

THE NORTH AMERICAN GENERA RELATED TO GAUROTES WITH A KEY TO THE MEXICAN COMPONENT SPECIES

(Coleoptera: Cerambycidae)

J. A. CHEMSAK AND E. G. LINSLEY¹

University of California, Berkeley

The generic name *Gaurotus* was proposed by LeConte (1850) for *Leptura cyanipennis* Say, a metallic species then unique among North America lepturines in having a protuberant mesosternum. Later, Bland (1862, 1864) described two similarly metallic species as *Gaurotus abdominalis* and *G. cressoni*, which lacked the protuberant mesosternum. In the Old World, other species were assigned to *Gaurotus* on the basis of similar superficial resemblances (Fairmaire, 1864; Plavilstshikov, 1921; etc.). In the Biologia Centrali-Americana and subsequently, Bates (1880, 1885, 1892) described several Mexican species of "*Gaurotus*" which share with *Leptura cyanipennis* a protuberant mesosternum, but which differ in other important features which exclude them from the same genus.

Although the present paper is not concerned with the Old World species which have been assigned to *Gaurotus* (see, for example, Gressitt, 1951; Podany, 1962²), those at hand differ markedly from *G. cyanipennis* in sculpturing and other features. With the exception of those species related to *Gaurotus ussuriensis* Blessig, type of the genus *Paragaurotus* Plavilstshikov (distinctive by possessing spined intermediate and posterior femora), most of the others appear to be referable to *Carilia* Mulsant (1863), a genus based upon *Leptura virginea* Linnaeus.

KEY TO THE NORTH AMERICAN LEPTURINE GENERA RELATED TO GAUROTUS LECONTE

1. Mesosternum anteriorly abruptly declivous with a distinct keel or protuberance between coxae.....2
- Mesosternum anteriorly gradually, arcuately declivous at most, convex but without a protuberance between the coxae3
- 2(1) Antennae with scape shorter than third segment, fifth segment longest; mesosternal keel not prominently elevated; pubescence spare, almost lacking dorsally; elytra with

¹The authors gratefully acknowledge support of the National Science Foundation, through grant G-19959.

²The monograph on the genus *Gaurotus* by Podany (1962, Mitt. Muncher Ent. Gesells., 52:219-252) was received subsequent to the submission of this paper for publication. With the exception of the necessary name changes, the results and conclusions of Podany have not been incorporated. One point must be clarified, however; *Neogaurotus* Podany, 1962, is a junior synonym of *Carilia* Mulsant, 1863, by virtue of isogenotypy.

- edges elevated around scutellum; integument bright metallic bluish or greenish *Gaurotes*
- Antennae with scape longer than third segment, subequal to fifth; mesosternal keel prominently protuberant; pubescence distinct, often dense; elytra with edges not elevated around scutellum; integument dark metallic greenish, black, or brownish..... *Tomentgaurotes*
- 3(1) Elytra finely to coarsely punctate, but not distinctly rugose; pronotum sparsely to densely punctate, not rugose.....4
- Elytra coarsely, irregularly rugose; pronotum strongly irregularly rugulose; elytra with pale maculate at middle *Sachalinobia*
- 4(3) Antennae with scape shorter than fifth segment, shorter than or subequal to third segment.....5
- Antennae with scape subequal in length to fifth segment, longer than third segment.....6
- 5(4) Elytra with inner edges elevated around scutellum; antennae with third segment subequal in length to fourth; integument brilliant metallic green or blue..... *Pseudogaurotina*
- Elytra with inner edges not elevated around scutellum; antennae with third segment much longer than fourth; integument testaceous and black, not metallic..... *Evodinus*
- 6(4) Posterior tarsi with first segment much longer than following two together; head with genae long; pronotum strongly transversely impressed at apical constriction; elytra with apices usually truncate..... *Acmaeops*
- Posterior tarsi with first segment not longer than two following segments together; head with genae short; pronotum not impressed apically; elytra with apices usually rounded; body form stout, robust..... *Brachysomida*

GAUROTES LeConte

Gaurotes LeConte, 1850, Jour. Acad. Nat. Sci. Philadelphia, (2) 1:324.

The only North American species remaining in this genus as here defined is *Leptura cyanipennis* Say, the monobasic type.

PSEUDOGAUROTINA Plavilstshikov

Pseudogaurotina Plavilstshikov, 1958, Ent. Obozr., 37:624.

Gaurotes (pars), Lacordaire, 1869, Genera des coléoptères, 8:422; Leng, 1890, Ent. Americana, 6:55; Casey, 1913, Memoirs on the Coleoptera, 4:217; Swaine and Hopping, 1928, Nat. Mus. Canada Bull., 52:14; Hopping, 1937, Nat. Mus. Canada, Bull., 85:19; Knull, 1946, Ohio Biol. Surv. Bull., 39:178.

Head oblique, gradually narrowed behind eyes, neck and temples not abruptly angled; antennae inserted below anterior margin of eyes, segments three and four subequal, fifth longer than scape or third segment; eyes entire, finely faceted; palpi unequal, not dilated. Pronotum inflated, narrowly constricted at apex, transversely impressed at base and apex, sides obtusely angulate; prosternum transversely excavated; anterior coxae contiguous, coxal cavities open behind; mesosternum with intercoxal process not abruptly elevated nor tuberculate; metathorax with episternum broad in front, narrowly tapering posteriorly. Elytra convex, polished, brightly metallic, sutural edges elevated around scutellum, surface with punctures not rugose, pubescence sparse, apices rounded; wings without a closed cell in anal sector. Legs moderately long, tibiae with spurs terminal; posterior tarsi with a pubescent sole on first segment, first segment as long as following segments together; tarsi with apical segment cleft to base, bilobed.

Type species: *Gaurotres splendens* Jakowleff (by original designation).

This genus may be distinguished from *Gaurotres* by the lack of a protuberant mesosternal process. Additionally, the antennal scape is longer than the third segment or subequal to it in length; in *Gaurotres*, the scape is shorter than the third antennal segment.

The characteristics of this group differ sufficiently to warrant recognition of *Pseudogaurotina* as a distinct genus rather than a subgenus of *Gaurotres* as originally proposed.

In North America, *G. cressoni* Bland definitely fits the definition of this genus and *G. abdominalis* Bland can also be assigned to *Pseudogaurotina*. This latter species, although smaller in size and lacking the lateral pronotal impressions, agrees with *cressoni* in other characteristics.

TOMENTGAUROTRES Podany

Tomentgaurotres Podany, 1962, Mitt. Müncher Ent. Gesells., 52:242.

Head oblique, rather suddenly narrowed behind eyes, neck and temples abruptly angled; antennae inserted at anterior margin of eyes, scape subequal in length to fifth segment, longer than third, third segment subequal to fourth; eyes entire, finely faceted; palpi unequal, often dilated in the male. Pronotum convex, narrowly constricted apically from a little before middle, not impressed at base or apex, sides obtusely angulate, not tuberculate; disk with a median longitudinal, glabrous line; prosternum transversely excavated; anterior coxae contiguous, cavities open behind; mesosternum with intercoxal process produced into a distinctly elevated keel, abruptly declivous anteriorly; metathorax with episternum broad in front, tapering posteriorly. Elytra convex, tapering, dark metallic or brownish, sutural edges not elevated around scutellum, punctuation not coarsely rugose, pubescence uniform or condensed into patches, apices emarginate, angles dentate; wings without a closed cell in anal sector. Legs moderate, slender, tibiae with spurs terminal; posterior tarsi with a pubescent sole on first segment, first segment as long

as following segments together, apical tarsal segments cleft to base.

Type species: *Gaurotes batesi* Aurivillius (= *G. donacioides* Bates) (by original designation).

This genus differs from all others in this group by the very prominent intercoxal process of the mesosternum. From *Gaurotes*, it may be separated by the longer antennal scape, non-depressed scutellum, and entirely different facies.

Tomentgaurotes is known presently only from Mexico, where it is represented by five species, one apparently previously undescribed.

KEY TO THE KNOWN SPECIES OF TOMENTGAUROTES

- | | | |
|------|---|---------------------|
| 1 | Elytra with pubescence dense to moderately dense, uniform, not condensed into patches..... | 2 |
| | Elytra with pubescence condensed into distinct irregular patches | 4 |
| 2(1) | Antennae and legs uniformly concolorous black, or with aeneous lustre..... | 3 |
| | Antennae, except base, femora, except knees, and tibiae, except base, reddish yellow. Length, 9 mm..... | <i>ochropus</i> |
| 3(1) | Integument dark metallic greenish; elytra with pubescence mostly sub-depressed, without long black erect hairs at base; metasternum and abdomen lacking erect hairs. Length, 9-12 mm..... | <i>batesi</i> |
| | Integument uniformly black, not metallic; elytra with long erect dark hairs at base; metasternum and abdomen with sparsely interspersed erect hairs. Length, 8-10 mm..... | <i>plumbea</i> |
| 4(1) | Elytra and appendages brownish testaceous, legs often with dark bands at apices of femora and tibiae. Length, 9-11 mm | <i>maculosa</i> |
| | Elytra and appendages dark metallic or black, antennae with segments three to eleven grayish pubescent at base. Length, 11-14 mm..... | <i>multiguttata</i> |

TOMENTGAUROTES BATESI (Aurivillius)

Gaurotes donacioides Bates, 1880, Biol. Centr.-Amer., Coleoptera, 5:37, pl. 4, fig. 23.

Gaurotes batesi Aurivillius, 1912, Coleopterorum catalogus, 39:194 (new name for *donacioides*).

Gaurotes (Tomentgaurotes) batesi, Podany, 1962, Mitt. Müncher Ent. Gesells., 52:242.

The obscure, uniform brassy color and uniform pubescence distinguish this species from others in this genus.

Type locality: "Mexico, near the capital."

Material examined: 7 ♂♂, Matilde, D.F., VIII-27-56 (R. and K. Dreisbach); 1 ♂, 22 miles north of Atlacomulco, Mexico, VIII-18-54 (C.D. Michener and party); 1 ♂, 32 miles west of Puebla, Puebla, IX-7-51 (H.A. Scullen); 1 ♂, 4 miles northwest of Colonia, Hidalgo, VIII-14-56 (J.W. MacSwain); 1 ♀, 10 miles northwest of Tamazulapan, Oaxaca, VIII-22-59 (L.A. Stange, A.S. Menke).

TOMENTGAUROTES OCHROPUS (Bates)

Gaurotus ochropus Bates, 1880, Biol. Centr.-Amer., Coleoptera, 5:37.

Gaurotus (Tomentgaurotes) ochropus, Podany, 1962, Mitt. Müncher Ent. Gesells., 52:243.

This species is basically similar in coloration to *T. batesi* but apparently differs by having reddish-yellow legs and antennae.

Type locality: "Mexico."

Tomentgaurotes plumbea Chemsak and Linsley, new species

Female: Form small, robust; integument shining black, densely clothed with grayish pubescence. Head small, vertex convex, punctures shallow, rather coarse, a glabrous median line extending from antennal tubercles to neck; pubescence dense, grayish, subdepressed, with very long, black erect hairs sparsely interspersed; antennae not attaining middle of elytra, segments gradually broadening apically, first four segments and most of fifth clothed with fine grayish, depressed hairs, outer segments opaque, densely clothed with very fine, dark, depressed pubescence. Prothorax broader than long, sides obtusely angulate, narrowing from before middle to apex, apex much narrower than base, base and apex barely transversely impressed; pubescence moderately dense, depressed, with long, dark, erect hairs abundantly interspersed, disk rather finely, sparsely punctate, with a longitudinal glabrous line, sides with punctures dense; prosternum densely pubescent; meso- and metasternum densely clothed with recumbent gray hairs, sparsely interspersed with longer, suberect hairs. Elytra less than twice as long as broad, tapering apically; punctures at base fine, well separated, much finer than those on disk of pronotum, not becoming finer apically; pubescence dense, subdepressed and suberect, with very long, black, erect hairs sparsely interspersed; apices obliquely emarginate, angles acute. Legs slender, densely clothed with recumbent gray pubescence. Abdomen finely, densely, shallowly punctate, densely pubescent; apex of fifth sternite rounded. Length, 8-10 mm.

Holotype female (California Academy of Sciences) from 9 MILES SOUTHEAST OF NOCHIXTLAN, OAXACA, MEXICO, VIII-22-59 (A. S. Menke, L. A. Stange); one female paratype from Orizaba, Veracruz, Mexico, VIII-12/22-61 (R. and K. Dreisbach).

This species may be distinguished from *T. batesi* by the black color and long, erect hairs in the elytra. It differs from *ochropus* by the concolorous appendages and from *multiguttata* and *maculosa* by the lack of irregular, pubescent maculation.

TOMENTGAUROTES MACULOSA (Bates)

Gaurotes maculosus Bates, 1885, Biol. Centr-Amer., Coleoptera, 5:277.

Gaurotes (Tomentgaurotes) maculosa, Podany, 1962, Mitt. Müncher Ent. Gesells., 52:244.

This species may be recognized by the brownish elytra and appendages. The elytra are maculated by irregular patches of pubescence.

Type locality: "Mexico."

Material examined: 3 ♂♂, 1 ♀, 4 miles west of Pachuca, Hidalgo, VI-24-53, "Taken on pepper trees" (Univ. Kansas Mex. Expedition); 1 ♂, 13 miles northwest of Comitán, Chiapas, III-3-53 (E.I. Schlinger).

TOMENTGAUROTES MULTIGUTTATA (Bates)

Gaurotes multiguttatus Bates, 1892, Trans. Ent. Soc. London, 1892:158, pl. 6, fig. 2; Casey, 1913, Memoirs on the Coleoptera, 4:217.

Gaurotes (Tomentgaurotes) multiguttata, Podany, 1962, Mitt. Müncher Ent. Gesells., 52:244.

The entirely dark color with irregular patches of pubescence on the elytra characterize this species.

Type locality: Xucumanatlan, Guerrero, Mexico.

SACHALINOBIA Jacobson

Sachalinobia Jacobson, 1899, Ann. Mus., Zool. St. Petersburg, 4:39.

Pseudopachyta Swaine and Hopping, 1928, Nat. Mus. Canada, Bull., 52:15.

Gressitt (1953) has pointed out that *Sachalinobia* and *Pseudopachyta* are synonyms, and that the type species of the former, *Brachyta koltzei* Heyden, is apparently only subspecifically distinct from that of the latter, *Toxotus rugipennis* Newman.

BRACHYSOMIDA Casey

Brachysomida Casey, 1913, Memoirs on the Coleoptera, 4:219.

This genus was not recognized by Swaine and Hopping (1928), apparently being considered synonymous with *Acmaeops*. It contains a number of distinctive species in western North America. The type of the genus is *Acmaeops tumida* LeConte (by original designation).

LITERATURE CITED

BATES, H. W.

1880-1885 Biologia Centrali-Americana, Coleoptera, 5:xii + 525 pp., 25 pls.

1892. Additions to the Longicornia of Mexico and Central America, with some of the previously recorded species. Trans. Ent. Soc. London, 1892:143-183, 3 pls.

BLAND, J. H. B.

1862. Descriptions of several new species of Cerambycidae in the collection of the Entomological Society of Philadelphia. Proc. Ent. Soc. Philadelphia, 1:267-276.

1864. Descriptions of several new species of North American Coleoptera. Proc. Ent. Soc. Philadelphia, 3:65-72.

FAIRMAIRE, L.

1864. In Jacquelin du Val: Genera des coléoptères d'Europe, 4:97-251, pls. 31-59.

GRESSITT, J. L.

1951. Longicorn beetles of China. Longicornia, 2:1-667, 22 pls.

1953. Notes on nomenclature and relationships of some Palearctic and Nearctic Lepturinae. Pan-Pacific Ent., 29:207.

LECONTE, J. L.

1850. An attempt to classify the longicorn Coleoptera of the part of America north of Mexico. Jour. Acad. Nat. Sci. Philadelphia, (2)1:311-340.

MULSANT, E.

1863. Histoire naturelle des coléoptères de France, Longicornes, 590 pp.

PLAVILSTSHIKOV, N. N.

1921. Quaedam cerambycidarum palaeanarcticarum species descriptae. Rev. Russe d'Ent., 17:112-123.

SWAINE, J. M. and HOPPING, R.

1928. The Lepturini of America north of Mexico. Nat. Mus. Canada Bull., 52:1-97, 13 pls.

A HOST OF MACROSAIGON CRUENTUM (GENMAR) IN GEORGIA

(Coleoptera: Rhipiphoridae)

ROY R. SNELLING

Woodland, California

Since so few hosts have been recorded for species of *Macrosaigon* the present record is of interest, especially since this is the first report of a solitary vespid serving as a host for any rhipiphorid in North America, although Bequaert (1918) records *M. (Emenadia) ferrugineum flabellatum* (Fabricius) as a parasite of *Synagris spiniventris* (Illiger) and *S. calida* (Linné) in the Belgian Congo. To date only three species of *Macrosaigon* hosts have been recorded in this country. These have been wasps of the families Tiphidae and Sphecidae. Hosts have been recorded for *M. flavipenne* (LeConte) (*Bembix spinolae* Lapeletier, Barber, 1915), *M. pestinatum* (Fabricius) (*Tiphia* sp., Davis, 1919) and *M. sayi* (LeConte) (*Myzine* sp., as *Elis* sp., Rivnay, 1929).



Chemsak, John A. and Linsley, E Gorton. 1963. "The North American genera related to *Gaurotes* with a key to the Mexican component species (Coleoptera: Cerambycidae)." *The Pan-Pacific entomologist* 39, 81–87.

View This Item Online: <https://www.biodiversitylibrary.org/item/226308>

Permalink: <https://www.biodiversitylibrary.org/partpdf/237840>

Holding Institution

Pacific Coast Entomological Society

Sponsored by

IMLS LG-70-15-0138-15

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Pacific Coast Entomological Society

License: <http://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.