

**Synoptic tables of some Genera of COLEOPTERA with  
notes and Synonymy.**

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The tables which follow are presented with the hope that they may prove useful to the students of the American fauna. During the lifetime of Mr. G. R. Crotch, the idea was suggested of preparing similar tables for as many of the genera as had not been so dealt with, should the species be amenable to such treatment. The death of Mr. Crotch seriously interrupted the work, and while many genera have been already published by myself, none of his have as yet appeared. The manuscript having been collected will be published as rapidly as my leisure will allow of its review. I have taken the liberty of making such additions to the manuscripts as seemed necessary to make them plainer or more useful.

**ELAPHRUS, Fab.**

- A.—Anterior tarsi ♂ with four dilated joints; thorax sparingly punctate.  
 B.—Elytra smooth impunctate.  
 C.—Thorax beneath coarsely and sparsely punctate.....**Clairvillei.**  
 C. c.—Thorax beneath finely and more densely punctate.  
   Legs piceous.....**laevigatus.**  
   Legs pale.....**olivaceus.**  
 B. b.—Thorax and elytra sparsely coarsely punctate.....**cicatricosus.**  
 B. bb.—Thorax and elytra sparsely and lightly punctate, foveæ feebly impressed....**obliteratus.**  
 B. bbb.—Thorax evidently punctate, elytra punctate at sides, disc smooth.  
**fuliginosus.**  
 A. a.—Anterior tarsi ♂ with three joints dilated. Thorax and elytra very closely and finely punctate.  
 B.—Thorax finely and closely punctate beneath.  
 C.—Thorax broad, transverse, abruptly coarctate.....**Lecontei.**  
 C. c.—Thorax cordate.....**riparius.**  
 B. b.—Thorax coarsely punctate beneath and more shining.....**ruscarius.**

The other changes in synonymy are as follows :

- E. politus**, Lec. = **Clairvillei**, Kby.  
**E. Clairvillei**, † Lec. = **fuliginosus**, Say.  
**E. intermedius**, Kby. = **californicus**, Mann. = **riparius**, Linn.  
**E. intermedius**, † Lec. = **Lecontei**, Crotch.  
**E. obscurior**, Kby., doubtful, but probably a small **obliteratus**, Mann.  
(G. R. CROCH).



D. d.—Elytra with simple margin.

E.—Elytral intervals equal, margin bluish.....**limbatus.**

E. e.—Elytra bronzed, four intervals forming slender costæ..**vinctus.**

(G. R. CROUCH.)

*C. sylvossus* and *finitimus* differ in the latter being a broader and more robust species, the elytral margin more reflexed; the surface is smoother and more shining. These differences do not appear, however, to be of any very great value, as there are specimens in the cabinet of Mr. Ulke of such a form as to render it extremely doubtful to which of the two they should be referred. These differences find a parallel in *tædatus* and its varieties. (G. H. H.)

*Clivina elongata*, Rand., (*Randalli*, Lec.), does not differ from the *C. fossor*, Hbst., of Europe. All the specimens of this species collected in this country have occurred on the seaboard, Boston; it has probably been introduced. It is not common. (G. H. H.)

#### **PERIGONA**, Cast.

In September, 1875, among other synonymical notes, I spoke of the identity of *Trechichus umbripennis*, Lec., and *nigriceps*, Dej., and at the same time a confusion of generic nomenclature as indicated. M. Putzeys noticing the difficulty, has kindly sent me for study a specimen of *Perigona japonica*, Bates, and it is now possible to state definitely that our species is also a *Perigona*. In the arrangement of his collection, Chaudoir had always so placed our species, but not having any of our types with me, it was impossible until after my return to confirm by comparison my opinion of the specific identity of *nigriceps* and *umbripennis*.

*Perigona*, Cast., has for synonyms, therefore, *Trechichus*, Lec., *Nestra*, Motsch., and *Spathinus*, Niet.

*Pentoplogenus*, Morav., as a synonym, is from notes made by Dr. Leconte, and by a letter from M. Putzeys, I infer that *Somoplatus* is another thing, while nothing can be said at present of *Masoreus*, which by some strange accident I wrote *Mastigus*.

*Perigona nigriceps*, (Dej.), is the name of our insect.

#### **PATROBUS**, Dej.

In the *Annales Soc. Ent. Belg.*, XIV., 1871, Baron Chaudoir has published a review of the group Pogonides, which was entirely overlooked by me at the time I prepared the table of *Patrobis* of our country. (*Trans. Am. Ent. Soc.*, 1875, p. 160). I cannot, however, see any valid reason for changing the views there expressed, that the

species of *Patrobis* (*sensu*, Chaud.), in our fauna, are really variations of one species, excepting *longicornis*, Say. I can, therefore, hardly see how there is room to insert two other species between those which I have already placed together as synonyms. These two species are *obtusiusculus*, Chd., loc. cit., p. 43, Hudson's Bay, and *stygius*, Chd., p. 46, Newfoundland; *Lecontei*, Chd., p. 47, is suggested for *rufipes*, || Lec., and is unnecessary if the preceding remarks be correct.

Our depressed species with quadrate thorax are placed by Chaudoir, in a new genus. *Platidius*, seems to have value rather as a sub-genus as *rugicollis*, Rand., is nearly intermediate in form between the true *Patrobis* and *Platidius*. (G. H. H.)

#### **POGONUS**, Dej.

This genus was first indicated in our fauna by Chaudoir, who in the Rev. et Mag. Zool., 1868, p. 64, described a species from Texas, (*texanus*, Chd.) The essential differences between *Patrobis* and *Pogonus* are, that the former has the head constricted more or less behind the eyes, and the latter has the middle and posterior tarsi sulcate above.

Since Chaudoir, two other species have been published by Leconte, *parallelus* and *depressus*, from Texas and California, respectively. (Trans. Am. Ent. Soc., 1874, p. 44).

In the review of the *Pogonides* above referred to, Chaudoir has subdivided the *Pogonus* of older authors into five genera, based on characters which seem most too finely drawn to be generally admitted as valid.

By the method of division followed by Chaudoir, our three species belong to different genera, the characters of which will be given below. It seems to me entirely unnecessary to multiply genera on such small differences, and science will be equally benefitted by indicating sub-generic groups without the burden of additional names. I therefore prefer to consider our species as constituting one genus, with three groups in our fauna.

The three genera above mentioned are as follows :

Mentum tooth deeply notched; ligula with a single bristle at tip.

Epilobes of mentum acutely toothed.....**POGONUS**.

Epilobes of mentum obtuse.....**POGONISTES**.

Mentum tooth shorter and broader, feebly emarginate; ligula bisetose at tip.

Epilobes of mentum obtuse.....**DIPLOCHÆTUS**.

**POGONUS** as above defined has in addition the following characters:—  
Elytra with distinct basal marginal line, scutellar stria and three punctures on the outer side of the third interval.

**POGONISTES.**—Thorax cordate; form elongate, parallel. Elytra with feeble basal marginal line and scutellar stria. Dorsal punctures as in *Pogonus*.

**DIPLOCHÆTUS.**—Form of *Pogonistes*, thorax not narrowed at base. Prosternum broadly sulcate. Scutellar stria absent; basal marginal line obliterated at middle, forming at the humeri a moderately elevated recurved carina; striæ obliterated at base. Two dorsal punctures only, one median on the outer side, the other one-fourth from the apex on the inner side of the third interval.

Our species are as follows :

**Pogonus texanus**, Chd., Rev. Mag. Zool., 1868, p. 64; Annales Belg. XIV., p. 31.

**P.** (*Pogonistes*), **planatus**, = *depressus*, || Lec., Trans. Am. Ent. Soc., 1874, p. 44.

**P.** (*Diplochætus*), **Lecointei**, = *parallelus*, || Lec., loc. cit.

The name *depressus* is preoccupied in any case, whether the genus *Pogonistes* be adopted or not; *parallelus* is used already in *Pogonus*, and should the genus *Diplochætus* be adopted, may be allowed to remain. The latter species should be compared with *P. rutilus*, Chev., Am. Fr., 1873, p. 197, it is possible that they may be identical.

(G. H. H.)

#### DYTISCIDÆ.

The discovery of *Anodochilus exiguus*, (Aube), in Florida, has given us the means of determining the fact that the genus indicated by Babington must be suppressed, and the presence or absence of the mentum tooth has very little value.

*Hydroporus plicipennis*, Crotch, is misplaced in the synopsis. Its position should be near *exiguus* in the group with basal thoracic and elytral plica.

In this section the sculpture of the metasternum, whether sulcate or not, will afford the means of grouping the species. The grooving of the metasternum is very much more common than Crotch supposed.

*Dytiscus latissimus*, Linn., should not be included in our lists. I am satisfied that the species was never alive on this side of the Atlantic, and from the number of specimens sent me from time to time for determination, identical with those of England and pinned on English pins, I am convinced that there must be either great carelessness or deception on some side. We have enough species legitimately introduced and now acclimated without bringing dead ones on pins.

(G. H. H.)

**HYDROCHARIS**, Latr.

Prosternum acutely prolonged behind.

Sixth joint of antennæ much larger than the seventh; maxillary palpi as long as the head and thorax.....**castus**.

Prosternum not prolonged, obtuse at tip.

Sixth joint of antennæ smaller than the seventh.

Maxillary palpi as long as the head. Color of body piceous with faint tinge of bronze.....**obtusatus**.

Maxillary palpi short. Surface of body with glaucous coating...**glaucus**.

In *castus* the crest of the prosternum forms nearly a continuous line with that of the meso-metasternum, while in the other two species the two form a very oblique angle.

*H. glaucus*, Lec.—This species was first described as *H. lineatus*, Lec., Proc. Acad., 1855, p. 369, from a very badly discolored specimen of *glaucus*, the latter having been described six years later, Proc. Acad., 1861, p. 341. By an error of the pen the name *lineatus* appears as *H. substriatus*, List Col. N. A., 1863, p. 18. I adopt the later name *glaucus*, because it is more appropriate and belongs to the true species and not to a discolored variety, and also on account of the confusion of the other name. No injustice is done to the original describer and there is no intermediate synonymy.

*H. grandis*, Zimm., Trans. Am. Ent. Soc., 1869, p. 250, is merely a female of *obtusatus*. (G. H. H.)

**BEROSUS**, Leach.

*B. styliferus*, Horn, should be removed from its present position in the list and placed near *infuscatus*. The last ventral segment is similarly toothed in the two species, my original description having been made from a specimen accidentally deformed. The mesosternal spine will at once distinguish it from any other species. (G. H. H.)

*Sepidulum costatum*, Lec., Trans. Am. Ent. Soc., 1874, p. 47, should be referred to *EPIMETOPUS*, Muls. (G. H. H.)

**TROIPISTERNUS**, Sol.

Prosternal groove open anteriorly.

Thorax and elytra with pale margin, the latter with discal yellow vittæ.

**striolatus**.

Prosternal groove closed anteriorly.

Thorax and elytra margined with yellow.....1.

Thorax and elytra unicolorous.....2.

1.—Elytral limb suddenly broader at basal third.....**limbalis**.

Elytral limb narrow, equal.....**lateralis**.

2.—Last ventral segment without spinous crest.....3.

Last ventral segment with spinous crest.....4.

- 3.—Basal third of hinder femora opaque and finely punctured.....**sublævis.**  
 Basal third shining and with very few punctures.....5.
- 5.—Legs piceous, form more oval and convex.....**ellipticus.**  
 Legs bicolored, form more oblong, less convex... ..**californicus.**
- 4.—Punctures of surface fine and equal.....**glaber.**  
 Punctures coarser and unequal.....**mixtus.**

**T. striolatus.**—Legs entirely testaceous except at base of femora. Last ventral segment without crest.

**T. sublævis.**—With this species should be placed *quadristriatus*, Horn.

**T. glaber.**—The punctures of the surface are very fine and equal, and do not dim the gloss of the surface.

**T. mixtus.**—The surface has a resemblance to that of *Dineutus vittatus*. Species other than *glaber* and *mixtus* often have a fine raised line on the last ventral segment, but no spiniform crest.

**T. ellipticus,** occurs at times with legs more or less bicolored, but its form more arched and more obtuse at each end will at once distinguish it.

**T. lateralis.**—Dr. Zimmerman (Trans. Am. Ent. Soc., 1869, p. 249), thinks that Say's name (*nimbatus*), should be retained, inasmuch as the two species do not appear to be identical. This must, however, be left for further determination. Herbst's *lateralis* is apparently an erroneous determination, and is *striolatus*, Lec. (G. H. H.)

*Anthrenus claviger*, Er., must be included in our lists. It may be known by its five-jointed antennæ the club of which is formed of one long joint. It is usually confounded with *musæorum*, Linn., (*castaneæ*, Mels.), in cabinets. (G. H. H.)

*A. scrophulariæ*, Linn., has also been reported from the State of New York, where the larva has been found to be very injurious to carpeting in houses, (Lec., Proc. Acad., 1876, p. 195).

*Aglenus brunneus*, (Gyll.), another European insect has been collected in Missouri; Ulke.

*Pyanisia opaca*, Sol., and *Zophobas morio*, Fab., have occurred within our territory, the former in Texas, and the latter in Florida, abundantly.