescence. Head with front having the white pubescence predominating; vertex with a tinge of ochraceous and a very narrow margin of same color; front of lower lobe of eye ochraceous. Scutellum dark brown pubescent. Elytra with a large, dark brown macula behind crested humeri, which has the posterior margin strongly bidentate. Beneath dark reddish brown, abdomen piceous, the sterna with same pubescence as above but the brown predominating laterally. Abdomen glabrous, shining, with a broad ochraceous or bright fulvous vitta laterally, somewhat less broad on first sternite. Legs dark reddish brown or piceous, white and dark brown variegate, with some ochraceous pubescence interspersed; femora all annulate near middle with dark brown, protibiae and mesotibiae annulate basally and apically and metatibiae only basally, with dark brown. Antennae with scape and third segment piceous or dark reddish brown, covered with same pubescence as upper surface of body and also tinged with ochraceous, the capitate portion of scape with an irregular, dark brown macula; from fourth segment the antennae dark brown on apical third and testaceous on basal two-thirds, rather thinly, finely grayish pubescent.

Head with front finely, densely punctate, with a few coarse punctures interspersed; genae sculptured as in front; eye with lower lobe oblong-ovate rather than ovate. Pronotum transverse, sides straight, unarmed, narrowed to apex; disk with an elongate median tubercle and either side of middle a large rounded tumescence; basal sulcus wide, shallow. Scutellum transverse, sides straight, apex subtruncate, depressed medially. Elytra with sides broadly arcuate, tapering to apices, each of which is broadly, separately rounded; disk basally with a

strong, prominent humeral crest, extending nearly halfway to suture, carinate on apex; gibbosity distinct, oblique, arcuate; basal half of disk with well-spaced, coarse punctures, these becoming somewhat finer towards apex. Fifth sternite at apex subtruncate, triangularly impressed medially. Antennae slightly shorter than body, from fourth segment gradually shorter.

Length 15 mm., width 7.6 mm.

Holotype: Female; Caviuna, Paraná, Brazil; October, 1945; A. Maller, collector.

Oncideres nicea, new species

Closely allied to *O. ilaire* Dillon and Dillon but differs in the following ways: integumental color black instead of reddish brown; the larger white maculae of elytra less numerous and scattered, the minute ones more numerous and extending onto base; glabrous tubercles of base more strongly elevated, and a slight gibbosity on each elytron basally; beneath clothed with white pubescence.

FEMALE: Elongate-ovate, moderately robust, subcylindrical, elytra convex; black or brownish black, entirely gravish brown pubescent, except on head and pronotum the pubescence tends to ochraceous. Head with lower lobe of eye margined with ochraceous, wider on anterior margin. Pronotum with several transverse, glabrous carinules, not entire. Elytra from basal fifth minutely irrorate with white maculae of two sizes, the larger, few in number, very scattered extending from basal quarter to apex, the smaller very numerous and extending from basal fifth to apex. Beneath dark reddish brown to piceous. white pubescent, mesosternal side-pieces and metepisterna tinged with ochraceous. Legs piceous, clothed with ochraceous and white variegated pubescence, the ochraceous predominating. Antennae with scape and third segment piceous, remaining segments gradually paler, with the extreme apices darker; entirely clothed with thin, whitish pubescence, the scape faintly tinged with ochraceous.

Head above minutely alutaceous; front rather broadly concave between antennal tubercles, surface minutely, densely punctate; genae vertical, scabrose; eye with lower lobe oblong-ovate, slightly longer than gena; antennal tubercles prominent, unarmed at apex. Pronotum transverse, wider apically; apical sulcus wide, shallow, basal one deep, narrow; disk transversely

multicarinulate, carinules sometimes interrupted; lateral tubercles small but distinct, with a short, obtuse tooth at apex. Scutellum transverse, sides and apex arcuate. Elytra with sides broadly arcuate, feebly widened behind middle; apices together rounded; extreme base smooth, on basal quarter with a distinct gibbosity on each one, the gibbosity with from six to eight large, strongly elevated granules, surrounded with a number of smaller granules which extend to humeri; disk with coarse, very shallow punctures which become smaller and obsolete apically; humeri arcuate, with a large, rounded tubercle at angle. Procoxae tumid, unarmed; profemora robust, rather broadly clavate, not rugose, remaining femora less robust, clavate. Fifth sternite about one-third longer than fourth, at apex shallowly triangularly impressed; apex broadly emarginate. Antennae slightly less long than body; scape robust, clavate, grooves at base nearly obsolete, surface minutely, obsoletely punctate; third segment robust, nearly twice length of scape, feebly sinuate; fourth much shorter, slightly more robust than following segments which are gradually shorter.

Length 18 mm., width 7 mm.

HOLOTYPE: Female; Satipo, Peru; September, 1944; A. Maller, collector.

Oncideres trigerta, new species

While resembling O. satyra Bates most closely in elytral maculation and in coloration of the under surface, this species is probably closest to O. saga amazona, preëminently in the maculation of the pronotal disk. From the latter it is distinct in having more tubercles on the base of the elytra; the elytra light brown pubescent, not fulvous, with the white maculation somewhat reduced in quantity and never forming rosettes, and the under surface lacking white pubescence on the abdomen.

MALE: Elongate-ovate, robust, subcylindrical; black, elytra fuscous, entire upper surface fulvous brown pubescent, somewhat paler on pronotum, and a little redder on most of head. Pronotum with a transverse, median, glabrous carina, indistinctly expanded into five minute, glabrous maculae, which are elevated. Elytra behind basal sixth rather densely covered with small and minute white maculae, irregularly placed, often forming short longitudinal rows, never condensed into rosettes, on anterior two-thirds rather more sparse. Beneath fuscous,

yellowish gray pubescent; sterna each side with a rather broad, sublinear, white macula, not sharply delimited; abdomen with trace of an obsolete white vitta at extreme sides. Legs piceous, with fulvous, brown, and ashy pubescence. Antennae black, segments from fifth gradually becoming dark reddish brown; fulvous brown pubescent.

Head minutely alutaceous; front broadly concave between antennal tubercles, rather finely, moderately sparsely punctate; genae glabrous, coarsely rugose; eye with lower lobe elongateoblong, nearly twice height of genae; antennal tubercles very prominent, at apex with an obsolete tooth. Pronotum transverse, behind lateral tubercle feebly constricted; disk at middle transversely carinate, the carina broad, not sharply defined, more strongly elevated here and there; lateral tubercles broad, not prominent, ending in a short, obtuse spine. Elytra attenuate, apically less strongly so, apices together rounded; base with a few large, shining granules, placed five or six on each gibbosity and surrounding area, and a larger number of somewhat finer ones behind humerus; basal half with rather dense but shallow punctures, becoming finer to middle, behind which point they disappear; humeri feebly rounded, entire angle glabrous, the terminal tubercle slightly larger than the other. Procoxae with a prominent, large, rugose tubercle; profemora very robust, widest basally, sides nearly straight, coarsely rugose; fifth sternite slightly longer than fourth, broadly retuse at apex. Antennae about two-fifths longer than body, the eighth segment attaining elytral apex; sparsely fringed beneath; scape gradually clavate, deeply grooved beneath.

Length 23 mm., width 8.3 mm.

Hоlotype: Male; Satipo, Jauja Province, Peru; March, 1945; P. Paprzycki, collector.

Oncideres poeta, new species

Related to *Oncideres ophthalmalis* but differs in having the under side of the humeri dark brown pubescent; in lacking the light fascia of the elytra; and in that the mesepisterna are chalky white pubescent.

FEMALE: Elongate-ovate, rather slender, cylindrical, elytra convex; piceous, elytra dark reddish brown. Head red ochraceous pubescent, with scattered hairs of silvery gray interspersed; eyes feebly outlined with the first pubescence. Pronotum with

same pubescence as head but the gray is more abundant. Scutellum thinly red ochraceous pubescent. Elvtra on basal third red ochraceous pubescent, with minute, scattered patches of silvery gray; thence to apex the red ochraceous pubescence forms indistinct, rounded maculae surrounded by the silvery gray pubescence; entire elytra with well-spaced glabrous maculae, those on basal third are larger and granular, thence to apex smaller and punctate; the under side of humeri to near middle dark brown pubescent. Beneath dark reddish brown, thinly red ochraceous pubescent, prosternum, mesosternum, and metasternum pale gray medially, the sternites with pale gray intermixed with the other pubescence, in nearly equal amounts; mesosternal side-pieces, basal tip of metepisternum and a wide vitta laterally on metasternum, chalky tomentose, the remainder of the metepisternum dark brown. Legs piceous, with ochraceous and gray pubescence intermixed. Antennae with scape piceous, remaining segments dark reddish brown; entirely covered with red ochraceous pubescence.

Head above minutely alutaceous; front very feebly concave between antennal tubercles, surface vertically rugose and finely, densely punctate; genae transverse, coarsely rugosely punctate; eye with lower lobe oblong, very large, more than twice the length of the genae; antennal tubercles feebly prominent, un-Pronotum transverse; sides arcuate; base narrower than apex; apical transverse sulcus deep, strongly curved medially, basal one feebly arcuate; disk with five transverse, glabrous, feebly elevated tubercles medially in a sinuate line, the median one more or less rugose, between these and apical sulcus a sinuate carina; lateral tubercles feeble, obtusely toothed at apex. Scutellum transverse, sides straight, oblique, apex subtruncate. Elytra feebly widened behind middle; apices together rounded; disk on basal half with well-separated, rounded tubercles, those on basal quarter larger and more numerous; remainder of elvtra feebly granulate-punctate; humeri prominent, front margin arcuate, at angle a large rounded tubercle. Procoxae globose, not tuberculate; profemora not rugose, simply punctate. Fifth sternite longer than fourth, apex feebly emarginate, and surface at apex feebly, triangularly impressed. Antennae about as long as body, beneath feebly fimbriate to fifth segment; scape feebly clavate to apex.

Length 16 mm., width 5.5 mm.

HOLOTYPE: Female; Canal Zone, Barro Colorado; December, 1934; M. Bates, collector; in Museum of Comparative Zoölogy, Cambridge.

Oncideres lyside, new species

Close to *Oncideres minuta* but differs in the following ways: elytral white maculae fewer in number and more widely spaced; basal granules larger, less numerous, and more widely spaced; metasternum white maculate; antennae from fourth segment darker apically.

MALE: Elongate-oblong, robust, cylindrical, elytra convex; dark reddish brown, elytra paler; entirely fulvous pubescent. Head with eyes margined with denser fulvous pubescence. Pronotum with five discal glabrous maculae, the two lateral ones more or less coalesced; lateral tubercles glabrous at tip. Scutellum thinly fulvous pubescent. Elytra each with about 18 or 20 rather coarse glabrous maculae, formed by granules, extending nearly to middle; from just before middle to apex with white, rounded, well-spaced maculae (about 18 or 20 larger on each elytron), with a few, very minute ones scattered in between. Beneath reddish brown, yellowish gray pubescent; mesosternal side-pieces ochraceous, metasternum densely, broadly white maculate laterally; sternites laterally on apical margin with a transverse glabrous macula, largest on first sternite, gradually smaller to fifth. Legs dark reddish brown; femora rather thinly, medially denser basally and apically, clothed with ochraceous pubescence. Antennae dark reddish brown, scape and third segment fulvous pubescent; fourth to seventh basally, gradually more narrowly fulvous, apices more broadly dark brown pubescent. segments 8 to 11 dark brown pubescent.

Head above finely, densely punctate; front feebly concave between antennal tubercles, surface moderately, rather densely punctate; genae transverse, coarsely punctate; eye with lower lobe elongate-oblong, more than three times length of gena; antennal tubercles feebly elevated, widely separated, not toothed at apex. Pronotum one and one-half times as wide as long, apex slightly wider than base; apical transverse sulcus broad, deep, strongly recurved medially, basal sulcus shallower, feebly curved medially; disk with five feebly elevated tubercles, all except median one transverse; lateral tubercles feeble, obtuse apically. Scutellum transverse; sides straight, oblique; apex subtruncate.

Elytra with sides very feebly attenuate to apices, which are together rounded, base with from 18 to 20 large, well-spaced granules, reaching to just before middle, those nearest middle slightly less elevated and smaller, remainder of disk very minutely punctate; humeri prominent, with a large, rounded tubercle at angle. Procoxae globose, tumid and rugose anteriorly but not tuberculate; femora robust, profemora broader and simply punctate. Fifth sternite about one-third longer than fourth; apex feebly emarginate. Antennae about one and two-thirds times body length, sparsely fimbriate to sixth, from seventh very sparsely so; scape elongate, slender, feebly clavate to apex, finely, densely punctate.

Length 9.3 mm., width 2.5 mm.

HOLOTYPE: Male; Canal Zone, Barro Colorado; November, 1934; M. Bates, collector; in Museum of Comparative Zoölogy, Cambridge, Massachusetts.

Oncideres laceyi, new species

In the key to species, this runs to dejeani, owing to the densely placed, nearly uniformly sized tubercles on the base of the elytra; these, however, in the present form are confined to the basal quarter. Moreover, the elytral maculation is quite distinct, consisting of glabrous punctures medially and including forked lines on the apex. In its affinities it is closest to multicincta Dillon and Dillon, from which it differs in the basal granulation, and in the median glabrous maculae of elytra being larger and widely separated; the pubescence above is largely silvery white, variegated with reddish and brown; the pronotum medially is broadly reddish; the median fascia of elytra is mostly silvery, as are the legs. Just behind the humerus on sides of elytra is a very large, projecting tubercle.

Female: Elongate-ovate, robust, black, base of pronotum, apex of elytra, and scutellum fuscous piceous; covered with pubescence. Head and pronotum dull reddish pubescent, variegated somewhat with hoary, especially around occiput and at base and apex of pronotum. Scutellum glabrous (probably rubbed off). Elytra largely silvery white pubescent, variegated irregularly with dull reddish, especially at extreme base; beyond usual smooth area entirely covered by densely placed, contiguous, black granules; from basal quarter to apex with sparse, distinct, rounded, glabrous points; at apical third a broad, nearly

glabrous band, consperse with pubescent maculae; from this band to apex run two or three fine, glabrous, forked lines. Body beneath and legs largely hoary, sides of body and legs above broadly tinged or variegated with dull reddish. Antennae fuscous, reddish fulvous pubescent, first three segments entirely and remaining ones beneath, varied with hoary.

Head with front finely punctate and minutely alutaceous; antennal tubercles small, prominent, widely separated, unarmed; eyes with lower lobe elongate-quadrate, slightly taller than genae. Pronotum strongly transverse, with a broad, low tubercle each side behind middle; disk with a single, distinct, transverse, glabrous carina across middle; apical and basal transverse sulci broad, shallow. Scutellum with sides moderately tapering, apex subtruncate. Elytra with sides distinctly tapering, apices together rounded; beyond smooth base densely, finely, contiguously granulate to basal quarter, the granules towards base and around humeri slightly larger, behind and below humerus a very large, projecting tubercle each side; the glabrous points somewhat elevated but otherwise sculpturing concealed to apex; humeri prominent, very broadly rounded. Procoxae with a feeble tubercle anteriorly. Mesosternal process with a distinct tubercle medially (absent in multicincta). Fifth sternite nearly twice length of fourth, deeply emarginate at apex, broadly impressed medially. Antennae distinctly shorter than body; sparsely fimbriate beneath to apex; third segment very little longer than scape, which is slender and simple; rest much shorter.

Length 20.5 mm., width 8.3 mm.

HOLOTYPE: Female; Satipo Valley, Junin Province, Peru; June 2, 1945; in L. Lacey collection.

Dedicated to Lionel Lacey of New Rochelle, New York, whose generosity in lending specimens from his collection of Cerambycidae and whose assistance in many other ways have been of value to the authors in their studies.

Clavidesmus rubigineus, new species

While very closely related to *C. heterocera* Buquet, *rubigineus* is distinct in having only the postmedian dark fascia on each elytron; the antennae from fourth segment pale pubescent, with only the apical halves of the fifth, seventh, and ninth, and apex of eleventh, dark brown pubescent; and, especially, in having

bright red pubescence intermingled among the yellow and brown on the head, pronotum, base of elytra, the legs, and body beneath.

FEMALE: Elongate-oblong, robust, cylindrical; black, everywhere covered with short dark brown pubescence, variegated with bright red and yellow. Head with a vitta each side of middle of red and yellow, commencing at occiput and continuing to base of front, separating on antennal tubercles, thence gradually converging. Pronotum with a broad, irregular, poorly defined vitta occupving each side of disk, converging anteriorly, largely bright red but including several small patches of yellow pubescence as well; a median line of red and yellow on apical half. Scutellum entirely brown. Elytra largely dull yellow, each with a dark brown, oblique fascia behind middle, variegated with red, and with a vague series of brown blotches basally, extending from near scutellum to suture at middle; extreme base and apex strongly varied with bright red. Body beneath and legs black, largely bright red pubescent, varied somewhat with brown (especially laterally on abdomen) and yellow. Antennae with first three segments and apical halves of fifth, seventh, ninth, and eleventh, and extreme apices of the remainder, black, covered with brown pubescence; rest pale, with hoary pubescence.

Head minutely alutaceous, impunctate; genae rather coarsely, sparsely punctate. Pronotum with basal and apical transverse sulci narrow, the basal one fairly pronounced medially; sides nearly unarmed, bearing only an extremely minute tubercle behind middle. Elytra widened behind middle; entire surface alutaceous, with fairly sparse, rather coarse punctures on basal half, punctures much finer behind middle; humeri slightly prominent, anterior margin arcuate, angle with a feeble, obtuse tubercle. Antennae reaching slightly beyond middle of elytra; scape attaining apex of pronotum, slightly clavate apically; third segment much longer, gradually clavate apically from middle and with a dense tuft of hair there; rest very short, gradually diminishing in length.

Length 16 mm., width 5.6 mm.

HOLOTYPE: Female; Corupa (Hansa Humboldt), Santa Catharina, Brazil; January, 1945; A. Maller, collector.

LIST OF REFERENCES

BATES, HENRY W.

1872. On the longicorn Coleoptera of Chontales, Nicaragua. Trans. Ent. Soc. London, p. 197, nota.

Breuning, Stephan

- 1942. Novae species cerambycidarum. Fol. Zool. Hydrobiol., vol. 11, p. 164.
- 1943–1945. Études sur les lamiaires. Tribe Agniini. Novitates Ent. Suppl. III, vol. 2, pp. 137–523.

DILLON, LAWRENCE, AND ELIZABETH DILLON

- 1941. The tribe Monochamini in the Western Hemisphere. Sci. Publ. Reading Pub. Mus., no. 1, pp. 1–135.
- 1943. Supplementary notes on Western Hemisphere Monochamini. Jour. New York Ent. Soc., vol. 51, March, pp. 13–18.
- 1945. Revision of the tribe Pachypezini. Bull. Brooklyn Ent. Soc., vol. 40, pp. 11–27.

LeConte, John L.

1852. An attempt to classify the longicorn Coleoptera of the part of America north of Mexico. Jour. Acad. Nat. Sci. Philadelphia, ser. 2, vol. 2, p. 149

THOMSON, JAMES

1865. Systema cerambycidarum. Paris, p. 556.

VOET, JOHANN E.

1778. Catalogus coleopterorum. The Hague, vol. 2, p. 7, pl. 5, fig. 6.