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A REVISION OF THE PHLOEOCHARINAE
AND OMALIINAE OF NEW CALEDONIA
(COLEOPTERA : STAPHYLINIDAE),

by William O. STEEL (London).

One *Phloeocharis* (*P. australis* FAUVEL) and two « *Homalium* » (*H. seriatum* FAUVEL and *H. singulare* KRAATZ) were recorded by FAUVEL (1903, Rev. Ent. Caen 22 : 257-258) from New Caledonia. During a recent visit to Brussels, the opportunity was taken of examining various species in the FAUVEL collection, and the results, as far as the species mentioned above are concerned, are given below.

I should like to express my thanks to the authorities of the « Institut royal des Sciences naturelles de Belgique », and Mr. G. FAGEL, for facilities granted.

1. *Phloeocharis australis* FAUVEL.

As was suggested in a previous paper (STEEL, 1950, Proc. Linn. Soc. NSW 75 : 334-344, cf. p. 334) this species belongs to the genus *Pseudophloeocharis* STEEL and is conspecific with *P. maori* (CAMERON). As the prior name, *australis* takes precedence over *maori* which must be placed as a synonym. The insect appears to be widespread in Australia and may well have spread from there into New Caledonia and New Zealand. It is described and figured in the paper noted above.

2. *Homalium seriatum* FAUVEL.

(Figs. 1-3.)

This insect differs from *Omaliium* in the relatively narrower last segment of the maxillary palpi which has the sides less rounded, the longer last tarsal segments, the distinctly more prominent inner lobe of the ligula, the mesosternum which is only keeled at extreme base and the structure of the antennae, here the sixth segment is much broader than the fifth so that the sixth to eleventh segments are sharply differentiated in width from the remainder. In these respects, it agrees with *Stenomaliium* BERNHAUER and should be placed therein; *Stenomaliium* was described as a subgenus of *Omaliium* but is in fact a good genus. A redescription of FAUVEL's species is given below.

Stenomaliium seriatum (FAUVEL) comb. n.

Homalium seriatum FAUVEL, 1903, Rev. Ent. Caen 22 : 258.

Somewhat depressed. Head very dark brown, pronotum and abdomen reddish brown, elytra reddish brown with about apical half darker. Antennae, palpi and legs reddish brown. Length : ca. 2.4 mm, without abdomen 1.6 mm.

General shape of front parts as fig. 1.

Head shining, anterior portion as far as level of antennal insertions with a few scattered punctures, mainly towards sides, and a distinct but not very strong, transverse ground sculpture, elsewhere rather closely and strongly punctured and without ground sculpture, the punctures about twice the diameter of the eye facets and separated on disc by at most their diameter and towards eyes by much less; impressed on each side inside antennal tubercles; close to the inner margin of the eye in front with a few longitudinal wrinkles which extend for about one quarter the length of the eye.

Antennae with third segment scarcely longer than second, fourth shorter than third, lightly transverse, fifth a little longer and broader than fourth, lightly transverse, six to tenth about equal in length but increasing gradually in breadth, the sixth about one and a half times as broad as long, much broader than fifth, the tenth about twice as broad as long, eleventh longer than tenth, bluntly pointed.

Maxillary and labial palpi as figs. 2 and 3.

Pronotum shining, impressed at sides on posterior half and with distinct but not very deep median impressions; impunctate for whole length between median foveae, elsewhere with punctures similar to those on head and separated, on the average, by rather less than their diameter; without ground sculpture.

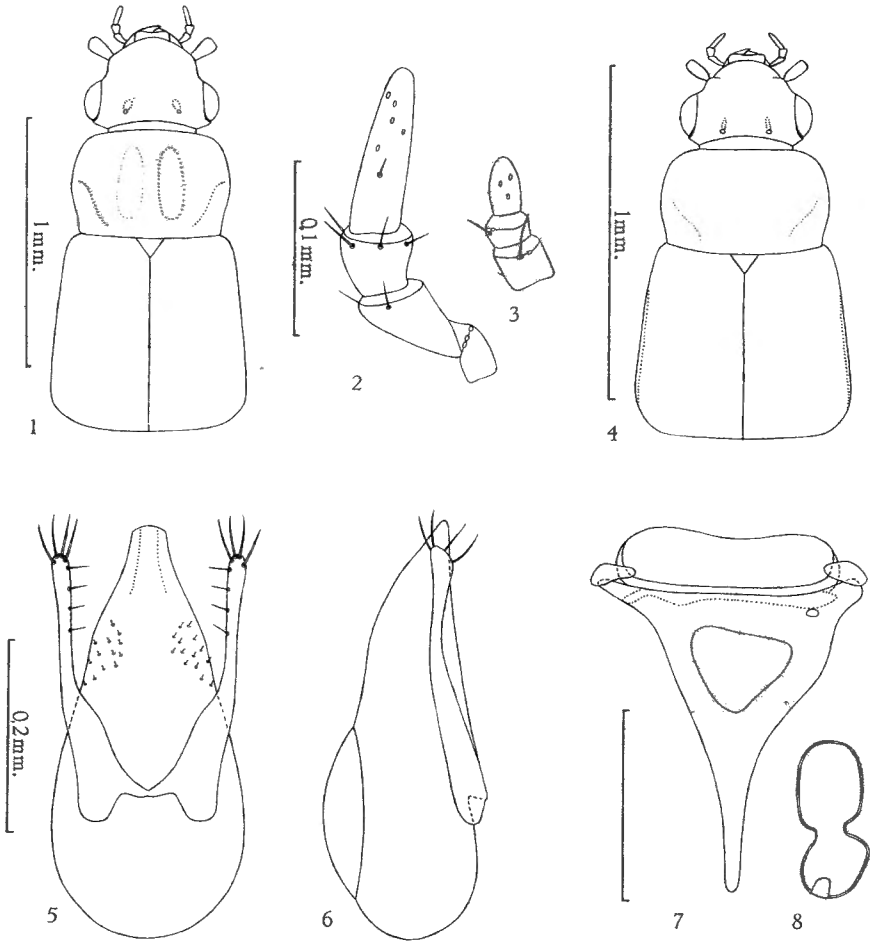


Fig. 1-3. — *Stenomalium seriatum* (FAUVEL).

1. — Head, pronotum and elytra; 2. — Maxillary palpus; 3. — Labial palpus.

Fig. 4-8. — *Paraphloeostiba kanalensis* sp. n.

4. — Head, pronotum and elytra; 5. — Aedeagus, ventral view; 6. — Aedeagus, lateral view; 7. — Accessory sclerite of female; 8. — Spermatheca. The scale for fig. 7 and 8 represents the length of the coxite of the last abdominal segment (see STEEL, 1960, loc. cit. : 143, fig. 5).

Elytra shining, the punctures weaker and a little finer than those on pronotum and, except on anterior fourth, arranged in more or less distinct longitudinal rows, the punctures in the rows separated by about their diameter, the rows separated by more than this; epipleural keel rather narrow as seen from above.

Abdomen a little less shining than front parts, very finely and moderately closely punctured and with a distinct but not very strong mainly transverse ground sculpture.

Female without accessory sclerite (see STEEL, 1960 : Trans. R. Ent. Soc. Lond. 112 : 142); male unknown.

New Caledonia : Coulée de Boulari (SAVÈS).

This species differs from the other species at present known in the genus by the shorter elytra.

3. *Homalium singulare* KRAATZ.

It is noted elsewhere (STEEL, 1960, Trans. R. ent. Soc. Lond. 112 : 159) that, although FAUVEL records this species from New Caledonia, no specimens from there were to be found in his collection. A closer examination, however, revealed three specimens from New Caledonia identified as this species; these represent an undescribed species of *Paraphloeostiba* STEEL. Besides these three specimens, there were three further specimens of an Omaliine separated off by FAUVEL as *adustum*. These belong to a new genus and species of which there are also specimens in the British Museum collection. Both the new forms are described below.

Paraphloeostiba kanalensis sp. n.

(Figs. 4-8.)

Not very convex. Head, pronotum and abdomen yellowish brown to dark brown, elytra lighter or darker yellowish brown, legs and first five antennal segments yellowish brown, remainder of antennae darker. Length 1.6-1.8 mm, without abdomen 1.05-1.22 mm.

General shape of front parts as fig. 4. In the specimens examined, the pronotum varied from 1.58 to 1.60 times as broad as long and the sutural length of the elytra from 1.58 to 1.66 times the length of the pronotum.

Head not very shining, ground sculpture strong, posterior half with scattered, rather weak and indistinct punctures about as large as meshes of the ground sculpture.

Antennae with the penultimate segments about twice as long as broad.

Pronotum moderately shining to rather dull, the ground sculpture variable in strength but always distinct; impressed on each side on poste-

rior half and with very superficial median impressions or traces of these; narrowly to rather broadly impunctate on disc, elsewhere with distinct though not very strong punctures as large as or a little larger than meshes of ground sculpture and separated by at least twice their diameter.

Elytra moderately shining, ground sculpture somewhat variable in strength but always distinct, punctures varying in size and strength in different individuals but coarser than those on pronotum, separated by twice their diameter or a little more, absent on about posterior fourth in weakly punctured examples; epipleural keel distinct as seen from above.

Abdomen more shining than elytra, ground sculpture much weaker, punctures very indistinct.

Aedeagus as figs. 5, 6, accessory sclerite and spermatheca as figs. 7, 8.

New Caledonia : Kanala (BOUGIER) (type); Noumea (DELAUNEY).

Holotype (♂) and allotype in the Institut royal des Sciences naturelles de Belgique, one paratype in the author's collection.

This species is close to *P. apicalis* (CAMERON), *marianicola* STEEL and *tonkinensis* (CAMERON) and difficult to separate from these using external characters, the aedeagus and accessory sclerite are however characteristic. The aedeagus is closest to that of *apicalis* but differs in the shape of the parameres and the group of short setae on each side of the ventral surface of the median lobe. The aedeagus and accessory sclerite of *apicalis* and the other two species mentioned are figured in the paper noted above (STEEL 1960).

Noumalia gen. n.

Head narrowed immediately behind eyes to a broad neck, ocelli distinct, below and behind each eye with a fine border which appears from above as a small tooth at its posterior margin; gular sutures separate, closest at about level of middle of eyes, diverging in front of and behind this point; antennae with sixth to eleventh segments with close, short, fine setae in addition to the sparse, rather long setae present on all segments; the third segment distinctly narrower than the second; labrum emarginate in front; mandibles short and stout, each with a fringe of frayed setae internally and a distinct file-like molar area at base, the right with a distinct tooth internally not far from apex, the left edentate; maxillae with inner lobe rather narrow, similar to that of *Ulommia* STEEL (cf. STEEL 1960, loc. cit. : 170, fig. 114), maxillary palpi as fig. 10, labium as fig. 11.

Pronotum transverse, the side margins single as seen from the side; mesosternum not keeled, its process bluntly pointed and extending between the intermediate coxae for about half their length to meet that of the metasternum; elytra and wings normal.

Abdomen : tergite of fourth segment with a small, closely punctulate and pubescent area on each side of middle; posterior margin of tergite of seventh segment with a narrow membranous fringe.

Legs : tibiae finely setose, the anterior also with a few stout setae externally on about apical third, the intermediate with two rows of stout setae internally on apical half; tarsi, excluding claws, about two thirds as long as their respective tibiae, the fifth segment about one and one half times as long as the preceding four together; ventral surface of first segment of all tarsi with numerous long, unmodified setae, the second to fourth segments with a ventral apical fringe of similar setae.

Type species : *Noumalia adustum* sp. n.

Range : at present known only from New Caledonia.

This genus differs from all other described Omaliine genera in the combination of maxillary palpi, labium, pronotal margins and tarsi described above.

Noumalia adustum sp. n.

Homalium adustum FAUVEL in litt.

Phloeonomus montaguei BERNHAUER in litt.

Not very convex. Head, pronotum and abdomen dark brown to black, elytra black on about apical fourth, elsewhere varying from yellowish (? immature) to dark blackish brown, antennae lighter or darker yellowish brown, the first five segments a little lighter than the remainder, legs similar in colour to basal segments of antennae. Length : 1.7-2.2 mm, without abdomen 1.19-1.30 mm.

General shape of front parts as fig. 9. In the specimens examined, the pronotum varied from 1.44 to 1.53 times as broad as long and the sutural length of the elytra from 1.75 to 1.81 times the length of the pronotum.

Head shining, area in front of level of antennal insertions impunctate and with ground sculpture which varies, in different individuals, from strong to weak and indistinct, elsewhere with irregularly spaced, rather strong punctures about twice the diameter of the eye facets and no ground sculpture.

Antennae with the sixth segment intermediate in breadth between the fifth and seventh, the penultimate segments nearly twice as broad as long.

Pronotum shining, without ground sculpture, narrowly impressed on each side on posterior half and with distinct median impressions; impunctate between median impressions, elsewhere with punctures similar to those on head and separated, on the average, by about their diameter.

Elytra shining, without ground sculpture, punctures similar to those on pronotum but less close and a little less strong, becoming weaker and much more diffuse on about posterior fourth; epipleural keel rather narrow as seen from above.

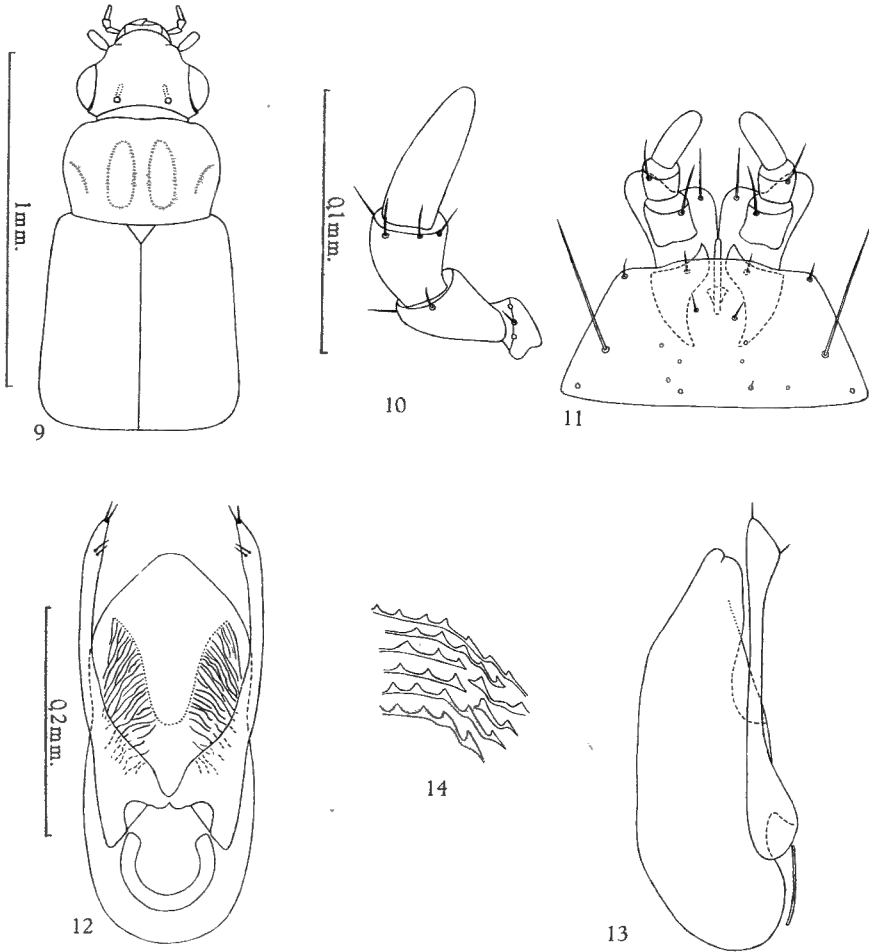


Fig. 9-14. — *Noumalia adustum* gen. et sp. n.

9. — Head, pronotum and elytra; 10. — Maxillary palpus; 11. — Labium; 12. — Aedeagus, ventral view; 13. — Aedeagus, lateral view; 14. — Portion of sculpture of median lobe of aedeagus, more highly magnified.

Abdomen less shining than elytra, with distinct ground sculpture and very fine but distinct, not very close, punctures.

Aedeagus as figs. 12, 13; ventral surface of median lobe strongly sculptured on each side, with a distinct impression between and in front of this sculpture; female without accessory sclerite.

Ground sculpture on head and abdomen in the form of a fine polygonal network.

New Caledonia : Mt. Ignambi (P. D. MONTAGUE) (type locality); Noumea (DELAUNEY).

Holotype, allotype and 3 paratypes in the British Museum collection, 3 paratypes in the Institut royal des Sciences naturelles de Belgique and 2 paratypes in the author's collection.

Key to the *Omalinae* at present known from New Caledonia.

1. Side margins of pronotum double as seen from the side
 *Paraphloeostiba kanalensis* sp. n.
- Side margins of pronotum single as seen from the side 2.
2. Last segment of maxillary palpi shorter in relation to third (fig. 10), sixth antennal segment distinctly shorter and narrower than seventh, elytra confusedly punctured, length without abdomen 1.19-1.30 mm
 *Noumalia adustum* sp. n.
- Last segment of maxillary palpi longer in relation to third (fig. 2), sixth antennal segment as long as and practically as broad as seventh, elytra punctured in more or less distinct rows, length without abdomen ca 1.6 mm *Stenomalium seriatum* FAUVEL.

RÉSUMÉ.

L'auteur étudie les *Phloeocharinae* et *Omalinae* (*Coleoptera*, *Staphylinidae*) de la collection FAUVEL conservée à l'Institut royal des Sciences naturelles de Belgique. Un genre et deux espèces nouveaux sont décrits.

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