### Notes on taxonomy of the subfamily Epuraeinae (Coleoptera: Nitidulidae)

### A.G. Kirejtshuk & T. Kvamme

Kirejtshuk, A.G. & Kvamme, T. 2001. Notes on taxonomy of the subfamily Epuraeinae (Coleoptera: Nitidulidae). Zoosystematica Rossica, 9(2), 2000: 409-436.

It is shown that the type species of Epuraea Erichson, 1843 is Nitidula silacea Herbst, 1794 (not N. decemguttata Fabricius, 1792 given by Parsons, 1843). New taxa: EPURAEINI: E. (Epuraea) vicaria sp. n. from Sakhalin, E. (E.) vultuosa sp. n. from Arizona, Epuraea subgen. Blackburnaea subgen. n. (type species Haptoncura uniformis Blackburn, 1891) with several Australian, Polynesian and Novacaledonian species, including E. (B.) tenuiclava sp. n. from W Australia, Epuraea subgen. Strophoraea subgen. n. with the single species E. (S.) notatipennis sp. n. from New Caledonia, Stauromenus nitidissimus gen. et sp. n. from Christmas Island, TAENIONCINI: Csiromenus gen. n. (type species C. calderi) with C. calderi sp. n. from Queensland and New South Wales, C. glaber sp. n. and C. histeroides sp. n. from Queensland and Eutaenioncus macroculatus gen. et sp. n. from Queensland. New names: Epuraea (Epuraeanella) nearctica nom. n. for E. castanea Melsheimer, 1846 (non E. castanea C.R. Sahlberg, 1820) (= E. helvola auctt., non Erichson) and E. (Blackburnaea) gilloglyi nom. n. for Haptoncus brunneus Gillogly, 1982 (non Epuraea brunnea Wiedemann, 1825). New synonymies: Epuraea helvola Erichson, 1843, sec. typ. = E. parsonsi Connell, 1981; E. lindensis (Blackburn, 1891) = E. nelsonensis (Blackburn, 1903); E. montrouzieri Grouvelle, 1903 = E. magnoculi (Gillogly, 1982). New records and notes on variability of some species are included.

A.G. Kirejtshuk, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg 199034, Russia; e-mail: AK3929@Ak3929.spb.edu

T. Kvamme, Norsk Institutt for Skogforskning, Høykoleveien, 12, N-1432, Ås, Norway, email; Torstein.Kvamme@nisk.no

#### Introduction

The recent classification of supraspecific taxa in the family Nitidulidae became possible when the fundamental importance of differences in aedeagal structures was revealed (Kirejtshuk, 1986a). In the mentioned and in some later publications, the taxonomic structure of this family was essentially rearranged (Kirejtshuk, 1986b, 1987, 1992, 1996, 1998a, 1998b; Kirejtshuk & Lawrence, 1992, etc.). In course of this rearrangement, the tribe Epuraeini within the subfamily Carpophilinae was proposed for the group of genera related to Epuraea Erichson, 1843 (Kirejtshuk, 1986a). Later on, the subfamily Carpophilinae s. lato was divided (Kirejtshuk, 1992) into 3 subfamilies (Carpophilinae, Epuraeinae and Amphicrossinae) corresponding to the tribes included in it before. All these subfamilies together with Calonecrinae were considered as the groups of

the carpophiline lineage as opposed to the nitiduline lineage (Meligethinae, Nitidulinae, Cillaeinae, Maynipeplinae, Cryptarchinae and Cybocephalinae). Finally, the subfamily Epuraeinae was divided into the tribes Epuraeini s. str. and Taenioncini (Kirejtshuk, 1998b).

Depositories of the specimens are indicated with the following abbreviations: ANIC – Australian National Insect Collection, Canberra; BPBM – B.P. Bishop Museum (State Museum of Natural and Cultural History), Honolulu; BPIV – Institute of Biology and Soil, Far Eastern Scientific Centre, Russian Academy of Sciences, Vladivostok; CMNO - Canadian Museum of Nature, Ottawa; CNC - Canadian National Collections (Biosystematics Research Institute), Ottawa; DPIM - collection of Department of Primary Industry, Mareeba (Queensland); FMNH - Field Museum of Natural History, Chicago; IRSN - Institut Royal des Sciences naturalles, Bruxelles; NHML - Natural History Museum [formerly British Museum (Natural History)], London; QM – Queensland Museum of Natural History, Brisbane; SAM – South Australian Museum, Adelaide; USNM – U.S. National Museum of Natural History, Washington; ZISP – Zoological Institute, Russian Academy of Sciences, St.Petersburg; ZMB – Zoologisches Museum (Museum für Naturkunde) an der Humboldt-Universität, Berlin; ZMO – Zoologisk Museum at Oslo University; ZMUC – Zoologisk Museum at Copengahen University, København.

### Tribe Epuraeini Kirejtshuk, 1986

This tribe includes more than 400 species in recent fauna and is composed of a comparatively small number of genera (Kirejtshuk, 1998b: 2 genera in extinct faunas and only 8 recent genera). Many its genera comprise two or more subgeneric taxa, and the largest genus (Epuraea) is divided into 16 subgenera (Kirejtshuk, 1998b, etc.). Composition of this tribe was recently considered for the Pa-Region Spornraft laearctic by Kirejtshuk (1992), Audisio (1993), etc.; for Nearctic Region by Parsons (1943), Connell (1984), Kirejtshuk & Pakaluk (1996), etc.; for Indo-Malayan Region by Kirejtshuk, (1998a), etc.; for Afro-Madagascarean Region by Jelínek (1977), Kirejtshuk (1989), etc.; for Australian Region by Kirejtshuk (1986c, 1990), etc. This subfamily includes many species demonstrating a low level of group variability in most organs. Some of subgeneric taxa of Epuraea may obtain a generic status, although it can be done only after more detailed study of taxonomic structure and hierarchy in this subfamily as a whole.

### Genus Epuraea Erichson, 1843

### Subgenus Epuraea Erichson, 1843

Epuraea Erichson, 1843. Type species: *Nitidula silacea* Herbst, 1784, designated by Thomson, 1859.

Note: Parsons (1943) erroneously cited as the type species N. decemguttata Fabricius, 1792 (= N. guttata Olivier, 1811), non N. decemguttata Olivier, 1790.

Composition and distribution. This subgenus is the largest one in the genus Epuraea. It consists of more than 200 species known to the authors, although only 62 species from the Palaearctic Region, 30 from Indo-Malayan Region, 27 from Nearctic, 4 from Australia, 3

from New Zealand and 1 from Afrotropical Region are described as yet.

### Epuraea (Epuraea) helvola Erichson, 1843

Epuraea helvola Erichson, 1843 (Pennsylvania).

Epuraea (Epuraeanella) helvola: Crotch, 1874.

Epuraea parsonsi Connell, 1981 (for Epuraea ovicula Parsons, inedit.), syn. n. (Quebec, Maine, Vermont, New York).

Types examined. Holotype of E. helvola, o', "8475", "helvola Er., Pensylv., Thr., Hg." (ZMB); 36 paratypes of E. parsonsi from Quebec and Maine (CNC, ZISP).

Other specimens examined. 20 spec. named by C. Parsons as E. ovicula (CNC, USNM), British Columbia, Quebec, Newfoundland, Maine, New York; British Columbia: 1 spec. (ZISP), "Stanley, B.C., VII-6-1931, W.G. Mathers", "Abies lasiocarpa"; Alberta: 1 spec. (CNC), "Tp. 112, Rge. 20, W 5 mer. Alberta, 12.VII.1981, B.F. & J.L. Carr"; Manitoba: 1 spec. (CNC), "Aweme, Man., N. Criddle, 3.V.1922", Ontario: I spec. (CNC), "7 km SW Carleton Place, VI.1981, S.J. Miller, light"; Ontario (? Minnesota): 1 spec. (CNC), "Rainy R. Dist., 1.VI.24, J.F. Brimley"; Quebec: 4 spec. (FMC, ZISP), "Lake Normand, Que, 7-19-1968, At light, C. Chantal"; 8 spec. (FMC), "Allagash, VII, 30-31.55, M.E. A.E. Brower"; Nova Scotia: 23 spec. (CNC, ZISP, ZMB), "Cape Breton H.N.P., Lone Shilding, PG72861", "4.VII.1983, R. Vockeroth, malaise through"

Diagnosis. This Nearctic species is very similar to the Palaearctic E. (E.) intercalatis Kirejtshuk, 1995, differing from it only in the longer antennal club, more narrowed pronotum widest in the basal quarter (in E. intercalatis, just behind the pronotal middle) and with more narrowly explanate sides, and somewhat more widely rounded apex of penis trunk. The antennal club of E. helvola is about twice (in E. intercalatis, 1.5 times) as long as wide. The explanate pronotal sides are about as wide as antennal stems (flagelli) in E. helvola and as antennal scapes in E. intercalatis.

Among the Nearctic species, *E. helvola* can be compared only with *E. (E.) aestiva*, from which it differs in the smaller and less convex body, elongate oval antennal club with last segment the narrowest, pronotum with less arcuate sides and slightly emarginate fore edge, moderately separated mesocoxae, deeper excision of hind edge of metasternum between coxae and different aedeagal structures. (See also the diagnosis of *E. intercalatis* in Kirejtshuk, 1995).

Note. The identity of E. helvola was misinterpreted by subsequent authors (Crotch, 1874; Reitter, 1875; Horn, 1879; Blatchley, 1910; Grouvelle, 1913; Parsons, 1943; Kirejtshuk & Pakaluk, 1996, and others) who used this name for a species of the subgenus Epuraeanella

(see below). The recent examination of the holotype (ZMB) showed that the type specimen of *E. helvola* is clearly conspecific with type specimens of *E. parsonsi*.

The considerable similarity of this species and *E. intercalatis* deserves special consideration. Their ranges are not sufficiently known. It is not unlikely that they represent vicariant populations formerly connected through the Beringean bridge. It can be supposed also that their isolation even now is not quite complete and they should be regarded as two subspecies of the same species.

#### Epuraea (Epuraea) intercalatis Kirejtshuk, 1995

Epuraea (Epuraea) intercalatis Kirejtshuk, 1995 (Primorsk Terr.: Khasan Distr.; Kuriles: Kunashir; Honshu: Gumma pref.; Shikoku: Ishizuchi).

Additional specimens. 3 spec. (BPIV, ZISP), "Primorsk Terr., Krasnoarmeysk Distr., Sinancha, 16.VII.67, Ivliyev".

### **Epuraea (Epuraea) vicaria** sp. n. (Figs 1-8)

Holotype. o', Russia, "Sakhalin, Yuzhno-Sakhalinsk, 5-13.06.1990, V.V. Grichik" (ZISP).

Paratypes. 3 9 with labels as in the holotype (ZISP). Description. Male (holotype). Length 2.8, breadth 1.3, height 0.7 mm. Moderately convex dorsally and ventrally; reddish with darkened (chestnut brown) antennal clubs, paramedian stripes on disc of pronotum and median spot on disc of each elytron; each elytron with 4 somewhat lightened spots (prescutellar, humeral, at middle of lateral edge, and behind darkened median spot); dorsum and underside moderately shining; dorsum with rather conspicuous and dense, subrecumbent, yellowish hairs about twice as long as distance between their insertions; pygidium and underside with less conspicuous, shorter and thinner hairs.

Head and pronotum with distinct punctures about as large as eye facets, interspaces between punctures slightly broader than a puncture diameter on head and pronotal sides, but almost twice broader on disc of pronotum, smoothly alutaceous and partly undulately microreticulated. Elytra almost as punctured as disc of pronotum, but with interspaces between punctures more distinctly microreticulated. Pygidium with somewhat deeper punctures than those on rest dorsum, interspaces between punctires subequal to or narrower than a puncture diameter and smoothly microreticulated. Prosternum scarcely punctured and finely alutaceous. Other sclerites of underside with shal-

low, rather sparse and very small punctures, intervals between them much broader than a puncture diameter, smoothly microreticulated.

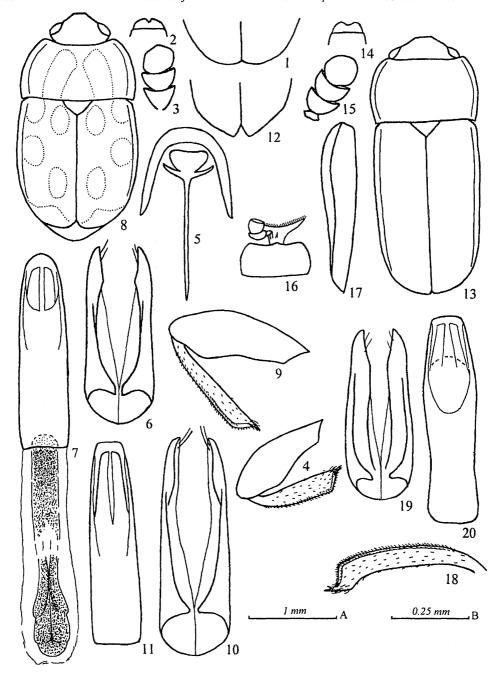
Head 0.83 times as long as distance between eyes, weakly depressed between antennal insertions, with not raised temples. Length of antennae subequal to width of head; antennomere 2 almost 2/3 as long as antennomere 3 and a little longer than antennomere 4; their club nearly twice as long as wide, composing nearly 2/7 of total length of antenna. Labrum rather projecting anteriorly and with a moderately deep excision between lobes. Pronotum moderately vaulted at disc and evenly sloping to widely explanate sides (about as explanate as antennal scape wide), with rounded fore and distinctly angular hind corners; its fore edge moderately excised; hind edge bisinuate. Elytra 1.17 times as long as their combined width, moderately steeply sloping to moderately explanate sides (markedly less widely explanate than pronotal sides) and with obliquely rounded apices. Pygidium scarcely exposed from under elytral apices, with subtruncate apex and rounded lateral ang- les, from under which a widely rounded apex of anal sclerite is exposed.

Mentum 4 times as wide as long, with somewhat arcuate sides. Last labial palpomere distinctly transverse. Antennal grooves subrectilinearly and moderately convergent behind mentum, indistinctly outlined and slightly deepened. Prosternal process strongly curved between coxae before apex, which is strongly widened and widely rounded at hind edge, 1.25 times as wide as antennal club. Distance between mesocoxae 1.5 times and that between metacoxae twice that between procoxae. Metasternum shallowly depressed before arcuately excised hind margin between coxae. Ventrite 1 much longer than hypopygidium, the latter with widely rounded apex. Epipleura at base 1.3 times as wide as antennal club.

Tibiae subtriangular; protibia somewhat wider, but meso- and metatibiae somewhat narrower than antennal club; meso- and metatibiae with rows of dense, short and thin setae. Profemur almost twice, mesofemur 2.5 times and metafemur almost 3.0 times as wide as corresponding tibiae; pro- and mesofemora of usual shape; metafemur somewhat widened before apex. Protarsus scarcely narrower, meso- and metatarsi about 0.7 times as wide as corresponding tibiae; claws rather long and simple.

Tegmen moderately and penis trunk weakly sclerotized.

Female. Differs from male in narrower protibiae and tarsi: protibia slightly narrower than



Figs 1-20. 1-8, Epuraea (Epuraea) vicaria sp. n. (1-7,  $\sigma$ '; 8,  $\varphi$ ): 1, elytral apices, dorsal; 2, fore part of frons and labrum; 3, antennal club; 4, metafemur and metatibia, ventral; 5, anal sclerite with ventral plate and spiculum gastrale, ventral; 6, tegmen, ventral; 7, penis trunk with armature of inner sac, dorsal; 8, body with contour of explanate sides of pronotum and elytra as well as dotted outline of darkened places of pronotum and elytra, dorsal; 9-12, E. (E.) peltoides (9-11,  $\sigma$ '; 12,  $\varphi$ ): 9, metafemur and metatibia, ventral; 10, tegmen, ventral; 11, penis trunk, dorsal; 12, elytral apices, dorsal; 13-20, E. (E.) vultuosa sp. n.,  $\sigma$ ': 13, body with contour of explanate sides of pronotum and elytra, dorsal; 14, fore part of frons and labrum; 15, antennal club; 16, labial palpus; 17, elytron, lateral; 18, mesotibia, ventral; 19, penis trunk, dorsal; 20, tegmen, ventral. Scales: A – to Figs 1, 8, 12, 13, 17; B – to Figs 2-7, 9-11, 14-16, 18-20.

antennal club, protarsus about 0.7 times, mesoand metatarsi about half as wide as corresponding tibiae. Elytral apices more distinctly oblique; pygidium and hypopygidium widely rounded at apices or the latter subtruncate.

Variations. Length 2.7-2.9 mm. Contrastness of light and darkened spots on pronotum and elytra somewhat variable.

Diagnosis. This new species is very similar to E. (E.) peltoides Horn, 1879 (Figs 53-55), but differs in the less arcuate and not very widely explanate pronotal and elytral sides, distinctly transverse last labial palpomere, shape of the male metafemur and metatibia, and structure of the male genitalia.

Etymology. The name of this new species means "replacing", "shifting", "changing".

### **Epuraea (Epuraea) vultuosa** sp. n. (Figs 13-20)

Holotype. o', USA, "Hannagan Camp, Greenlee Co., Ariz., VII.12.1968, D.E. Bright" (CNC).

Paratype. 1 of with labels as in the holotype (ZISP).

Description. Male (holotype). Length 2.6, breadth 1.2, height 0.7 mm. Moderately convex dorsally and ventrally; uniformly reddish; dorsum almost dull and underside with a very weak shine; dorsum with rather conspicuous and dense, subrecumbent, golden yellowish hairs somewhat more than twice as long as distance between their insertions; pygidium and underside with shorter and less conspicuous pubescence.

Head and pronotum with very shallow and scarcely outlined punctures markedly larger than eye facets; interspaces between punctures much narrower than half a puncture diameter, with contrasting and rather fine cellular microreticulation. Elytra with scarcely visible punctures, microreticulated similarly to head and pronotum. Pygidium with small and sparse punctures at apex, finely and rather contrastingly microreticulated. Prosternum indistinctly punctured, extremely finely and very densely microreticulated, almost alutaceous. Other sclerites of underside punctured and sculptured similarly to distal half of pygidium.

Head slightly shorter than distance between eyes, weakly and transversely depressed between antennal insertions, with not raised temples. Antennae somewhat longer than head width; antennomere 2 a little shorter than antennomere 3 and a little longer than antennomere 4; club about twice as long as wide, composing nearly 1/3 of total length of antenna. Labrum moderately projecting anteriorly and with not deep excision between lobes.

Pronotum moderately vaulted at disc and evenly sloping to rather narrowly explanate sides (subequal in width at apex to antennal flagelli and at base to antennal scape), with rounded fore and distinctly angular hind corners; its fore edge shallowly emarginate, hind edge subbisinuate. Elytra 1.43 times as long as their combined width, moderately steeply sloping to not widely explanate sides (subequal in width to antennal flagelli) and with subtruncate to almost conjointly rounded apices. Pygidium almost entirely exposed from under elytral apices, with subtruncate apex and rounded lateral angles, from under which a widely rounded apex of anal sclerite is exposed.

Mentum twice as wide as long, with slightly rounded sides. Last labial palpomere subquadrate to transverse with oblique apex. Antennal grooves behind mentum can be traced only due to slight and indistinct depressions. Prosternal process rather curved between coxae before medially convex apex, which is strongly widened and subtruncate at hind edge, the latter almost as wide as antennal club. Distance between mesocoxae scarcely greater and that between metacoxae about 1.5 times as great as that between procoxae. Metasternum subflattened before subangularly excised hind margin between coxae. Ventrite 1 much longer than hypopygidium: the latter with widely subtruncate apex. Epipleura at base 1.33 times as wide as antennal club.

Protibia subtriangular; mesotibia slightly dilated at inner edge before apex; metatibia subparallelsided; protibia and metatibia at apex about 0.7 times as wide as antennal club; mesotibia at apex slightly narrower than antennal club; meso- and metatibiae with slightly raised rows of rather short and thin setae; protibia with a short but pointed subapical tooth. Femora of usual shape; profemur nearly 3 times, mesofemur a little more than twice and metafemur about 3.5 times as wide as corresponding tibiae. Protarsus about 0.7 times, meso- and metatarsi less than 0.33 times as wide as corresponding tibiae; claws rather long and simple.

Aedeagus of paratype moderately to weakly sclerotized.

Diagnosis. This new species has some resemblance to several Nearctic species of the subgenus with elongate body. In addition to the obsolete punctation and peculiar aeadeagal structure, it differs from these species as follows:

- from E. (E.) angustula Sturm, 1844, in lighter, unicoloured, almost dull and more parallelsided body with rather contrasting mi-

croreticulation of surface, subtruncate labral lobes, more narrowly explanate pronotal sides, subtruncate to almost conjointly rounded elytral apices (not separately rounded), oblique apex of last labial palpomere, much longer mentum, lack of distinct trace of antennal grooves behind mentum and dilated apex of male mesotibia;

- from E. (E.) interposita Kirejtshuk & Pakaluk, 1996, in larger, slenderer, usually lighter, unicoloured and almost dull body with subtruncate apices of labral lobes, narrower pronotum with less arcuate and more narrowly explanate sides as well as with shallower excision at fore edge, elytra with more narrowly explanate sides and subtruncate to almost conjointly rounded elytral apices (not separately rounded to suboblique), oblique apex of last labial palpomere, somewhat longer mentum, lack of distinct trace of antennal grooves behind mentum, narrower epipleura and different sexual character at apex of male mesotibia;
- from *E. (E.) linearis* Mäklin, 1853, in generally smaller, lighter, unicoloured, almost dull and much less convex body with more widely explanate pronotal sides and hind corners very slightly projecting posteriorly, oblique apex of last labial palpomere, somewhat longer mentum, flattened middle of male metasternum (without longitudinal depression), narrower epipleura (*E. linearis* has a faint trace of inner edges of antennal grooves behind mentum and slightly dilated apex of male mesotibia);
- from E. (E.) planulata Erichson, 1843, in lighter, unicoloured and not subflattened dorsally body with rather contrasting microreticulation on dorsum, longer and less conspicuous pubescence, subtruncate labral lobes, more narrowly explanate pronotal and elytral sides, subtruncate to almost conjointly rounded elytral apices, subtransverse last labial palpomere with oblique apex (not elongate and narrowed to apex) (E. planulata has a faint trace of inner edges of antennal grooves behind mentum and slightly dilated apex of male mesotibia);
- from E. (E.) prolixa Sharp, 1890, in much smaller, much lighter, unicoloured, almost dull and somewhat more convex dorsally body with rather contrasting microreticulation on dorsum, sparser and more conspicuous pubescence, pronotum with trapezoid emargination at fore edge (not arcuate) and less arcuate sides, subtruncate to almost conjointly rounded elytral apices (forming a small sutural corner), subtransverse last labial palpomere with oblique apex (not strongly widened to truncate apex), much longer mentum, distance between metacoxae markedly greater than that between pro-

coxae, lack of median elongate depression on male metasternum and dilated apex of male mesotibia;

- from E. (E.) rectangula Connell, 1981, in lighter, unicoloured and somewhat more convex dorsally body with denser and longer but less conspicuous pubescence, shallower emargination at fore edge of pronotum, more narrowly explanate pronotal and elytral sides, elytra with subtruncate to almost conjointly rounded elytral apices with a small sutural corner (not regularly truncate), somewhat longer mentum, lack of trace of antennal grooves behind mentum, distance between metacoxae markedly greater than that between procoxae, narrower epipleura and different sexual character at apex of male mesotibia;
- from E (E.) truncatela Mannerheim, 1846 in lighter, unicoloured, almost dull and somewhat more convex body with well expressed microreticulation on all sclerites, subtruncate apices of labral lobes, pronotum moderately narrowed anteriorly with more narrowly explanate sides, subtruncate to almost conjointly rounded elytral apices (not separately rounded to suboblique), oblique apex of last labial palpomere, somewhat longer mentum, lack of trace of antennal grooves behind mentum, narrower apex of prosternal process.

The lateral elytral edge of *E. vulnerata* sp. n. in lateral view is as curved as in *E. angustula*, *E. linearis* and *E. truncatella*, while this edge is completely straight in *E. prolixa* and *E. rectangula*, and intermediate between the mentioned extremes in *E. interposita* and *E. planulata*. Pygidium in examined specimens of the new species is almost entirely exposed from under elytral apices as usually in many species mentioned above, while most specimens of *E. angustula*, *E. interposita* and *E. planulata* are with the only apex of pygidium exposed.

Etymology. The name of this new species means "grimacing", "affecting".

### Subgenus Epuraeanella Crotch, 1874

Epuraeanella Crotch, 1874. Type species (designated here under Art. 70.3 of the Code): Epuraea nearctica nom. n., misidentified as Epuraea helvola Erichson, 1843 in the original fixation (by monotypy).

Omosiphora Reitter, 1875. Type species: Nitidula rufa Say, 1825, designated by Kirejtshuk (1998b).

Composition and distribution. This subgenus comprises only the species distributed in the forest zone of the Holarctic [E. amurensis Kirejtshuk, 1992, E. durula Reitter, 1894, E. georgica Reitter, 1877, E. hammondi

Kirejtshuk, 1992, E. limbata (Fabricius, 1787), E. neglecta (Heer, 1841) and E. nikitskyi Kirejtshuk, 1992 from the Euro-Asian part; E. nearctica nom. n., E. obtusicollis Reitter, 1873 and E. rufa (Say, 1825) from North America] and in the continental part of the Indo-Malayan Region (E. fossicollis Grouvelle, 1908, E. hammondi, E. martensi Kirejtshuk, 1998 and E. nigerrima Kirejtshuk, 1998].

*Note*. This subgenus has been characterized in some recent publications (Kirejtshuk, 1992, 1998b; Kirejtshuk & Pakaluk, 1997).

### Epuraea (Epuraeanella) nearctica nom. n.

Epuraea helvola: auctt., non Erichson, 1843.

Omosita castanea Melsheimer, 1846, non Nitidula castanea C.R. Sahlberg, 1820, nec Nitidula castanea Duftschmid, 1825.

Epuraea rufa: Reitter, 1873. Misidentification of Nitidula rufa Say, 1825.

Notes. The type of *E. helvola* Erichson belongs to a species of the subgenus *Epuraea* s. str. (see above). The only known available name for the species previosly considered as the type species of *Epuraeanella* is *Omosita castanea* Melsheimer, 1846, but it is preoccupied by *Nitidula castanea* C.R. Sahlberg, 1820 and *N. castanea* Duftschmid, 1825. Therefore, a new name is proposed for *O. castanea* Melsheimer. The type series of the latter is not examined by the authors, but all types of species described by F.E. Melsheimer and deposited in the Museum of Comparative Zoölogy at Harvard College (Cambridge) were checked by Parsons (1943).

All references to *E. helvola* published between Erichson (1843) and this paper seem to concern *E. nearctica* nom. n. (Crotch, 1873; Reitter, 1875; Horn, 1879; Blatchley, 1910; Grouvelle, 1913; Parsons, 1943; Kirejtshuk & Pakaluk, 1996; and others).

Etymology. The species name is formed from the name of the zoogeographic region where this species is rather widely distributed.

Subgenus Micruria Reitter, 1875

### Epuraea (Micruria) auripubens Reitter, 1901 (Figs 21-26)

Epuraea (Micrurula) auripubens Reitter, 1901 (Mongolia); Kirejtshuk, 1992 (also Tuva, Central and East China).

Epuraea auripubens: Sjöberg, 1939 (also Japan).

Epuraea (Micruria) auripubens: Kirejtshuk, 1998b (also Qinghai, Yunnan, Sichuan).

Specimens examined. Russia, Kurile Islands: 40 spec., Kharimkotan I., 8.VIII.1996, V. Teslenko, A. Lelej (BPIV, ZISP); 2 spec., Rasshua I., 4.VIII.1999, A. Lelej, S. Storozhenko (BPIV); 1 spec., Ketoi I., Diana Bay, 6.VIII.1999, A. Lelej, S. Storozhenko (BPIV); 14 spec. Simushir I., Broutona Bay, 8.VIII.1999, A. Lelej, S. Storozhenko, (BPIV); 7 spec., Chirpoi I., Peschanaya Bay, 10.VIII.1999, A. Lelej, S. Storozhenko, V. Bogatov (BPIV); 4 spec., Brat Chirpoev I., 20.VIII.1997, A. Lelej, S. Storozhenko (BPIV); 6 spec., Ekarma I., 10.VIII.1996, A. Lelej (BPIV); 2 spec., Iturup I., 5 km N of Reydovo, 30.VII.1997, A. Lelej, S. Storozhenko, V.A. Teslenko (BPIV); 1 spec., Kunashir I., Kislaya River, 28.8.1997, A. Lelej (BPIV).

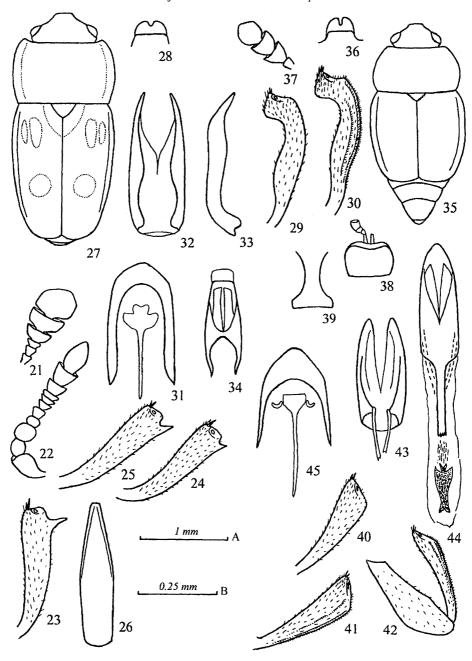
Notes. Kirejtshuk (1992, 1998b) raised some doubts upon the record of this species from Japan (Sjöberg, 1939), because this species was missing from all works of the Japanese coleopterists. Specimens recently collected in the Kuriles (see above) indirectly corroborate the record by Sjöberg.

The specimens from Kuriles are smaller (2.4-2.8 mm) and darker than most specimens from Mongolia and China (2.3-3.5 mm), however the authors did not find any reliable character to distinguish continental and insular forms as separate species or subspecies. Insular specimens demonstrate some (partly teratogenic) variability discussed below.

Protibia with sexual dimorphism in development of outer subapical corner, which usually looks in males like a strong, long and sharp process, but in females like a weaker projection. In Kurile specimens, the subapical corner is less developed in both sexes. This tibial process can be almost perpendicular to general plane of tibia in some specimens from Mongolia, but it inclines downwards as a continuation of line of outer edge of tibia in all specimens from Sichuan and Kuriles. Pronotal sides of larger specimens are almost as widely explanate as width of antennal stems (flagelli), those of smaller specimens (most from Kuriles) are scarcely subexplanate. Fore edge of labrum is almost straight in most specimens, but in some cases a weak emargination or excision at its middle can be seen.

Penis trunk in some Chinese and insular specimens is much more narrowed posteriorly and shortly (sub)truncate or even acute at apex, while in the type and larger specimens from the continent it is usually less narrowed posteriorly and with subangular apex.

Antennal club is usually larger than in most members of the subgenus forming about 1/3 of total antennal length and subequal to or longer than 1/3 of lateral margin of pronotum (usually, members of the subgenus have antennal club shorter than 1/3 of lateral margin of pronotum).



Figs 21-45. 21-26, Epuraea (Micruria) auripubens: 21, antennal club of of from Rasshua (Kuriles); 22, antenna of of from Kharimkotan; 23, protibia of of from Mongolia, dorsal; 24, id. from Rasshua, dorsal; 25, id. from Sichuan, dorsal; 26, penis trunk of of from Rasshua, dorsal; 27-34, E. (Strophoraea) notatipennis sp. n., of: 27, body with contour of explanate elytral sides, and dotted outline of light pronotal sides and spots on elytra, dorsal; 28, fore part of frons and labrum; 29, protibia, dorsal; 30, mesotibia, dorsal; 31, anal sclerite with ventral plate and spiculum gastrale, ventral; 32, tegmen, ventral; 33, id., lateral; 34, penis trunk, dorsal; 35-45, Stauromenus nitidissimus sp. n., of: 35, body with contour of explanate elytral sides, dorsal; 36, fore part of frons and labrum; 37, antennal club; 38, mentum and labial papus, ventral; 39, prosternal process, ventral; 40, protibia, dorsal; 41, mesotibia, dorsal; 42, metafemur and metatibia, dorsal; 43, anal sclerite with ventral plate and spiculum gastrale, ventral; 44, tegmen, ventral; 45, penis trunk with armature of inner sac, dorsal. Scales: A – to Figs 21, 27, 35; B – to Figs 22-26, 28-34, 36-45.

Another unusual character is that the ultimate antennomere is the largest among segments of the club. The proportions of club antennomeres vary almost in similar way and degree as those in *E. (Epuraea) aestiva* (Linnaeus, 1758). One of males from Kharimkotan has strongly abnormal structure of antennae, including one antenna with completely modified club.

### Subgenus Blackburnaea subgen. n.

pro *Haptoncura*: Blackburn, 1891: 103 (part.); non Reitter, 1875: 61, 64 (sep. 11, 14).

Type species: Haptoncura uniformis Blackburn, 1891. Description. Length 0.9-2.5 mm. Body elongate to elongate oval, rather convex dorsally and moderately convex ventrally; dorsum distinctly and diffusely punctured and with rather broad interspaces contrastingly and cellularly microreticulated; covered with more or less conspicuous pubescence, but without ciliae along pronotal and elytral sides. Head transverse, with moderately large eyes comprising rather large facets. Antennae longer than head width; their 3-segmented club elongate oval to elongate. Labrum moderately projecting anteriorly and usually with shallow median excision. Mandibles with acute and moderately projecting apices. Last labial palpomere rather short and sometimes transverse, narrowed or widened to apex. Pronotum transverse, subquadrangular with slightly arcuate sides, usually rather to strongly convex at disc and comparatively steeply sloping laterally, with subtruncate or shallowly emarginate fore edge, not explanate but narrowly bordered sides, rounded to subangular and not projecting hind corners. Elytra incomplete, markedly longer than their combined width, subflattened medially and slightly to steeply sloping laterally, subtruncate or oblique at apices. Pygidium more or less uncovered by elytra; its apex subtruncate or shallowly emarginate in males (with anal sclerite rather far exposed posteriorly from under pygidial apex) and rounded in females. Tergite VI more or less sclerotized. Mentum transverse and subrectilinearly narrowed anteriorly. Antennal grooves somewhat depressed but unclearly outlined. Prosternal process strongly curved along coxae and strongly widened before transverse apex. Distance between mesocoxae less and that between metacoxae much greater than that between procoxae. Mesosternum moderately excavate, ecarinate to subcarinate. Metasternum subflattened in both sexes; its hind edge between coxae arcuately or angularly excised; submesocoxal lines follow hind

edge of coxae and slightly deviate from them. Tibiae narrow and subtriangular in both sexes. Femora of usual shape, moderately wider than tibiae. Tarsi rather narrow, only protarsi somewhat widened; claws simple and narrow. Male and female genitalia of generalized structure and slightly sclerotized.

Note. This subgenus links the species extremely similar one to another in both external characters and genitalia of both sexes. Therefore, reliable identification of its species is mostly possible with usage of synoptic specimens for comparison. Most species regarded here as members of the subgenus Blackburnaea are rather common in Australia and deposited in collections of many museums. A comprehensive revision of the species of this subgenus with a detailed discussion of their distribution and key to them will be prepared in some future.

Diagnosis. Species of this subgenus have a generalized habitus somewhat similar to that of other anthophilous groups of the subfamily. They are characterized by the elongate and comparatively convex body, subtruncate elytral apices, distinct and usually rather sparse punctation, simple legs, untoothed claws, and absence of sexual characters in the structure of legs, antennae and mandibles. This combination of characters makes possible to recognize the members of this subgenus among Epuraeinae of Australia and surrounding territories. Particularly striking characters of this subgenus are very distinct punctures on dorsum as well as distinct and regular cellular microreticulation (not quite usual within the tribe Epuraeini), but an exception is formed by E. (B.) gilloglyi nom. n. with reduced punctation and smooth microreticulation. Species of this subgenus have comparatively large facets of eyes, although in general smaller than in most species of Haptoncus, Haptoncurina Jelínek, 1977, Ommoraea Kirejtshuk, 1998, Parepuraea Jelínek, 1977, Polinexa Kirejtshuk, 1989, Apria Grouvelle, 1919, and Platychorina Grouvelle, 1905.

Species of the subgenus *Blackburnaea* have diagnostic characters of Epuraeini (Kirejtshuk, 1998b), but resemble externally rather representatives of *Csiromenus* gen. n., *Raspinotus* Kirejtshuk, 1990 and *Taeniolinus* Kirejtshuk, 1998 (Taenioncini) than those of *Epuraea* s. str. (Epuraeini). The members of this new subgenus differ from most *Epuraea* s. lato in the rather to strongly and regularly convex dorsum, more or less rounded and not projecting hind corners of pronotum (except many Asian species of *Micruria*), pronotal and elytral sides

rather not explanate but narrowly bordered, obliquely truncate elytral apices.

The Palaearctic *E.* (*Haptoncurina*) paulula Reitter, 1873 has also rather convex body, similar to *Blackburnaea* shape of pronotum and quite distinct and very dense punctation, but differs in the extremely narrowly explanate pronotal and elytral sides, hind corners of pronotum distinctly projecting posteriorly, and irregular cellular microreticulation on dorsum.

Species of the subgenus *Blackburnaea* differ from those of *Csiromenus* gen. n. in the less steeply sloping pronotal and elytral sides, less smooth and frequently more pubescent integument, widely separated hind coxae, simple segments of legs, and not or scarcely modified ovipositor. They are also quite distinct from representatives of *Raspinotus* and *Taeniolinus* in the less shortened elytra (covering tergites preceding pygidium), small and elongate antennal club, simple segments of legs.

Bionomy. Imagines of all species of the subgenus Blackburnaea regularly occur on flowers of plants from different families, though no larva have been as yet collected there.

### Epuraea (Blackburnaea) brightensis (Blackburn, 1903)

Haptoncura brightensis Blackburn, 1903 (Victoria). Epuraea brightensis: Grouvelle, 1913.

Type examined. Lectotype (NHML), here designated, "T7272 Al.", "Australia, Blackburn Coll., B.M. 1910-236", "Haptoncura brightensis Blackb.".

Comments to the original description. Length 2.3, breadth 1.0, height 0.6 mm. Very similar in most characters to the examined type specimen of E. nelsonensis (synonym of E. lindensis), but with more narrowed pronotum (about as narrowed as in the types of E. lindensis). Dorsum punctured and sculptured as in E. uniformis. Underside punctured more sparsely than in E. lindensis. Elytra slightly oblique at apices.

Note. It is possible that the type of E. brightensis is an aberrant specimen of E. lindensis (see below), because it differs essentially from typical specimens of the latter only in the narrowed pronotum and in the punctation and sculpture of integument, which are similar to those of E. uniformis.

### Epuraea (Blackburnaea) eyrensis (Blackburn, 1903)

Haptoncura eyrensis Blackburn, 1903 (South Australia). Epuraea eyrensis: Grouvelle, 1913. Types examined. Lectotype (NHML), here designated, "T 7277", "Australia Blackburn Coll. B.M. 1910-236", "Haptoncura eyrensis Blackb."; I paralectotype (SAM), "S. Australia, Blackburn", "Haptonc. eyrensis cotype", "J. 8594, Haptoncura eyrensis Bl., S. Australia".

Comments to the original description. Lectotype: length 1.8, breadth 0.9, height 0.5 mm. Light chestnut brown with somewhat lighter appendages and darkened prescutellar parts of elytra; dorsum with a faint fat lustre and rather conspicuous hairs subequal in length to or slightly longer than distance between their insertions. Antennal club almost twice as long as wide. Elytra widest at the middle and with obliquely truncate apices.

Variations. Some specimens here considered as *E. eyrensis* have larger and wider antennal club (sometimes 1.5 times as long as wide) and partly darkened appendages, although the variations in shape of antennal club show no interruptions which can allow us to separate two forms.

Diagnosis. This species is somewhat similar to E. uniformis and E. sparsior differing from the both in the somewhat larger body (1.7-2.6 mm), raised and conspicuous dorsal pubescence, frequently larger and wider antennal club; in addition, this species differs from E. uniformis in the somewhat lighter and less uniform coloration of body and most width of elytra at their middle (not in basal third), and from E. sparsior, in the slenderer body and longer elytra (about 1.2 times as long as their combined width) with somewhat less arcuate sides. Many characters distinguishing the mentioned 3 species are rather variable and in some cases identification becomes scarcely possible because incongruence in variability of different characters. Particular variability is observed in length and conspicuousness of hairs, while body coloration is comparatively stable.

E. eyrensis is also very similar to E. tenuiclava sp. n. (see below).

Note. The paralectotype, in contrast to the lectotype and other examined specimens, has body shape, punctation and dorsal pubescence similar to those in *E. meyricki*: body uniformly straw yellow, with rather dense, distinct and uniform punctation and rather microreticulated interspaces; antennal club about twice as long as wide; elytral apices subtransversely truncate; apex of anal sclerite widely rounded.

Distribution. This species was collected in different parts of E Australia (Queensland, New South Wales, Victoria, South Australia) and in Tasmania.

### Epuraea (Blackburnaea) gilloglyi nom. n.

Haptoncus brunneus Gillogly, 1982 (New Hebrides, Western Samoa, American Samoa and New Caledonia), non Epuraea brunnea (Wiedemann, 1825).

Types examined (BPBM): 2 paratypes of H. brunneus from Upolu I., Samoa, and 2 paratypes from Espiritu Santo (Efate), New Hebrides.

Other specimens examined. 8 spec. (ZMUC, ZISP), "New Hebrides, Efate I., Vila, III.1978, N.L.H. Krauss".

Diagnosis. This species is similar to E. eyrensis, E. sparsior, E. tenuiclava sp. n. and E. uniformis, but has less convex dorsum with narrowly subexplanate pronotal and elytral sides, lightened places along pronotal edges and on elytral discs, shorter elytra (1.12 times as long as combined width) with transversely truncate apices, wider antennal club (about 1.5 times as long as wide), less distinct punctures on dorsum and almost smooth interspaces between them. Hairs on dorsum in contrast to all mentioned species extremely fine and rather long.

Etymology. The species is named after L.R. Gillogly who contributed much to the study of Epuraeinae of the Indo-Malayan Region, Australia, Polynesia and New Caledonia.

# **Epuraea (Blackburnaea) lindensis** (Blackburn, 1891) (Figs 46-57)

Haptoncura lindensis Blackburn, 1891 (South Australia). Haptoncura nelsonensis Blackburn, 1903 (Victoria), syn. n. Epuraea lindensis: Grouvelle, 1913. Epuraea nelsonensis: Grouvelle, 1913.

Types examined. Lectotype of H. lindensis (HNML), here designated, "T 88", "Haptoncura lindensis Blackb."; 4 paralectotypes of H. lindensis (SAM), "T 88", "Port Lincoln, Blackburn", "I. 8593, Haptoncura lindensis Bl., S. Australia, cotype"; lectotype of H. nelsonensis, here designated, o' (NHML), "T. Nels. 7274", "Australia, Blackburn Coll., B.M. 1910-236", "Haptoncura nelsonensis Blackb."

Comments to original descriptions. Length 1.9-2.5, breadth 0.7-0.9, height 0.4-0.5 mm. Moderately convex dorsally and ventrally; straw yellowish; dorsum almost dull and underside shining; dorsum with moderately dense, recumbent, moderately conspicuous, golden yellowish hairs twice as long as distance between their insertions. Head and pronotal surface with quite distinct punctures subequal to or smaller than eye facets; interspaces between them equal to 1.5-2.0 puncture diameters, with contrasting and fine cellular microreticulation. Elytra with larger but somewhat sparser and less distinct punctures. Me-

tasternum with very small and very sparse punctures and finely alutaceous to almost smooth interspaces between them. Elytra widest at basal third, very slightly arcuate at sides and with obliquely truncate apices.

Diagnosis. This species has rather dense punctation and very conspicuous pubescence, similar to those in E. meyricki, but in contrast to the latter E. lindensis has less robust, less convex and lighter (light brown) body with length 2.1-2.6 mm; pronotum widest at base and arcuately narrowed anteriorly; longer elytra (at least 1.3 times as long as combined width but usually longer); antennal club usually almost twice as long as wide; dorsal surface with less distinct punctures subequal to or larger than eye facets; interspaces between them subequal to or usually broader than a puncture diameter, finely and densely microreticulated. Punctation and sculpture of dorsum of this species are somewhat similar to those of E. sloanei, i. e. not quite typical of other members of the subgenus.

Note. The type specimens of *E. lindensis* and *E. nelsonensis* seem to be conspecific, although have some differences in the shape of pronotum and coloration.

Distribution. This species was collected in the Central and Eastern Australia (Queensland, Western Australia, New South Wales, South Australia, Victoria) and Tasmania.

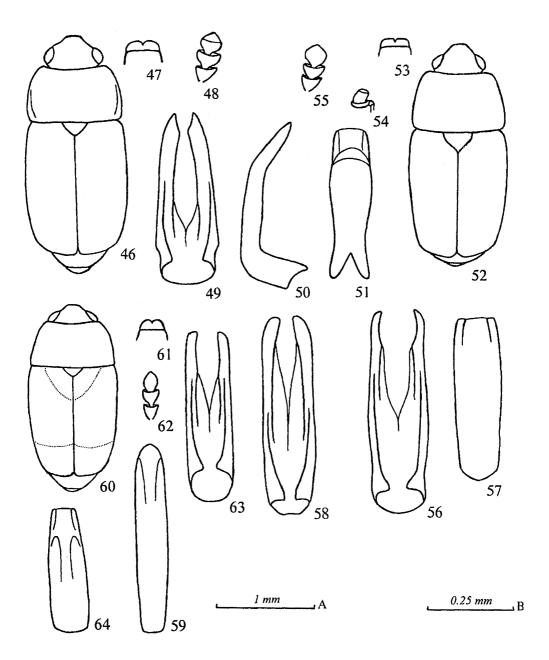
### Epuraea (Blackburnaea) meyricki (Blackburn, 1891)

Haptoncura meyricki Blackburn, 1891 (Western Australia). Epuraea meyricki: Grouvelle, 1913.

Type examined. Lectotype (NHML), here designated, "T 38 x", "Haptoncura meyricki Bl."

Note. This species resembles E. lindensis, but is usually larger (length 2.2-3.0 mm), with more convex dorsum; darker body coloration (chestnut brown with elytra somewhat lighter); pronotum subparallel-sided in proximal half and arcuately narrowed anteriorly; shorter elytra (about 1.2 times as long as combined width); antennal club about 1.5 times as long as wide; dorsal surface with quite distinct punctures subequal to or larger than eye facets; interspaces between them usually narrower. than a puncture diameter, with regular microreticulation. infrequently not smoothed on pronotum.

Distribution. This species was collected in different parts of Australia (Western Australia, Northern Territory, Queensland, New South Wales, South Australia, Victoria) and Tasmania.



Figs 46-64. 46-57, Epuraea (Blackburnaea) lindensis: 46-51, paralectotype of Haptoncura lindensis (SAM), σ': 46, body with contour of subexplanate sides of pronotum, dorsal; 47, fore part of frons and labrum; 48, antennal club; 49, tegmen, ventral; 50, id., lateral; 51, penis trunk, dorsal; 52-57, lectotype of Haptoncura nelsonensis, σ': 52, body, dorsal; 53, fore part of frons and labrum; 54, labial palpus, ventral; 55, antennal club; 56, tegmen, ventral; 57, penis trunk, dorsal; 58-59, E. (B.) montrouzieri (paratype of Haptoncus magnoculi, σ', BPBM): 58, tegmen, ventral; 59, penis trunk, dorsal; 60-64, E. (B.) tenuiclava sp. n., σ': 60, body with dotted contour of darkened part of elytra, dorsal; 61, fore part of frons and labrum; 62, antennal club; 63, tegmen, ventral; 64, penis trunk, dorsal. Scales: A, to Figs 46, 52, 60; B – to Figs 47-51, 53-59, 61-64.

### Epuraea (Blackburnaea) montrouzieri Grouvelle, 1903

(Figs 58-59)

Epuraea montrouzieri Grouvelle, 1903, 1913 (New Caledonia).

Haptoncus magnoculi Gillogly, 1982 (New Caledonia, Borneo, Loyalty Islands), syn. n.

Types examined. Lectotype of E. montrouzieri, here designated, o' (IRSN), "Nouvelle Caledonie, Noumea, ex coll. Fauvel", "Epuraea montrouzieri Grouv." (written by ? A. Grouvelle); 4 paratypes of H. magnoculi (BPBM): one from Yahoue, two from Sarramea, and one from Mt. Koghi.

Comments to original descriptions. Length 1.7-1.8, breadth 0.8, height 0.5 mm. Moderately convex; straw reddish; moderately shining; dorsum subglabrous; underside with sparse, moderately long and slightly conspicuous pubescence. Head and pronotum with distinct punctures as large as eye facets, interspaces between them subequal to puncture diameter, smoothly alutaceous. Elytra with shallower and sparser punctures; interspaces between them up to two puncture diameters, finely and densely smoothly microreticulated. Antennae length 1.17 times head width; their club composing 1/3 of total antennal length, elongate, 1.5 times as long as wide. Labral lobes regularly arcuate and only slightly exposed from under fore edge of frons. Pygidium with truncate apex. Anal sclerite widely rounded at apex. Pronotum and elytra gently sloping to not explanate lateral edges. Metasternum with distinct punctures smaller than eye facets, separated by 2-3 puncture diameters, interspaces between them with smooth microreticulation. Legs narrow and of usual outline, fore tarsi slightly narrower than fore tibiae.

Diagnosis. The appearance of E. montrouzieri is similar to that in E. uniformis, but the body is lighter and slenderer; pronotum widest at hind corners and nearly rectilinearly narrowed to rounded fore corners; elytra scarcely more than twice as long as pronotum, slightly arcuate at sides and obliquely subacute at apices; dorsal punctation much denser and pubescence less raised.

Note. The examined type specimens (see above) are certainly conspecific. Taking into consideration the characters mentioned in the original description of *Haptoncus magnoculi*, the proposed synonymy becomes quite evident.

Distribution. This species is definitely known only from New Caledonia; the record from Loyalty Islands and Malaysian part of Borneo (Gillogly, 1982) seems to be questionable and should be additionally corroborated.

## Epuraea (Haptoncurina) sloanei (Blackburn, 1903)

(Figs 65-66)

Haptoncura sloanei Blackburn, 1903 (New South Wales). Epuraea sloani: Grouvelle, 1913.

*Type examined.* Lectotype, here designated, o' (NHML), "7273, N.S.W.", "Blackburn Coll., B.M. 1910-236", "Haptoncura sloanei Blackb.".

Comments to original description. Length 1.5, breadth 1.1, height 0.5 mm. Elongate oval, moderately convex dorsally and ventrally; unicoloured straw reddish; dorsum slightly shining and almost glabrous. Pronotum and elytra with punctures as large as eye facets; interspaces between them subequal or slightly greater than a puncture diameter, with regular cellular microreticulation. Antennal club about 1.5 times as long as wide. Elytra 1.2 times as long as their combined width and with apices almost transversely truncate to slightly oblique.

Diagnosis. This species is well characterized among the members of the subgenus by the comparatively wide and not very convex body as well as by the shape of the pronotum and elytral apices. In addition, this species has not so coarse punctation and somewhat smooth (not very contrasting) microreticulation in contrast to other species of the subgenus. Its facets look larger than in other members of the subgenus, as large as in the species of Haptoncus.

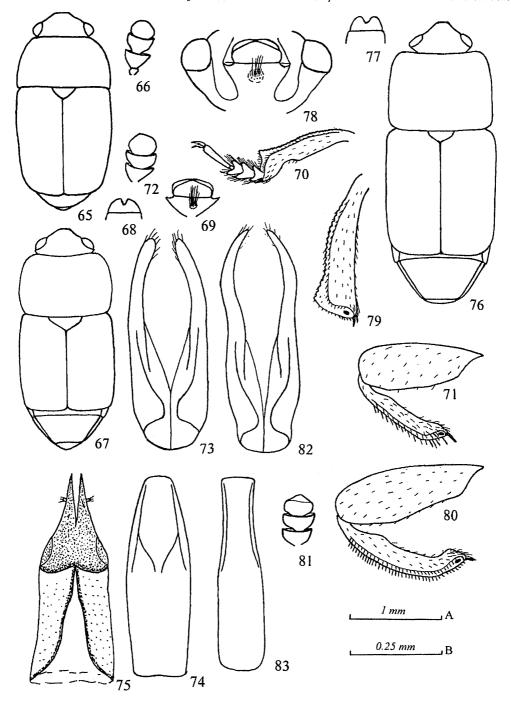
### Epuraea (Blackburnaea) sparsior (Blackburn, 1903)

Haptoncura sparsior Blackburn, 1903: 114 (New South Wales).

- ? Haptoncura darwinensis Blackburn, 1903: 115 (Northern Territory).
- ? Epuraea darwinensis: Grouvelle, 1913. Epuraea sparsior: Grouvelle, 1913.

Types examined. Lectotype of H. sparsior, here designated, Q (NHML), "7275 N.S.W.", "Blackburn Coll., B.M. 1910-236", "Haptoncura sparsior Blackb."; lectotype of H. darwinensis, here designated, Q (NHML), "T. 3931 N.T.", "Blackburn Coll. B.M. 1910-236", "Haptoncura darwinensis Blackb."

Comments to description. Lectotype of H. sparsior: length 2.1, breadth 1.0, height 0.5 mm. Lectotype of H. darwinensis: length 1.7, breadth 0.8, height 0.5 mm. Reddish to light brown with somewhat lighter appendages and darkened prescutellar parts of elytra; dorsum with a faint fat lustre and invisible pubescence. Antennal club about 1.5 times as long as wide. Elytra widest at the middle and with obliquely truncate apices.



Figs 65-68. 65-66, Epuraea (Blackburnaea) sloanei, lectotype: 65, body, dorsal; 66, antennal club; 67-75, Csiromenus glaber sp. n., (67-74, ♂; 75, ♀): 67, body, dorsal; 68, fore part of frons and labrum; 69, mentum, ventral; 70, protibia, dorsal; 71, mesofemur and tibia, ventral; 72, antennal club; 73, penis trunk, dorsal; 74, tegmen, ventral; 75, ovipositor, ventral; 76-83, C. histeroides sp. n., ♂: 76, body, dorsal; 77, fore part of frons and labrum; 78, mentum, ventral; 79, protibia, dorsal; 80, mesofemur and tibia, ventral; 81, antennal club; 82, penis trunk, dorsal; 83, tegmen, ventral. Scales: A – to Figs 65, 67, 76; B – to Figs 66, 68-75, 77-83.

Diagnosis. This species is very similar to E. uniformis differing from it only in lighter coloration of somewhat more robust and more convex body (1.4-1.9 mm), with pronotum about twice as wide as long (in E. uniformis narrower) and elytra at most 1.2 times as long as their combined width. All characters are also variable in both E. sparsior and E. uniformis; darker specimens of the first and lighter specimens of the second look more or less different in the shape of antennal club. See also notes to E. eyrensis and E. tenuiclava sp. n.

Note. The lectotypes of *H. sparsior* and *H. darwinensis* show only differences in the body size and coloration of antennal club (first with darkened club and second as well as most of examined specimens with yellowish club). Both names were proposed in the same publication; *H. sparsior* is selected here as the probable senior synonym.

Distribution. This species was collected in Northern Territory and the Eastern Australia (Queensland, New South Wales, Australian Capital Territory).

### **Epuraea (Blackburnaea) tenuiclava** sp. n. (Figs 60-64)

Holotype. o' (ANIC), Western Australia, "Nannup, WA, 28.ix.65, E. Britton".

Paratypes. 58 spec. (ANIC, ZISP, ZMB, ZMO) with labels as in the holotype; 12 spec. (ANIC, ZISP), "Porongorupe, WA, 2.x.1975, F.H. Uther Backer"; 10 spec. (ANIC, ZISP), "Denmark, W.A., Walpole Rd., 24.ix.65, E. Britton"; 5 spec. (ANIC, ZISP), "Deepdene, Karridale, W.A., 18 Jan 1967, M.S. Upton"; 10 spec. (ANIC, ZISP), "Rest Point, Walpole, W.A., 9 Oct. 1970, D.H. Colless"; 1 spec. (ANIC), "1 mi. E of Jewel Cave Augusta, W.A., 3 Oct.1970, D.H. Colless"; 2 spec. (ANIC), "Northeliffe Stn., nr. Pinjarra, W.A., ix.65, E. Britton"; 1 spec. (ANIC), "Augusta, W.A. (34.198 115.10E), 3 km NW, 13.xi.69, by beating, E. Britton".

Description of of, holotype. Length 1.8, breadth 0.8, height 0.4 mm. Moderately convex dorsally and ventrally; dark brown with darker prescutellar and apical parts of elytra, metasternum and abdomen, and with light reddish appendages; slightly shining; dorsum with moderately conspicuous yellowish grey hairs somewhat longer than distance between their insertions; underside with sparser and less conspicuous pubescence.

Head and pronotum with distinct punctures markedly smaller than eye facets; interspaces between them subequal to 3 puncture diameters, with smooth cellular microreticulation. Elytra with shallower and smaller punctures than those on head and pronotum, but interspaces between them with very similar mi-

croreticulation. Underside with extremely small and very sparse punctures, very smoothly microreticulated.

Head evenly convex and about as long as distance between eyes. Labrum with a short and wide median excision. Antennae somewhat longer than head width; their club composing 2/7 of total antennal length, elongate, about twice as long as wide. Pronotum slightly less than twice as wide as long, subtruncate at fore and hind edges, arcuate at unexplanate sides, widest in basal third. Elytra about 2.5 times as long as pronotum, almost 1.3 times as long as their combined width, with obliquely truncate apices. Pygidium with truncate apex, from under which a widely rounded apex of anal sclerite is far projecting.

Antennal grooves scarcely expressed only at sides on mentum. Last labial palpomere about as long as wide and somewhat narrowed to apex. Prosternal process rather curved along coxae, strongly widened and subcarinate before transverse apex. Distance between mesocoxae subequal to and that between metacoxae 3 times as great as distance between procoxae. Metasternum slightly convex and with shallowly emarginate hind edge between coxae. Hypopygidium widely rounded at apex.

Legs narrow and of usual outline; pro- and mesotibiae somewhat wider than antennal club; protarsi about 0.6 times as wide as protibiae.

Aedeagus weakly sclerotized.

Female. Differs from male only in widely rounded to subtruncate pygidial apex and lack of anal sclerite beyond it. Ovipositor rather weakly sclerotized and with usual shape of sclerites.

Variations. Length 1.6-2.1 mm. The examined specimens show a low level of variability, although dorsal punctures of some paratypes are larger than in the holotype, almost as those in *E. uniformis*.

Diagnosis. This new species is characterized by the rather small and slender body and particularly by the antennal club narrowest among the members of the subgenus. It is rather similar to E. uniformis in the characters of punctation and sculpture of dorsum, but the outline and coloration of its body are similar to those in E. eyrensis, and its pubescence more resembles that of E. lindensis. The new species differs from E. uniformis in the bicolorous dorsum, less distinct and irregular punctation, well raised and comparatively conspicuous pubescence, markedly narrower antennal club and tibiae: from E. evrensis in much smaller body with finer, less regular and markedly sparser dorsal punctation, yellowish appendages, much

narrower legs and especially antennal club; from *E. lindensis* in smaller, much darker and more convex body, more distinct punctation and less contrasting microreticulation on dorsum, and somewhat narrower antennal club.

The new species is similar also to E. sparsior, but differs from it in slenderer body, much lighter appendages, finer and less regular punctation, well raised dorsal pubescence, narrower appendages and especially in the narrower antennal club. It differs also from E. montrouzieri in the darker body coloration, denser and less regular punctation, well raised and comparatively conspicuous pubescence. Finally, this new species can be compared with E. gilloglyi, but these species are well distinguished by the pronotal and elytral sides, elytral apices, features of punctation, sculpture and pubescence. In addition, the latter, in contrast to E. temiclava, has a characteristic colour pattern and the antennal club is at most 1.5 times as long as wide.

Etymology. The name of this new species is formed from the Latin words "tenuis" meaning "fine", "narrow" and "clava" meaning "cudgel", "stick".

### **Epuraea (Blackburnaea) uniformis** (Blackburn, 1891)

Haptoncurina uniformis Blackburn, 1891 (Victoria). Epuraea uniformis: Grouvelle, 1913.

Types examined. Lectotype (NHML), here designated, "T 3636 Al.", "Australia, Blackburn Coll. B.M. 1910-236", 5 paralectotypes (SAM), "Victoria, Blackburn", "uniformis Blackburn", "co-type".

Comments to description. Length 1.4-2.1 mm. Dorsum almost always unicoloured dark brown to nearly black, with subuniform punctation and sculpture. Metasternum and abdomen more or less darker than dorsum, but appendages much lighter, reddish to yellowish. Dorsum with rather sparse, very short and frequently rather conspicuous yellowish hairs; underside with denser, longer but much less conspicuous hairs. Head and pronotal surface with very distinct punctures somewhat smaller than eye facets, interspaces between them 3-5 puncture diameters, with very fine and smooth cellular microreticulation. Elytra usually as punctured and sculptured as head and pronotum or with somewhat smaller and rarely somewhat sparser punctures. Pronotum frequently widest at base and gently arcuately narrowed to apex. Elytra with very gently curved sides and transversely or slightly obliquely truncate apices. Last labial palpomere scarcely longer than

wide and slightly narrowed to apex. All tibiae subequal and about as wide as antennal club.

Diagnosis. This species is well distinguished due to the combination of the following characters: body rather elongate (subelliptic) and about twice or more than twice as long as wide; dorsum with very uniform coloration, very distinct punctures and sculpture of integument; pronotum less than twice as wide as long; elytra almost 2.5 times as long as pronotum and about 1.5 times as long as their combined width; antennal club 1.5 times as long as wide; hairs on dorsum extremely short. Differences between E. unicolor, E. sloanei and E. sparsior look like intraspecific rather than specific, and a future study should clarify this problem. See also notes to and diagnoses of E. eyrensis, E. sparsior, E. tenuiclava sp. n.

Distribution. This species was collected in Queensland, New South Wales, Australian Capital Territory, Victoria, South Australia and Tasmania.

#### Key to species of the subgenus Blackburnaea subgen. n.

- 1. Dorsum with extremely fine (hardly conspicuous) and rather long hairs (about twice as long as distance between their insertions); elytra only about 1.12 times as long as their combined width; body chestnut brown, not infrequently sides of pronotum and distal parts of elytra markedly lighter (in this case a dark subapical spot remains on each elytron). 1.3-1.8 mm ..... E. (B.) gilloglyi nom. n.

- Hairs on dorsum not longer than distance between their insertions or only slightly longer . . . . . . . 4
- 3(2). Head and pronotum with intervals between smaller punctures broader than a puncture diameter and with more or less contrasting and fine cellular microreticulation (almost alutaceous); antennal club subparalellsided and more than 1.5 times (almost twice) as long as wide; pronotum widest at base and distinctly narrowed anteriorly, less steeply sloping at narrowly explanate sides; body slenderer and usually straw-yellow. 1.9-2.5 mm... E. (B.) lindensis
- Head and pronotum with intervals between larger punctures not broader than a puncture diameter (usually narrower) and with smoothed and finer cellular microreticulation; antennal club elongate oval and about 1.5 times or less as long as wide; pronotum more subquadrate, rather steeply sloping at not explanate sides; body much more robust and usually chestnut brown (sometimes rather dark). 2.2-3.0 mm
- 4(2). Body larger (1.7-2.6 mm) and more robust; head and pronotum with distinct punctures separated by about 1.0-1.5 puncture diameters; elytra with slightly finer and sparser punctation than that on head and pronotum; dorsum with hairs about as long

- as distance between their insertions; antennal club almost twice as long as wide; body unicoloured, light chestnut brown ..... E. (B.) eyrensis
- 5(4). Antennal club very narrow and subparalellsided, about twice as long as wide; dorsum with hairs about as long as distance between their insertions; punctures on head and pronotum much larger and markedly more distinct, larger and denser than those on elytra; dorsum usually dark brown with more darkened prescutellar parts of elytra. 1.6-2.1 mm....
- 6(5). Body slightly convex and straw-yellow; microreticulation on dorsal sclerites rather contrasting; elytral apices rather truncate than oblique; head and pronotum with finer punctures. 1.5 mm .......
- Body rather convex; elytral apices distinctly oblique; head and pronotum with coarser punctures ..... 7
- 7(6). Body dark brown to almost black (rarely light brown); antennal club subparallelsided, almost twice as long as wide. 1.4-2.1 mm . . . . E. (B.) uniformis
- Body reddish to light brown; antennal club rather elongate oval, about 1.5 times as long as wide ... 8
   8(7). Body markedly slenderer; pronotum widest at
- 8(7). Body markedly slenderer; pronotum widest at hind corners and with sides almost rectilinearly narrowing anteriorly. 1.7-1.8 mm

#### Subgenus Strophoraea subgen. n.

Type species: Epuraea (Strophoraea) notatipennis sp. n. Description. Body elongate, medium-sized, moderately convex dorsally and weakly so ventrally, darkened and well pubescent. Surface with usual punctation and sculpture on head, pygidium and underside, but almost microgranulose on pronotum and elytra. Head transverse, dilated over antennal insertions and with comparatively small eyes comprising rather small facets. Labrum far projecting, with a moderately deep and wide excision. Mandibles moderately raised, with acute and moderately curved apices. Last labial palpomere transverse and strongly widened to apex. Antennae somewhat longer than head width, with 3-segmented rather compact club. Pronotum gently arcuate at sides, shallowly emarginate at fore edge, with not projecting and rounded hind corners. Scutellum subtriangular, narrowly rounded at apex. Elytra incomplete, narrowly explanate and leaving distal part of pygidium uncovered. Pygidium of male with subtruncate apex and that of female rounded at apex. Anal sclerite far projecting beyong apex of pygidium. Mentum of usual shape. Antennal grooves with very distinct edges and rectilinearly convergent; postocular fossae not expressed. Prosternal process strongly curved between coxae before apex. Distance between mesocoxae less than and that between metacoxae greater than that between procoxae. Mesosternum moderately excavate, without carina. Metasternum with excised hind margin between coxae and submesocoxal lines slightly deviating from hind edge of coxae. Epipleura incomplete, weakly elevated laterally. Pro- and mesotibiae without prominent outer subapical corner. All female tibiae simple. Male pro- and mesotibiae curved before apex inwards. Femora of usual shape, but male metafemur emarginate at hind edge. Tarsi moderately dilated; claws simple. Genitalia of both sexes of generalized structure.

Diagnosis. This new subgenus is well characterized by the frons dilated over antennal insertions, comparatively large antennal club, transverse and strongly widened apically last labial palpomere, rectilinear antennal grooves, microgranulose surface on pronotum and elytra, lack of prominent outer corner and presence of characteristic sexual dimorphism in pro- and mesotibiae. Frons dilated over antennal insertions is usual among many Cryptarchinae; this character is known from some Meligethinae and Nitidulinae, but the mentioned dilatations of frons in Strophoraea subgen. n. is more unusual character among Epuraeinae: only representatives of the subgenera Epuraeanella and Amedanyraea Kirejtshuk & Pakaluk, 1996 have more or less raised dilatations of frons. Punctation and sculpture of dorsum in this new subgenus are somewhat similar to those in E. (Micruria) submicrurula Reitter, 1884 and E. (Epuraea) mestsheryakovae Kirejtshuk, 1992 from the Palaearctic fauna, E. (E.) linearis Mäklin, 1853, E. (E.) vultuosa sp. n. and E. (E.) prolixa Sharp, 1890 from North and Central Americas, E. (E.) waterhausei Grouvelle, 1908 and E. (E.) riedeli Kirejtshuk, 1998 from the Himalayas; but these features never have the same development as in E. (S.) notatipennis sp. n. and other above mentioned characters of all these species from the Northern Hemisphere form a different combination in each case. Transverse last labial palpomeres are usual among many anthophagous representatives of Epuraeinae, however, most of these anthophagous forms with the transverse palpomeres never have such characters of integument and sexual dimorphism in pro- and

mesotibiae as E. (S.) notatipennis sp. n. The rectilinearly convergent antennal grooves are not characteristic for other Epuraea s. lato and quite rarely occur in other Epuraeinae, although some species of the pumila group in the subgenus Epuraea (Kirejtshuk, 1998b) have unclearly and weakly outlined ones which look like rectilinearly convergent. The shape of tibiae and the sexual dimorphism in pro- and mesotibiae of the type species of this new subgenus are quite peculiar, although each of their characters occurs in different species of some groups of Epuraeini. Only Stauromenus nitidissimus gen. et sp. n. has tibiae somewhat similar to those in E. (S.) notatipennis sp. n., but many characters of the new genus are very different from those in this subgenus (see below).

Etymology. The name of this new subgenus is formed from the Greek "strophe" meaning "turn", "change" and the second half of the generic name "Epuraea".

### **Epuraea (Strophoraea) notatipennis** sp.n. (Figs 27-34)

Holotype. o' (CMNO), "New Caledonia, Mont Koghis, Auberge, 26.VII-13.VIII.1978, S. & J. Peck, 500 m, dung traps, rainforest".

Paratypes. 3 spec. (CMNO, ZISP) with labels as in the holotype; 2 spec. (CMNO, ZISP), "Col d'Amieu, 400 m, 31.VII-7.VIII.78, S. & J. Peck, dung traps"; 2 spec. (CMNO), "13 km NE Poya, Grottes d'Adio, 6.VIII.78, S. & J. Peck, 200 m, dung traps"; 3 spec. (CNC, ZISP), "N of La Foa, Col d'Amieu, 500 m, 7.VIII.1978, S. & J. Peck, Berlese rainforest litter".

Description of of, holotype. Length 2.8, breadth 1.3, height 0.7 mm. Moderately convex dorsally and weakly so ventrally; dorsum almost pitchy blackish with 3 small reddish spots on each elytron (a pair of elongate spots at shoulder and an oval one behind the middle); fore part of head, its appendages (mouthparts and antennae), pronotal sides and narrow stripes at head base and scutellum, scutellar and lateral edges of elytra lighter (nearly reddish); antennal clubs and legs almost yellow; underside and coxae dark brown; dorsum and underside with a slight shine; dorsum with moderately conspicuous, short and dense, subrecumbent, yellowish grey hairs about 1.5 times as long as distance between their insertions; pygidium and underside with less conspicuous but shorter and denser hairs.

Head surface with distinct punctures about as large as eye facets; interspaces between them less than half a puncture diameter, smooth and shining in fore half, but densely alutaceous in hind half. Pronotum and elytra almost microgranulose, with extremely dense,

very small and distinct punctures; very narrow interspaces between them microreticulated to coarsely alutaceous. Pygidium with surface somewhat similar to that on pronotum and elytra, but punctation less distinct and sparser. Prosternum scarcely punctured and finely alutaceous. Other sclerites of underside with shallow punctures (less distinct than on dorsum), intervals between them markedly greater than a puncture diameter, smoothly microreticulated.

Head 0.78 times as long as distance between eyes, weakly convex, with somewhat raised temples situated far behind eyes. Antennae somewhat longer than head wide, antennomere 2 almost 2/3 as long as antennomere 3 and a little longer than antennomere 4, their club about 1.25 times as long as wide, composing nearly 1/4 of total length. Labrum rather projecting anteriorly and with a not deep excavation between lobes. Pronotum subdepressed at disc and evenly sloping to narrowly explanate sides (more narrowly explanate than antennal flagelli wide), with narrowly rounded fore and distinctly angular hind corners; its fore edge shallowly emarginate and hind one almost stright. Elytra slightly longer than their combined width, moderately steeply sloping to sides (which are as narrowly explanate as pronotal ones) and with obliquely rounded apices. Pygidium scarcely exposed from under elytral apices and with subtruncate apex angles, from under which a narrowly rounded apex of anal sclerite is exposed.

Mentum 3 times as wide as long, with rounded sides. Prosternal process strongly curved between coxae before apex, which is strongly widened and subtruncate at apex, 1.5 times as wide as antennal club. Distance between mesocoxae somewhat less and that between metacoxae twice greater than that between procoxae. Metasternum subflattened before subangular hind margin between coxae. Ventrite 1 much longer than hypopygidium, the latter with subtruncate apex. Epipleura at base as wide as antennal club.

Tibiae about half as wide as antennal club; pro- and mesotibiae strongly curved before apex and with a subapical excision along inner edge; metatibia subtriangular; outer edge of meso- and metatibiae with rows of dense, short, thin setae. Profemur a little more, but meso- and metafemora somewhat less than 2.5 times as wide as corresponding tibiae; pro- and mesofemora of usual shape; metafemur with concave hind edge. Protarsus slightly narrower, meso- and metatarsi more than twice narrower than corresponding tibiae; claws rather long and simple.

Tegmen moderately and penis trunk weakly sclerotized.

Female. Differs from male in narrower protarsus, simple pro- and mesotibiae, convex hind edge of metafemur, moderately rounded pygidial and hypopygidial apices. Ovipositor moderately sclerotized.

Variations. Length 2.5-3.1 mm. General coloration varies from straw reddish to nearly black. A great level of variability is observed in coloration: lightened part of dorsal sclerites, however, 3 discal spots on each elytron almost always raised (although the lightest specimen is almost unicolored straw reddish). Sometimes male anal sclerite entirely concealed under pygidium and level of concavity of hind edge of male metafemur rather variable.

Etymology. The name of this new species is formed from the Latin words "notatus" meaning "having characters", "significant" and "penna" meaning "feather", "wing".

### Genus Stauromenus gen. n.

Type species: Stauromenus nitidissimus sp. n.

Description. Body oval, small, weakly convex dorsally and ventrally, darkened; dorsum subglabrous and underside inconspicuously pubescent. Integument with distinct and very sparse punctation and more or less reduced sculpture on interspaces (up to completely smooth pronotum and elytra). Head strongly transverse, with frons slightly projecting anteriorly and without anterior border ("clypeus"), medium-sized eyes comprising rather large facets. Labrum rather far projecting, with a moderately deep and narrow median excision. Mandibles strongly raised, with acute and moderately curved bidentate apices. Last labial palpomere transverse and strongly widened to apex. Antennae somewhat longer than head width, with 3-segmented, elongate and rather loose club. Pronotum subparallel-sided in basal half, scarcely emarginate at fore edge and subtruncate at hind edge, with not projecting and rounded hind corners. Scutellum subtriangular, with a rounded apex. Elytra incomplete, with widely explanate sides and truncate apex, leaving pygidium or also preceding tergite uncovered. Pygidium of male truncate and that of female rounded at apex. Anal sclerite far projecting beyond apex of pygidium. Mentum arcuately rounded to emarginate fore edge. Antennal grooves with very distinct edges and rectilinearly convergent; postocular fossae not expressed. Prosternal process slightly curved between coxae before flattened apex. Distance between mesocoxae and that between metacoxae greater than that between procoxae. Mesosternum scarcely concave, without carina. Metasternum with emarginate hind margin between coxae and submesocoxal lines closely following hind edge of coxae. Epipleura incomplete and weakly elevated laterally. All tibiae rounded at outer subapical corner. All female tibiae simple and subtriangular. Male proand mesotibiae simple; metatibiae narrowest and longest. Female femora of usual shape, but male metafemur rather curved, with concave hind edge. Tarsi moderately dilated; claws simple. Genitalia of both sexes of generalized structure.

Diagnosis. This new genus is well characterized by subflattened and wide body with smooth integument and reduced pubescence, loose antennal club, comparatively long mandibles, mentum narrowed to apex, submesocoxal lines not deviating from hind edge of coxal cavities, transversely abrupt elytral apices, rounded outer subapical corner of tibiae. It is most similar to some representatives of the genus *Propetes* Reitter, 1875, in particular to species of the subgenus Mandipetes Kirejtshuk, 1997, in loose antennal club, long mandibles, mentum narrowed to apex, submesocoxal lines not deviating from hind edge of coxal cavities, transversely abrupt elytral apices, leaving 2 last tergites uncovered; these genera share also the shortened fore part of frons and labrum far projecting anteriorly. But in contrast to the Propetes species, S. nitidissimus sp. n. has subflattened body, distinct antennal grooves and more curved prosternal process with flattened apex.

The species of this new genus has some resemblance to representatives of the subgenus *Trimenus* Murray, 1864 (genus *Tetrisus* Murray, 1864) and genus *Tritesus* Heller, 1916 differing from both in the much smaller body, more arcuate sides and unprojecting hind corners of pronotum, loose antennal club, flattened and truncate apex of prosternal process, very sparse punctation and reduced sculpture of integument; in addition it differs from the first also in the not explanate pronotal sides and lobed metatarsomeres 1-3, and from the second in the widely explanate elytral sides.

Finally, a marked feature of the new genus is the rather shortened elytra leaving 2-3 tergites uncovered. This feature is characteristic of the tribe Taenioncini (subfamily Epuraeinae) and subfamilies Carpophilinae and Cillaeinae, but very unusual among Epuraeini s. str. Some Epuraea (Haptoncus) and Propetes s. lato have rather short elytra, but never so shortened as in Stauromenus gen. n.

Bionomy. Specimens of the type species of this genus were collected at leaf axes of Pandanus, where they seem to live at oozing liquid not infrequently concentrated in such places. Such a habitat can provide with food and substrate not only imagines, but also larvae of S. nitidissimus sp. n.

Note. Like S. nitidissimus sp. n., the members of Propetes are associated with Pandanus, although species of Propetes have anthophilous mode of life. Taking into consideration also a significant similarity of these taxa (see above), their very close relationship can be supposed with a high level of probability.

Etymology. The name of this new genus is formed from the Greek words "stauros" meaning "cross" and "menos" meaning "strength", "boldness", "courage", "vitality", "effort".

### Stauromenus nitidissimus sp. n.

(Figs 35-45)

Holotype. of (ANIC), "Christmas Island, 10.28-29S 109.39-40E, vis. of Grants Well, 13-28 April 1969, J.F. Lawrence", "leaf axis of *Pandanus*".

Paratypes. 7 spec. (ANIC, ZISP) with labels as in the holotype.

Description of  $\sigma$ , holotype. Length 2.5, breadth 1.0, height 0.4 mm. Weakly convex dorsally and ventrally; dorsum, pygidium and legs dark chestnut brown; mouthparts, antennal stems (flagelli) and tarsi reddish to almost yellow; antennal club blackish; rather shining; dorsum with very short and conspicuous yellowish grey hairs 3 times shorter than distance between their insertions; pygidium and underside with less conspicuous but longer hairs.

Head surface with distinct punctures, about as large as eye facets, interspaces between them about 1.5 puncture diameters, with very smooth cellular microreticulation. Pronotum and elytra with punctures about as large as those on head, but interspaces between them 3-5 puncture diameters, with smooth cellular microreticulation. Pygidium and underside with shallow and very small punctures (here and there scarcely visible), intervals between them very finely and very densely microreticulated.

Head 0.8 times as long as distance between eyes, slightly and gently convex, with slightly raised temples just behind eyes. Antennae somewhat longer than head width; antennomeres 2-4 subequal and each somewhat longer than scape; antennal club about twice as long as wide, composing nearly 1/3 of total length. Labrum very far projecting anteriorly

and with a deep and narrow excision between lobes. Pronotum weakly convex at disc and evenly sloping to unexplanate sides, with widely rounded fore and hind corners; its fore edge subtruncate and hind one almost straight. Elytra slightly longer than their combined width, rather gently sloping to sides (as widely explanate as width of antennal club) and with transversely truncate apices. Pygidium completely exposed from under elytral apices, with subtruncate apex and rounded lateral angles, from under which a narrowly rounded apex of anal sclerite is exposed.

Mentum somewhat less than twice as wide as long, almost rectilinearly narrowed anteriorly. Prosternal process with strongly widened apex, which is flattened and truncate at apex, 1.5 times as wide as antennal club. Distance between mesocoxae subequal to that between metacoxae, 1.5 times that between procoxae. Metasternum subflattened before emarginate hind margin between coxae. Ventrite 1 much longer than hypopygidium, the latter with subtruncate apex. Epipleura at base as wide as antennal club.

Pro- and metatibiae slightly narrower than antennal club; mesotibia somewhat wider and somewhat arcuately curved; outer edge of meso- and metatibiae with scarcely expressed rows of very short and scarcely conspicuous setae. Pro- and metafemora about 2.5 times, but mesofemur about 1.5 times as wide as corresponding tibiae; pro- and mesofemora of usual shape; metafemur somewhat curved and with concave hind edge. Protarsus slightly narrower, meso- and metatarsi more than twice narrower than corresponding tibiae; claws rather long and simple.

Aedeagus moderately sclerotized; penis with a wide anterior apodeme and well sclerotized armature of inner sac. *Spiculum gastrale* connected with weakly sclerotized ventral plate by membraneous commissure.

Female. Differs from male in narrower protarsus, simple mesotibia, convex hind edge of metafemur, moderately rounded pygidial and hypopygidial apices. Ovipositor rather short and weakly sclerotized.

Variations. Length 2.2-2.5 mm. Level of variability of the type series is rather low. A certain variability is observed in coloration and punctation of integument. Elytra of some paratypes cover entire abdomen except a part of pygidium, but those of others leave 2 tergites entirely uncovered.

Etymology. The species name is formed from the Latin "nitidus" meaning "shining", "splendid", "brilliant".

### Tribe TAENIONCINI Kirejtshuk, 1998

The tribe is proposed and characterized by Kirejtshuk (1998b), but in this publication much less than half of species known to the authors were included (4 genera and 18 species). In this paper, 2 new genera with 4 new species are added. The generic classification of this tribe needs improvement; some generic rearrangement of the proposed groups can be expected.

#### Genus Csiromenus gen. n.

Type species: Csiromenus calderi sp. n.

Description. Elongate, moderately or rather convex dorsally and ventrally. Dorsum distinctly and sparsely punctured, finely pubescent, without ciliae along pronotal and elytral sides. Head short, with large eyes comprising normal or moderately large facets. Antennae not very long, with 3-segmented club. Last maxillary and labial palpomeres narrowed to apex. Antennal grooves distinctly outlined and rectilinearly convergent. Pronotum subquadrangular, with flat disc and rather steeply sloping to scarcely explanate lateral edges, its fore corners widely rounded and slightly projecting, hind corners with rounded apex. Scutellum subtriangular. Elytra somewhat shortened, flattened along suture, steeply sloping to narrowly explanate lateral edges and with transversely truncate apices leaving well sclerotized pygidium and preceding tergite uncovered. Pygidium truncate or emarginate at apex in male (anal sclerite moderately projecting posteriorly from under pygidial apex) and more or less rounded at apex in female. Prosternal process medially curved along coxae and approached to moderately excavated and flattened surface of mesosternum. All pairs of coxae subequally and narrowly separated. Metasternum convex but with a median depression; its hind edge between coxae angularly excised. Submesocoxal lines arcuately deviating from the hind edge of cavity only at fore corner of metasternum. Submetacoxal line not raised. Ventrite 1 about as long as hypopygidium, the latter rounded at apex. Epipleura fairly well elevated outwards. Legs moderately long and stout. Femora simple, with fore and hind edges gently curved, although in some species hind edges slightly concave. Protibia subtriangular, with prominent fine crenellation and a subapical process at outer edge; meso- and metatibiae narrow, with rows of more or less stout spines along their outer edge; pro- and mesotibiae of some species with sexual dimorphism. Protarsomeres

1-3 with raised lobes, meso- and metatarsomeres 1-3 very narrow and scarcely lobed; claws more or less toothed at base. Aedeagus rather long, with heavily sclerotized lateral lobes of tegmen and scarcely sclerotized penis trunk. Ovipositor strongly modified, with deeply forked apex and styli shifted aside it.

Diagnosis. It contrast to other genera of Taenioncini, this new genus is characterized by the histeroid habitus, not large eyes, well outlined antennal grooves and toothed tarsal claws (although tarsal claws of some *Taeniolinus* are slightly bulbous or toothed at base and antennal grooves of T. macroculatus sp. n. nearly as expressed as those in the considered genus). It is most similar to Carpocryraea Kirejtshuk, 1998 clearly differing from the latter in the elongate body with subflattened discs of pronotum and elytra, elongate elytra (longer than their combined width) with transversely truncate apices, and toothed tarsal claws. Carpocryraea modiglianii (Grouvelle, 1897) has a somewhat intermediate position between the type species of Carpocryraea, C. familiaris (Grouvelle, 1897), and the species considered in the new genus as it has, on the one hand, elongate oval body with short elytra, uncovered tergite VI and short aedeagus as those in C. familiaris, but on the other hand, rounded hind corners of pronotum, prosternal process not strongly curved along coxae and forked apex of ovipositor, as those in the species included here in the new genus.

The species of Sciromenus gen. n. are fairly well distinguished from those of *Taenioncus* and Raspinotus by the dorsum with distinct and sparse punctation, interspaces with reduced sculpture to smooth and shining, weakly raised pubescence, terminal labial palpomere narrowed to apex and strongly modified ovipositor. They also differ from representatives of Taeniolinus in the moderate size of eyes composed of not very large facets, concave fore edge of pronotum, narrowed apices of the terminal labial palpomere and shorter penis trunk. Finally, Sciromenus is very distinct from Eutaenioncus gen. n. due to its much wider and not strongly convex body with not so large eyes composed of not so large facets, emarginate fore edge of pronotum, narrowed apices of terminal labial palpomeres, toothed tarsal claws and lack of any character of sexual dimorphism in structure of metasternum and legs.

Bionomy. Representatives of Csiromenus gen. n. are very rare in collections; according to the labels pinned under specimens, they were captured mostly in forest litter, intercept and light traps.

Etymology. The name of this new genus is formed from the C.S.I.R.O. (Commonwealth Scientific Industrial Research Organization of Australia) and "menus" (see above etymology of Stauromenus gen. n.).

### Csiromenus calderi sp. n.

(Figs 84-92)

Holotype. of (ANIC), Australia, Queensland, "16.44S 145.39E, Ellis Beach, Q, 25 km NNW of Cairns, E.B. Britton", "Berlesate ANIC 770, litter under Notofagus moorei".

Paratypes. Australia: New South Wales: 1 of (ZISP), "28.22S 153.03E, Wiangaree S.F., NSW, 1050 m, 10-12 Feb.1983, T. Weir & A. Calder", "by sweeping"; Queensland: 1 \( \text{Q}(M), "NE QLD, Mt. Demi, 7.0 km SW of Mossman, 26 April 1983, G.B. Monteith, D.K. Yeates", "QM, Berlesate N 548, 16.30S 145.19E, Rainforest, 900-1000 m, litter".

Description of of, holotype. Length 2.9, breadth 1.2, height 0.8 mm. Elongate, moderately convex dorsally and ventrally; almost black; anterior part of head, mouth appendages, antennal club and legs reddish dark brown; antennal flagelli and tarsi nearly reddish; dorsum rather shining and underside with a fat lustre; dorsum clothed with moderately short and weakly conspicuous, rather sparse and recumbent, yellowish white hairs slightly longer than intervals between their insertions, but uncovered tergites and underside with more conspicuous and much denser pubescence.

Head with distinct and regular oval punctures somewhat larger than eye facets; interspaces between them about half a puncture diameter and with reduced fine microreticulation (almost smooth). Pronotum as punctured and sculptured as head, but with somewhat larger punctures separated by nearly a puncture diameter. Elytra with punctures sparser than those on head and pronotum, separated by 1.3-1.7 puncture diameters, with interspaces smoother than those on head. Pygidium and 2 apical ventrites with not quite regular and very dense punctures not larger than eye facet; extremely narrow interspaces between them finely and contrastingly microreticulated. Surface of tergite VI, pro-, metasternum and proximal ventrites nearly as that on head, with more or less distinct microreticulation. Mesosternum unpunctured, with almost microgranulate surface.

Head slightly convex at base and slightly concave between antennal insertions, scarcely shorter than distance between eyes, with not raised temples. Antennae somewhat longer than head width; their club about a third of total antennal length, 1.5 times as long as wide and with subequally long segments. Last labial

palpomere considerably longer than wide. Minimum distance between very distinct and deep antennal grooves behind mentum subequal to width of antennal club. Pronotum subquadrangular, narrowed to fore edge nearly from base, with flat disc and steeply sloping sides; hind corners right, with rounded apices; side border a little prolonged to base at its hind corners. Elytra 1.15 times as long as their combined width, with truncate apices forming a common transverse line.

Prosternal process medially curved along coxae and somewhat widened before medially convex apex with angular hind edge, which is considerably wider than antennal club. Distance between metacoxae equal to and that between mesocoxae somewhat less than that between procoxae (about 0.7 times the width of antennal club). Metasternum with very long median depression reaching level of mesocoxae.

Protibia strongly curved before the middle, with a very prominent subapical process; meso- and metatibiae narrow, with rows of moderately stout spines along outer edge; mesotibiae gently curved. Femora simple, profemur with emarginate fore edge, meso- and metafemora with slightly emarginate hind edge; profemur about twice, meso- and metafemora 2.5 times as wide as corresponding tibiae. Protarsi 0.6 times as wide as antennal club; meso- and metatarsi much narrower and scarcely lobed; claws strongly toothed at base.

Tegmen heavily and penis trunk moderately sclerotized.

Female. Externaly differs from the male in widely rounded pygidial apex, subtriangular all tibiae narrower than antennal club, less prominent subapical process on protibiae, less depressed middle of metasternum, hypopygidium longer than ventrite 1. Ovipositor well sclerotized.

Variations. Length 2.7-2.9 mm. Some variability is observed in the punctation and microreticulation of integument. In the second examined male (paratype), head and entire underside reddish dark brown. Antennal club of both paratypes light reddish.

Diagnosis. This new species differs m other congeners in the coloration, punctation and sculpture of integument, shape of pronotum and femora, not prominent temples, peculiar prosternal process, antennae and antennal grooves, but especially in the lack of a fossa with sensilla or long setae behind male mentum as well as in other features of sexual dimorphism in metasternum and middle legs (see also diagnosis of *C. histeroides* sp. n.).

Etymology. The species is named in honour of A. Calder.

### Csiromenus glaber sp. n.

(Figs 67-75)

Holotype. of (ANIC), Australia, Queensland, "10.5 m up Whitfield RG., RD., Cairns, NQ, 28.10.70, J.G. Brooks", "Cairns, NQ, 10.70, G.B.", "B 134", "J.G. Brooks Bequest 1976".

Paratypes. Australia, Queensland: 11 spec. (ANIC, ZISP) with labels as in the holotype (one of the specimens without head and prothorax); 1 spec. (ANIC), "Whitfield RG., RD., c. 486 m, Q, 3.II.1970, at light, J.G. & J.A.G. Brooks"; 3 spec. (ANIC, ZISP), "Black Mt. RD., NQ, 4.11.67", "Kuranda, NQ, 11.67, G.B.", "J.G. Brooks Bequest 1976"; 1 spec. (ANIC), "N side of L. Tinaroo, N.Q., at light, 9.XI.66, E. Britton".

Description of o, holotype. Length 2.5, breadth 1.0, height 0.5 mm. Elongate, moderately convex dorsally and ventrally; pitchy brown to almost black; head, hypomera, epipleura, abdominal apex and legs more or less lighter, but anterior part of head, mouth appendages, antennae and tarsi nearly reddish; dorsum rather shining and underside with a fat lustre; dorsum clothed with very short but conspicuous, rather sparse and recumbent, yellowish white hairs significantly shorter than intervals between their insertions, but uncovered tergites and underside with conspicuous and much denser pubescence.

Head with more or less distinct and regular oval punctures about as large as eye facets; interspaces between them about half a puncture diameter or somewhat broader and with rather contrasting irregular microreticulation. Pronotum and elytra with distinct punctures markedly larger than eye facets, with interspaces about as broad as a puncture diameter, with very regular cellular microreticulation. Uncovered tergites and apical ventrites with not quite regular and dense punctures somewhat smaller than eye facets, interspaces between them about a puncture diameter, finely and contrastingly microreticulated. Prosternum densely and indistinctly punctured and with fine, dense and contrasting microreticulation. Metasternum about as punctured and sculptured as pronotum and elytra, but with more distinct and denser microreticulation. Mesosternum unpunctured and almost alutaceous.

Head slightly convex at base and slightly concave between antennal insertions, 0.85 times as long as distance between eyes, with slightly raised but distinct temples. Antennae somewhat shorter than head width; their club about subovoid, forming a third of total antennal length, 1.33 times as long as wide and with

labial ultimate segment longest. Last palpomere scarcely longer than wide. Antennal grooves indistinct and shallow, strongly convergent behind mentum. Several very long setae present behind mentum (between antennal grooves). Pronotum subquadrangular, subparallelsided in basal half, with slightly convex disc and steeply sloping sides; hind corners very widely rounded; lateral border scarcely prolonged to base at its hind corners. Elytra nearly as long as their combined width, with truncate apices forming a common transverse line.

Prosternal process medially curved along coxae and somewhat widened before subflattened apex with subtruncate hind edge, which is scarcely wider than antennal club. Distance between metacoxae slightly greater and that between mesocoxae slightly less than that between procoxae (about 0.7 times the width of antennal club). Metasternum subflattened.

Protibia deeply excised before dilated apex, with a moderately prominent subapical process; meso- and metatibiae narrow, with rows of sparse and stout spines along outer edge; mesotibiae gently curved; protibia at apex as wide as antennal club, meso- and metatibiae much narrower. Femora simple; profemur with fore edge, almost straight mesometafemora with slightly convex hind edge; profemur less than twice, mesometafemora nearly 2.5 times as wide as corresponding tibiae. Protarsi half as wide as antennal club; meso- and metatarsi much narrower and scarcely lobed; claws strongly toothed at

Tegmen heavily and penis trunk moderately sclerotized.

Female. Externaly differs from the male in the widely rounded pygidial apex, subtriangular all tibiae narrower than antennal club, less prominent subapical process on protibiae, lack of long setae behind mentum, hypopygidium longer than ventrite 1. Ovipositor well sclerotized.

Variations. Length 2.1-2.7 mm. Body coloration varies from almost reddish to pitchy brown (many paratypes are light brown) with lighter appendages, although lighter specimens look like unicoloured. Some variability is observed in punctation and microreticulation of integument, but dorsal punctation in all cases distinct and microsculpture more or less well developed.

Diagnosis. This new species differs from both congeners here described in the smaller body size, frequently lighter coloration, raised temples behind eyes, comparatively short antennae with subovoid club, convex hind edge of pronotum, shallow and indistict antennal grooves, shape of femora, subflattened prosternal process with subtruncate hind edge, long setae behind male mentum, male protibia and features of genitalia of both sexes.

Etymology. The name of this new species means "balding", "smooth", "bald".

### Csiromenus histeroides sp. n.

(Figs 76-83)

Holotype. o' (QM), Australia, Queensland: "NE QLD, 2.0 km W of Cape Tribulation (Site 4), 25 Sept. 1982, Monteith, Yeates & Thomson", "QM Berlesate, N 429, 16.05S 145.28E, Rainforest, 200 m, Sieved litter".

Description of o', holotype. Length 3.1, breadth 1.2, height 0.6 mm. Elongate, moderately convex dorsally and ventrally; head, pronotum and elytra dark chestnut brown, but pygidium, underside and most part of legs markedly lighter; mouthparts, antennae and tarsi reddish; dorsum rather shining and underside with a fat lustre; dorsum clothed with moderately long and weakly conspicuous, rather sparse and recumbent, yellowish white hairs slightly longer than intervals between their insertions, but uncovered tergites and underside with more conspicuous and much denser pubescence.

Head with distinct and regular oval punctures slightly larger than eye facets, interspaces between them almost a puncture diameter and almost smooth. Pronotum about as punctured and sculptured as head, but with somewhat larger punctures; interspaces more or less greater than a puncture diameter and with almost raised cellular microreticulation. Elytra with punctures sparser than those on head and pronotum separated nearly by 2 puncture diameters, interspaces as sculptured as those on pronotum. Uncovered tergites and 3 apical ventrites with not quite regular and shallow punctures (partly dislodged by tubercles) not greater than eye facets, narrow interspaces between them subequal to puncture diameter, finely and contrastingly microreticulated. Pro-, metasternum and proximal ventrites with not quite distinct punctures nearly as large as eye facets, with more or less distinct obliquely undulate microreticulation. Mesosternum unpunctured, with smooth microreticulation.

Head slightly convex at base and moderately concave between antennal insertions, slightly shorter than distance between eyes, with not raised temples. Antennae somewhat longer than head width; their club about 0.3 of total antennal length, 1.5 times as long as wide and with subequally long segments. Last labial

palpomere considerably longer than wide. Minimum distance between deep and rather distinct antennal grooves behind mentum half the width of antennal club. A round fossa with sensillae present behind mentum (between antennal grooves). Pronotum subquadrangular, narrowed to fore edge nearly from base, with flat disc and steeply sloping sides; hind corners widely rounded; side border scarcely prolonged to base at its hind corners. Elytra 1.1 times as long as their combined width, with truncate apices forming a common transverse line.

Prosternal process medially curved along coxae and somewhat widened before subcarinate apex with angular hind edge, which is considerably wider than antennal club. Distance between metacoxae equal to and that between mesocoxae somewhat less than that between procoxae (about 0.7 times the width of antennal club). Metasternum subflattened, with scarcely raised median depression in distal half.

Protibia slightly and regularly curved along inner edge, with a moderately projecting subapical process; meso- and metatibiae narrow, with rows of moderately stout spines along outer edge; mesotibiae gently curved. Femora simple, with convex fore and hind edges; profemur twice, meso- and metafemora 2.5 times as wide as corresponding tibiae. Protarsi 0.6 times as wide as antennal club; meso- and metatarsi much narrower and scarcely lobed; claws strongly toothed at base.

Tegmen heavily and penis trunk moderately sclerotized.

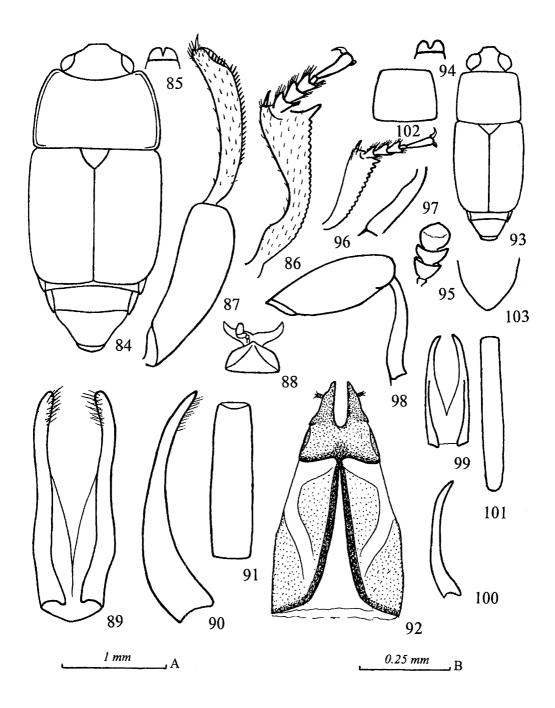
Diagnosis. This new species differs from the type species of the new genus in the less convex body, coloration, punctation and sculpture of integument, shape of pronotum and femora, less widely separated antennal grooves at base, a round fossa with sensilla behind mentum and especially features of sexual dimorphism in structure and tibiae.

Etymology. The name of this new species in formed from generic name *Hister* and Greek "eidos" meaning "habitus", "appearance", "image", "type", and respectively "similar" and "like".

#### Genus Eutaenioncus gen. n.

Type species: Eutaenioncus macroculatus sp. n.

Description. Body small, elongate, rather convex dorsally and ventrally. Dorsum distinctly and sparsely punctured, with very short and fine pubescence, without ciliae along sides. Head short, with very large eyes com-



Figs 84-103. 84-92, Csiromenus calderi sp. n. (84-91, &, 92, \$\varphi\$): 84, body with contour of bordered sides of pronotum, dorsal; 85, fore part of frons and labrum; 86, protibia and tarsus; 87, mesofemur and tibia; 88, mentum and labium, ventral; 89, tegmen, ventral; 90, id, lateral; 91, penis trunk, dorsal; 92, ovipositor, dorsal; 93-103, Eutaenioncus macroculatus sp. n. (93-101, &; 102-103, \$\varphi\$): 93, body, dorsal; 94, fore part of frons and labrum; 95, antennal club; 96, protibia and tarsus, dorsal; 97, mesotibia, dorsal; 98, metafemur and tibia, ventral; 99, tegmen, ventral; 100, id., lateral; 101, penis trunk, dorsal; 102, pronotum, dorsal; 103, apex of pygidium, dorsal. Scales: A – to Figs 84, 93, 102, 103; B – to Figs 85-92, 94-101.

posed of very large facets. Antennae moderately long, with 3 last segments simply clubbed. Last maxillary palpomere narrowed to apex, but labial ones nearly cup-like. Antennal grooves distinctly outlined and rectilinearly convergent. Pronotum subquadrangular, convex (but somewhat flattened at disc) and steeply sloping to unexplanate or scarcely explanate lateral edges with a distinct border; its fore and hind corners widely rounded. Scutellum subtriangular. Elytra somewhat shortened, with flat disc, steeply sloping to narrowly explanate lateral edges, with transversely truncate apices leaving 2 last (well sclerotized) tergites uncovered (pygidium and a part of preceding one). Pygidium with truncate apex in male (and anal sclerite shortly projecting posteriorly) and with more or less rounded apex in female. Underside nearly as in Sciromenus gen. n., but all pairs of coxae subequally separated, with small distance between them, and metasternum rather convex and without expressed median depression. Ventrite 1 shorter than hypopygidium, with rounded apex and scarcely expressed characters of sexual dimorphism. Epipleura fairly well elevated outwards. Legs simple, moderately long and narrow; femora with fore and hind edges gently curved; tibiae subtriangular and without any visible character of sexual dimorphism, profemora with rather prominent crenellation at outer edge, mesoand metafemora narrow, with rows of more or less stout spines along their outer edge. First 3 tarsomeres of all tarsi with raised lobes; claws narrow and bulbous at base or almost simple. Aedeagus rather long, with heavily sclerotized lateral lobes of tegmen (deeply excised in the middle) and scarcely sclerotized penis trunk.

Diagnosis. The type species of Eutaenioncus gen. n. has a very characteristic structure of head with very large eyes and dense contiguous punctation between them as well as extremely large last antennomere and rather wide prosternal process. It is most similar to species of Taeniolinus, but in addition to the mentioned differences it is quite distinct from them in the markedly slenderer and more convex body and comparatively larger crenellation at outer edge of protibia. In addition to the structure of head and prosternal process, the species of this new genus also differs from those of the Csiromenus gen. n. in the smaller and much slenderer body, subtruncate fore edge of pronotum, not narrowed apices of terminal labial palpomere, very long penis trunk and in the lack of any sexual dimorphism in the structure of metasternum and legs. This species differs from species of Taenioncus and Raspinotus in the sparse and distinct punctation, nearly smooth interspaces between punctures, reduced pubescence, bulbous at base claws, and very distinctly outlined antennal grooves.

Bionomy. As yet no information on biology of the type species of this new genus. Judging by the appearance (in particular, cup-like terminal labial palpomere, very large facets of comparatively large eyes, convex body), anthophilous mode of life may be suspected for imagines.

Etymology. The name of this new genus is formed from the Greek "eu" meaning "good", "true", "real", "genuine" and the generic name Taenioncus.

#### Eutaenioncus macroculatus sp. n.

(Figs 93-103)

Holotype. o' (ANIC from DPIM), Australia, Queensland, "Australia, N.Qld, 15 km WNW South Johnstone. Lt. trap, X.1986, Fay & Halfpanp".

Paratype. 1 9 (ZISP), same locality, "10.XII.1985, Fay & Halfpanp".

Description of  $\sigma'$ , holotype. Length 1.7, breadth 0.7, height 0.7 mm. Strongly convex; reddish yellow with dark large eyes; dorsum with very short, hardly conspicuous, subrecumbent yellowish hairs about twice shorter than interstices between their insertions; underside with somewhat longer and denser pubescence.

Head with distinct and regular punctures somewhat smaller than eye facets, interspaces between them 1/2-2/3 puncture diameter, with smoothed and dense, cellular microreticulation: between eyes, a transverse stripe bearing extremely dense, nearly contiguous punctures. Pronotum about as punctured as head, but somewhat more sparsely; interspaces between punctures much greater than a puncture diameter and with rather smoothed microreticulation. Elytral surface similar to that on pronotum, but punctures sparser and smaller, and cellular microreticulation less smoothed (nearly alutaceous). Pygidium and hypopygidium finely and distinctly punctured, very narrow intervals densely microreticulated. The remainder of underside with distinct punctures, 0.3 times as large as eye facets, separated on pro-, metasternum and ventrite 1 by 2-4 puncture diameters, and on ventrites 2-4 by about a puncture diameter.

Head concave, its length more than 1.5 times the distance between very large eyes composed of very large facets (combined width of eyes 1.3 times the distance between them). Antennae scarcely longer than head width, their club composing about 3/8 of total antennal length

and with terminal segment almost twice as long as two preceding ones taken together. Terminal labial palpomere somewhat wider than long. Minimum distance between antennal grooves behind mentum subequal to width of antennal club. Pronotum subquadrangular. nearly parallel-sided, with fore and hind corners rounded and not projecting; its apex and base distinctly convex and without any trace of border at corners (but its sides narrowly bordered). Elytra slightly convex and very steeply sloping at sides, with almost transversely to obliquely truncate apices forming a strongly open sutural corner. Pygidium 0.6 times as long as pronotum, transversely truncate at apex, from under which anal sclerite moderately projecting posteriorly.

Distance between procoxae and that between metacoxae subequal (about equal to length of 2nd antennal segment). Prosternal process strongly dilated before transverse apex, which is somewhat wider than antennal club. Metasternum convex, with a distinct median line in distal half and transversely concave before mesocoxae. Hypopygidium much shorter than ventrite 1, with almost transverse apex.

Tibiae subtriangular, somewhat wider than distance between mesocoxae and much narrower than antennal club; protibia with rather prominent crenellation. Femora with convex fore and hind edges; profemur twice, meso-and metafemora 2.5 times as wide as corresponding tibiae. Protarsus 0.7 times as wide as protibia; meso- and metatarsi a little narrower; claws narrow and slightly bulbous at base.

Aedeagus slightly sclerotized.

Female. Length 1.8 mm. Pygidium nearly angular at apex and hypopygidium widely rounded. The examined specimen (paratype) is not dissected, its pronotum somewhat narrowed from base to fore edge.

Etymology. The name of this new species is formed from the Greek "macros" meaning "great", "long" and Latin "oculatus" meaning "eyed".

#### Acknowledgements

It is our pleasant duty to express the authors' sincere thanks to all the colleagues who helped them by providing specimens for this study from different collections, namely: R.W. Aldridge (NHML), R. Anderson (CMNC), M. Bacchus (NHML), M.J.D. Brendell (NHML), K. Desender (IRSN), A.B. Egorov (BPIV), F. Génier (CMNO), B. Gill (CNC), P.M. Hammond (NHML), F. Hieke (ZMB), B. Jäger (ZMB), G.Sh. Lafer (BPIV), J.F. Lawrence (ANIC), O. Martin (ZMUC), E.G. Matthew (SAM), C.D. Monteith (QM), A.F. Newton (FMNH), A. Samuelson (BPBM), A. Smetana

(CNC), M. Thayer (FMNH), M. Uhlig (ZMB), N. Vandenberg (USNM), H. Wendt (ZMB). We are thankful also to the organizations which partly sponsored this study, namely the Deutsche Forschungsgemeinschaft (Bonn), Deutscher Akademischer Austauschdienst (Bonn), Field Museum of Natural History (Chicago, USA), Foundation of CANACOLL (Ottawa), Naturhistorisches Museum in Wien, Norsk Institutt for Skogforskning (Ås), Royal Society (London), Smithsonian Institution (Washington, D.C.).

#### References

(publications itimized in Grouvelle (1913) are omitted in the following list)

- Audisio, P. 1993. Coleoptera Nitidulidae-Kateretidae. Fauna d'Italia, 32: 1-971. Bologna: Calderini.
- Connell, W.A. 1981. Two new Nearctic Epuraea (Coleoptera: Nitidulidae). Coleopterist's Bull., 35(2): 229-233.
- Connell, W.A. 1984. Nearctic Nitidulidae synonymy and additions since Parsons' revision (Coleoptera). *Coleopterist's Bull.*, 38(2): 160-164.
- Gillogly, L.R. 1982. New species and a key to the genus *Haptoncus* (Coleoptera: Nitidulidae). *Pacific Insects*, 24(3/4): 281-291.
- Grouvelle, A. 1913. Byturidae, Nitidulidae. In: W. Junk (ed.). Coleopterorum Catalogus, Lief. 56: 1-223 (ex vol. 15). Berlin.
- Grouvelle, A. 1919. Descriptions d'espèces nouvelles de Coléoptères de l'Afrique australe. Mém. Entomol., 47: 47-61.
- Heller, K.M. 1916. Die Käfer von Neu-Caledonien und den benachbarten Inselgruppen. *Nova Caledonian. Zool.*, 2, L. 3: 229-364.
- Jelinek, J. 1977. Revision of the genus Epuraea Er. from Africa with remarks to related genera (Coleoptera, Nitidulidae). Acta entomol. Mus. natl. Pragae, 39: 345-397.
- Kirejtshuk, A.G. 1984. New taxa of Nitidulidae (Coleoptera) from the Indo-Malayan fauna of Vietnam and adjacent territories. *Ann. hist.-nat. Mus. natl. Hung.*, 76: 169-195.
- Kirejtshuk, A.G. 1986a. Analysis of structure of genitalia for reconstruction of phylogeny and substantiation of higher classification of fam. Nitidulidae (Coleoptera). Trudy Vsesoyuzn. entomol. Obshch., 68: 22-28. (In Russian).
- Kirejtshuk, A.G. 1986b. On polyphyly of the Carpophilinae with description of a new subfamily, Cillaeinae (Coleoptera, Nitidulidae). Coleopterist's Bull., 40(3): 217-221.
- Kirejtshuk, A.G. 1986c. New genera and species of the Nitidulid beetles (Coleoptera, Nitidulidae) from the Australian Region. I. *Entomol. Obozr.*, **65**(3): 559-573. (In Russian).
- Kirejtshuk, A.G. 1987. New taxa of the Nitidulidae (Coleoptera) of the Eastern Hemisphere (part 1). Omosita nearctica sp. n., vicariant with Palaearctic O. colon L. Trudy zool. Inst. Akad. Nauk SSSR, 164: 63-94. (In Russian).
- Kirejtshuk, A.G. 1989. New taxa of the Nitidulidae (Coleoptera) of the Eastern Hemisphere. Part 3.

- Trudy zool. Inst. Akad. Nauk SSSR, 208: 64-89. (In Russian).
- Kirejtshuk, A.G. 1990. New genera and species of the Nitidulid beetles (Coleoptera, Nitidulidae) from Australian region. III. *Entomol. Obozr.*, 69(4): 857-878. (In Russian).
- Kirejtshuk, A.G. 1992. Fam. Nitidulidae. *In*: P.A. Ler (ed.) *Opredelitel' nasekomykh Dal'nego Vostoka SSSR* [Keys to the insects of the Far East of the USSR], 3(2): 114-216. (In Russian).
- Kirejtshuk, A.G. 1995. New taxa of the Nitidulidae (Coleoptera) of the Eastern Hemisphere. Part 5. Trudy zool. Inst. Ross. Akad. Nauk, 258: 3-50. (In Russian).
- Kirejtshuk, A.G. 1996. Higher classification, evolution of mode of life and phylogeny of the order Coleoptera (Insecta). II. *Entomol. Obozr.*, 75(1): 39-62. (In Russian).
- Kirejtshuk, A.G. 1997. On evolution of anthophagous Nitidulidae (Coleoptera) in tropical and subtropical regions. *Bonner zool. Beitr.*, 47(1/2): 111-134.
- Kirejtshuk, A.G. 1998a. Position of the subfamily Maynipeplinae subfam. n. in the classification and notes on the evolution and structural modifications among sap-beetles. *Entomol. Obozr.*, 77(3): 540-554. (In Russian).

- Kirejtshuk, A.G. 1998b. Nitidulidae (Coleoptera) of the Himalayas and Northern Indochina. Part 1: Subfamily Epuraeinae. *Theses zool.*, 28: 1-489.
- Kirejtshuk, A.G. & Lawrence, J.F. 1992. Cychramptodini, new tribe of the Nitidulidae (Coleoptera) from Australian region. J. Austral. entomol. Soc., 31: 29-46.
- Kirejtshuk, A.G. & Pakaluk, J. 1996. Notes on the Nearctic Epuraeinae (Coleoptera, Nitidulidae). Zoosyst. ross., 4(1): 139-152.
- Parsons, C.T. 1943. A revision of Nearctic Nitidulidae (Coleoptera). Bull. Mus. comparat. Zoöl. Harvard College, 92(3): 119-278.
- Parsons, C.T. 1969. North American Nitidulidae (Coleoptera). V. Species of Epuraea related to corticina Erichson. Coleopterist's Bull., 23(5): 62-72.
- Sjöberg, O. 1939. Beitrag zur Kenntnis der Gattung Epuraea Er. (Col., Nitidulidae). Bestimmungstabelle der paläarktischen Arten. Entomol. Tidskr., 60: 108-126
- Spornraft, K. 1967. 50. Familie: Nitidulidae. In: H. Freude, K.W. Harde & G.A. Lohse (eds.). Die Käfer Mitteleuropas, 7: 20-77. Krefeld: Goecke & Evers Verlag.

Received 25 January 2001