

Brunomanseria faceta gen. n., sp. n. from Borneo (Coleoptera : Staphylinidae : Pselaphinae)

Autor(en): **Löbl, Ivan / Kurbatov, Sergei A.**

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Brunomanseria faceta gen. n., sp. n. from Borneo (Coleoptera:
Staphylinidae: Pselaphinae)

IVAN LÖBL¹ & SERGEI A. KURBATOV²

A new Bornean genus and species of Pselaphinae, *Brunomanseria faceta* **gen. n. sp. n.**, is described. *Brunomanseria* is related to *Takaorites* Jeannel and *Nipponobythus* Jeannel. These genera share a wide head, the presence of temporal patches, the elongate and apicodorsally emarginate scape, the presence of pronotal antebasal sulcus, the absence of subhumeral foveae, the distinct 3rd and large 4th abdominal ventrite, and the weakly sclerotized aedeagus. *Brunomanseria* may be easily distinguished from its allied by the sulcate elytral disc. *Bythiotes* Newton & Chandler is synonymized with *Takaorites* Jeannel (**syn. n.**), and *Bythiotes coiffaiti* and *B. longicornis* are transferred to *Takaorites*. *Machulkaia* Löbl is synonymized with *Nipponobythus* (**syn. n.**) and *Machulkaia mirabilis* Löbl and *M. dolharubang* Nomura & Lee are transferred to *Nipponobythus* (**comb. n.**).

Key-words: Coleoptera, Staphylinidae, Pselaphinae, taxonomy, East Malaysia

INTRODUCTION

The Iniocyphini genera *Takaorites* Jeannel, *Bythiotes* Newton & Chandler, 1989 (a replacement name for *Bythonesiotes* Jeannel, 1958), *Nipponobythus* Jeannel, 1958 and *Machulkaia* Löbl, 1964, form a distinctive group, reported so far only from Japan, China, Korea and Taiwan. Extensive recent collections of pselaphines from these countries, and also from Thailand and Malaysia, include numerous additional species of this group. Among several thousand pselaphines collected in Sabah, East Malaysia by D. Burckhardt and I. Löbl during few weeks of field work, only a single member of this group was found. It represents a new genus and new species, and is described below. The present study led to a re-appraise of related taxa, resulting in recognition of the synonymy of *Bythiotes* with *Takaorites*, and of *Machulkaia* with *Nipponobythus*.

TAXONOMY

***Brunomanseria* gen. n.**

Type species: *Brunomanseria faceta* sp. n.
Gender: feminine.

Description. Habitus as in Fig. 1. Head wider than long, subpentagonal. Antennal tubercles and postantennal pits and notches absent. Vertex with pits and median

¹ Muséum d'histoire naturelle, C. P. 6434, CH-1211 Genève, Switzerland
ivan.lobl@mhn.ville-ge.ch

² Davydkovskaya 4-2-104, Moscow 121352, Russia

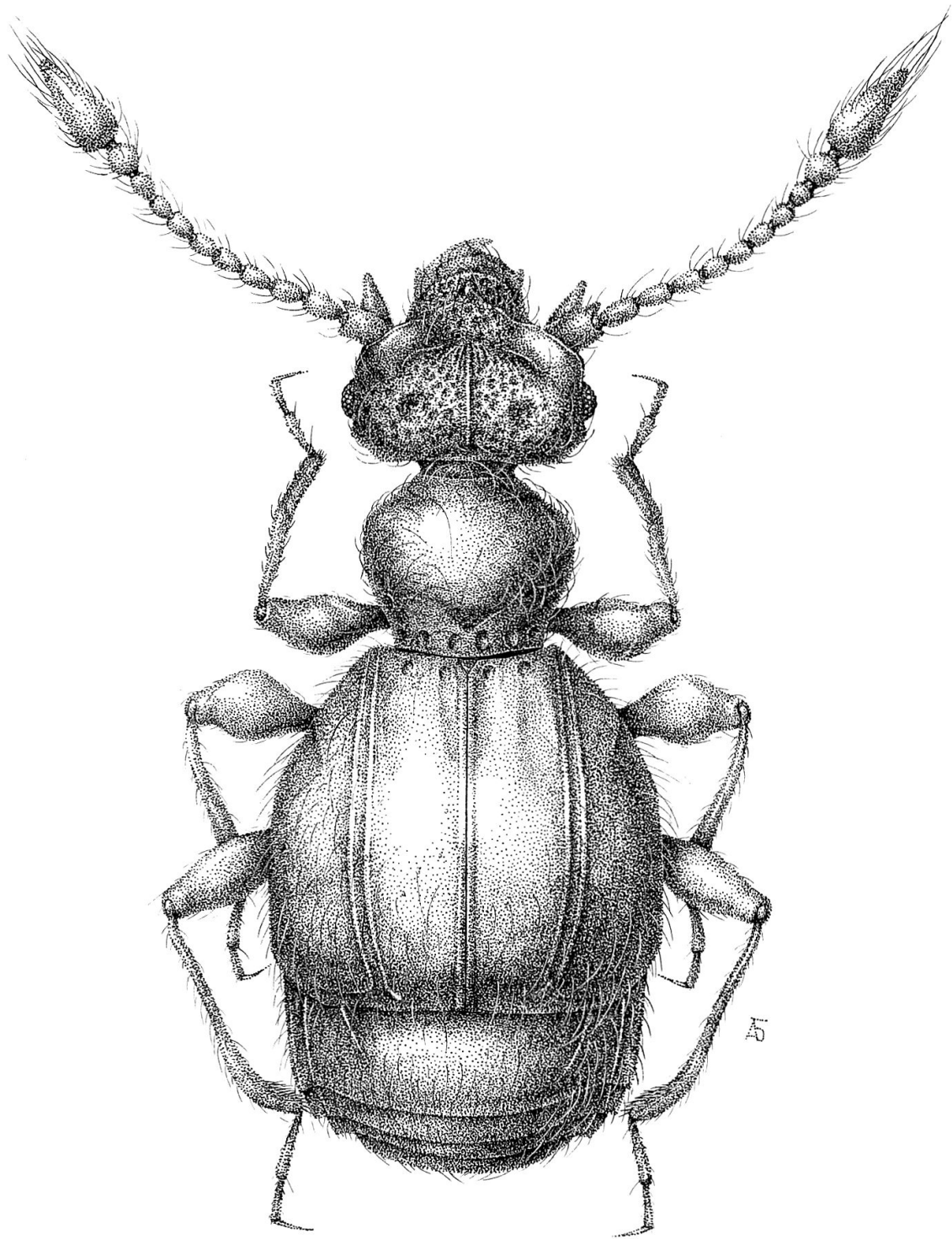


Fig. 1. *Brunomanseria faceta*, gen. n., sp. n., habitus.

carina, lacking sulci. Frontoclypeus small, moderately inclined. Eyes about in middle of head. Tempora each with smooth patch narrowed beyond. Dorsal temporal carina very fine, ventral temporal carina bordered by fine setae. Ocular-mandibular carina present, oblique. Genae narrow, weakly impressed. Subgenal areas each with long impression extended below eye, bordered by carinae. Inferior carinae forming ventral head margins. Ventral side of head weakly convex. Promentum vertical. Plan of labium and mandibles notably above plan of mentum. Mandibles each with basolateral tooth-like process, larger on right mandible than on left mandible. Antennal scape and pedicel not enlarged, scape moderately longer than pedicel, with emarginate dorso-apical margin, ventro-apical scapal margin not emarginate, following segments elongate, loose, club two-segmented, apical segment much larger than segment 10. Pronotum widened anteriorly, hardly cordiform, comparatively small, with pair of lateral foveae joined by antebasal sulcus, row of basal foveae, lacking paranotal carinae. Hypomera convex, not separated from pronotum and prosternum. Elytra large, convex, almost as long as pronotum and head combined, combined wider than long, strongly narrowed basally, lateral contours arcuate, basal margin not elevated and not carinate, each with two basal foveae, sutural stria entire, approximate to suture, deep discal sulcus not joined to basal fovea, lacking marginal stria and carina, and lacking subhumeral fovea. Mesosternum with large, setose median fovea and pair of large, setose lateral foveae. Metasternum with mesocoxal process strongly inclined toward intercoxal process of mesosternum. Submesocoxal area together with posterior edge of intercoxal process abruptly delimited, forming plate narrowly overlapping metasternal shield. Metasternum with metacoxal process truncate, not prominent, about 3 times as wide as mesocoxal process. Femora swollen in apical half. Tibiae with apical setal brush. Segment 2 of mesotarsi about as long as combined length of segments 1 and 3. Abdominal tergite 1 horizontal, about as long as combined length of tergites 2 and 3, impressed basally, with pair of discal carinae, lacking basal carinae. Tergites 2 to 4 about equally long, moderately inclined. Sternites pubescent. Sternite 1 exposed in middle and partly exposed laterally, in middle about as long as sternite 3, with median carina. Sternite 2 in middle about 3 times as long as sternite 1, deeply impressed basolaterally, with median carina, lacking sulci and lacking lateral carinae. Sternites 3 and 4 equally long. Aedeagus with parameres, lacking apical row of sensilla and lacking apical process or lobe, dorsal membrane absent.

Etymology. This genus is named in honour of Bruno Manser, a Swiss ethnologist who devoted his life to nature conservation and native populations in East Malaysia.

Comments. *Brunomanseria faceta* resembles in general appearance members of the Goniaceritae genera *Takaorites* Jeannel, 1958 and *Nipponobythus* Jeannel, 1958. In particular, it shares with them the presence of following presumed synapomorphies: head with temporal patches, scape with emarginated dorso-apical margin, pedicel only slightly larger than antennal segment 3, pronotum with antebasal sulcus, metatibiae curved, aedeagus with basal bulb weakly sclerotized and lacking dorsal membrane. *Brunomanseria* differs drastically from these genera by the sulcate elytral disc and denticulate basolateral mandibular edges. In addition, it differs from *Takaorites* by the well developed parameres and the absence of setiform sensilla at the apex of the median lobe of the aedeagus.

Jeannel (1958) erected *Takaorites* for a new Japanese species, *T. torticornis* Jeannel, and *Bythonesiotes* for two new Japanese species, *B. coiffaiti* Jeannel and *B. longicornis* Jeannel. He distinguished *Takaorites* and *Bythonesiotes* by the shape of the male frons, and the male antennal and aedeagal characters. The study of type material showed that the genital characters of *Takaorites* as illustrated and described in Jeannel (1958) are inexact. In addition, the secondary sexual characters used by Jeannel are variable as seen in several undescribed species preserved in the collection of the Geneva museum. Consequently, Jeannel's *Takaorites* and *Bythonesiotes* cannot be separated.

The name *Bythonesiones* Jeannel, 1958 is a junior homonym and was replaced by *Bythiotes* in Newton & Chandler (1989).

Following acts result:

Bythiotes Newton & Chandler, 1989 is a junior subjective synonym of *Takaorites* Jeannel, 1958, **syn. n.**

Takaorites coiffaiti (Jeannel, 1958) is transferred from *Bythiotes*, **comb. n.**

Takaorites longicornis (Jeannel, 1958) is transferred from *Bythiotes*, **comb. n.**

Machulkaia Löbl, 1964 was erected for a new Chinese species, *M. mirabilis* Löbl, 1964, represented by two males. It was distinguished from the genera found allied (*Nipponobythus*, *Takaorites*, and *Bythonesiotes*) by its maxillary palpi with the fourth segment widened and impressed ventrally, the asymmetrical antennomeres, and the form of the excavated upper side of the head. The subsequently discovered Korean *M. dolharubang* Nomura & Lee, 1992 shares these characters. In addition, both species presently included in *Machulkaia* have strongly denticulate outer edge of the male left mandible. While *M. mirabilis* is known only in male sex, the females of *M. dolharubang* lack the palpal, antennal and other head characters that were considered as generic in Löbl, 1964. A new Chinese species (in the collections of the Museum Geneva and of S. A. Kurbatov) that possesses the same male palpi as the two species described in *Machulkaia* lacks their male mandibular, antennal and frontal characters. It suggests poor definition of the group. Besides, a large number of undescribed species of *Nipponobythus* that are represented in examined collections exhibit highly variable antennae and heads. With respect to the present knowledge, *Machulkaia* as a distinct genus may be based only on the shape of the fourth segment of its male maxillary palpi. As this is a weak character we consider following acts necessary:

Machulkaia Löbl, 1964 is a junior subjective synonym of *Nipponobythus* Jeannel, 1958, **syn. n.**

Nipponobythus mirabilis (Löbl, 1964) is transferred from *Machulkaia*, **comb. n.**

Nipponobythus dolharubang (Nomura & Lee, 1992) is transferred from *Machulkaia*, **comb. n.**

***Brunomanseria faceta* sp. n.**

Holotype male: East Malaysia, Sabah, Crocket Range, km 51-52 Kota Kinabalu – Tambunan, 1600m, 18.v.1987, D. Burckhardt & I. Löbl (Museum Geneva).

Description. Length 1.6 mm. Body reddish-brown, elytra slightly lighter than pronotum and abdomen, appendages light brown. Body with long, mostly erect and

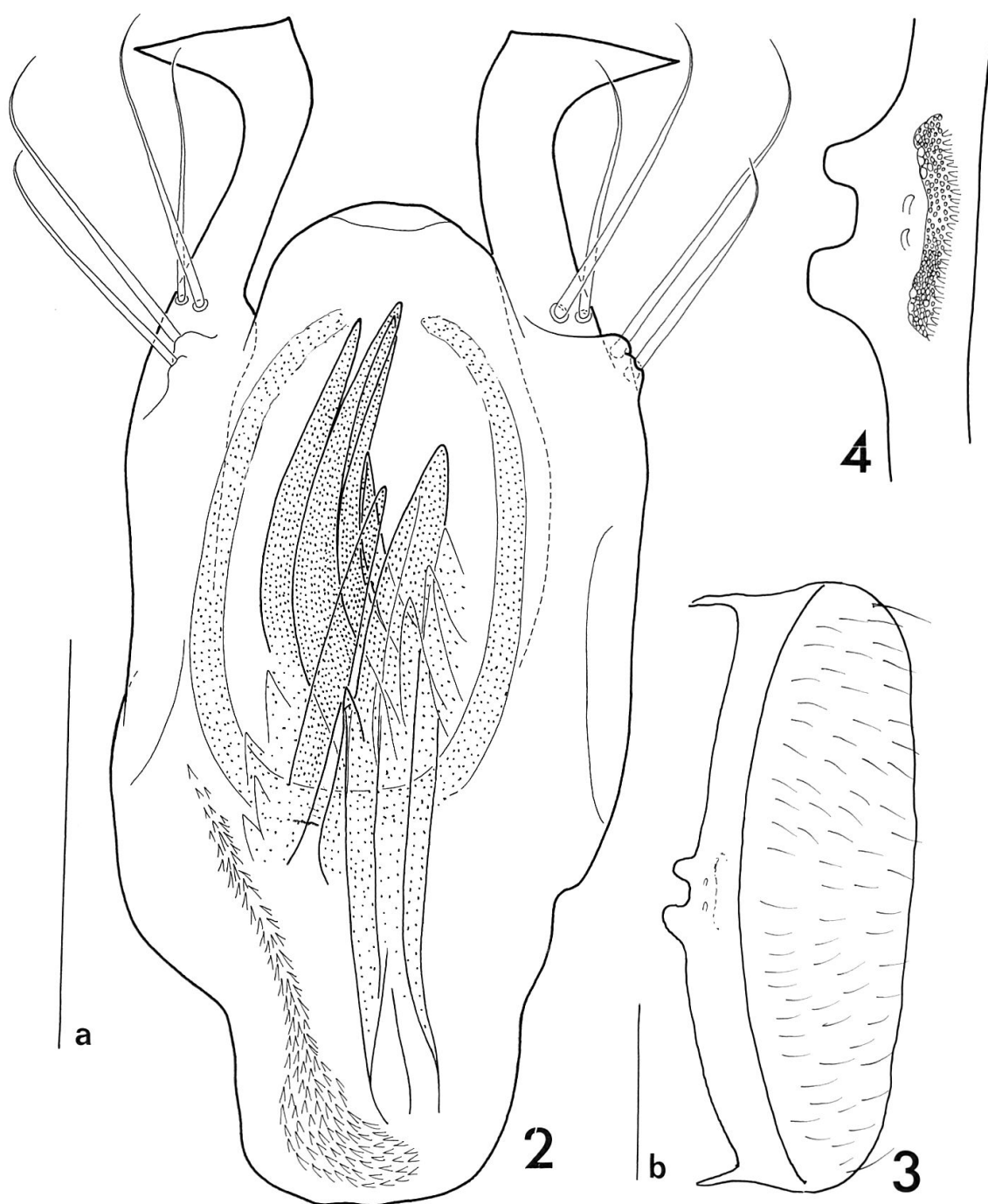


Fig. 2 to 4. *Brunomanseria faceta*, gen. n., sp. n., aedeagus (2), sixth abdominal sternite (3), detail of mediobasal part of sixth sternite (4). Scale lines = 0.1 mm, scale line a for Figs 2 and 4, scale line b for Fig. 3.

very fine pubescence. Head without eyes slightly wider than long, mandibles not included. Vertex weakly convex, with occipital edge weakly emarginated in middle, vertexal pits small, separated by twice of interval between them and lateral head margins, situated about in line of eye centres. Vertexal carina fairly robust, extended from occipital edge up to frontal, semicircular carina. Tempora rounded. Eyes small, prominent, multifaceted, in dorsal view about as long as tempora. Lateral margins anterior eyes oblique, hardly rounded. Frons impressed anteriorly, with oblique, carinate anterior margins interrupted in middle. Middle of anterior frontal margin impressed, well delimited by semicircular carina. Narrow areas posterior oblique frontal margins completely smooth, delimited by fine carina. Remainder of frons and vertex with punctures to part replaced by granules. Frontoclypeus distinctly delimited, elevated in mid-line to form ridge (lateral view), subangulate in middle of anterior margin (dorsal view), densely punctate. Ventral side of head punctate and pubescent. Antennae with scape and pedicel pubescent, scape cylindrical, with apical angles not prominent, pedicel widened apically, segment 3 slightly longer than segment 4, segments 4 to 7 about equally large, segment 8 slightly shorter and hardly wider than segment 7, segment 9 as long as and distinctly wider than segment 7, distinctly elongate, segment 10 thickened, about as long as wide, segment 11 about twice as long as wide, wider than segment 10, truncate at apex. Pronotum convex, wider than long, narrower than head without eyes, with broadly rounded anterior angles, at widest point about 1.3 times as wide as at base, with basal foveae small, not clearly delimited, antebasal sulcus bisinuate, discal punctation very fine and sparse. Hypomera setose anteriorly, asetose posteriorly. Elytra combined almost twice as wide as pronotum, wider than long (ratio 52: 46), with discal sulci deep, starting at base and extended almost up to apical margin. Carinae margining discal sulci diverging near elytral apices. Humeral hump absent. Punctation very fine but distinct compared to that of pronotum, fairly dense. Prosternum punctate and pubescent, except on fairly large, smooth area along anterior margin, impressed along posterior margin, posterior margin truncate. Metasternum pubescent in middle, asetose laterally. Abdominal tergite 1 about 2.5 times as long as tergite 2, with discal carinae converging apically and slightly curved, almost reaching apical third of tergite and at base separated by about two thirds of tergal width. Abdominal punctation similar to elytral punctation, abdominal pubescens semi-erect to recumbent.

Male characters. Gular area very deeply impressed, forming semi-globular excavation, anterior margin of gular impression bordered by setal row. Protibiae slightly sinuate, with flattened basal part of mesal side. Apical part of protibial mesal side with two large, spatulate sensilla. Apical part of protibial sensilla curved. Base of genital sternite with two admesal lobes (Fig. 3-4). Aedeagus (Fig. 2) 0.29 mm long, with median lobe elongate, parameres expanded and obliquely truncate at apex, bearing each four long setae, internal sac with bunch of denticles.

Habitat. Edge of moist *Lithocarpus/Castanopsis* forest, sieved leaf litter in a ravine.

Distribution. Borneo: Sabah: Crocker Range.

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