

On the Scaphidiinae (Coleoptera: Staphylinidae) of Java, Indonesia

IVAN LÖBL

Muséum d'histoire naturelle, C. P. 6434, CH-1211 Genève 6, Switzerland; e-mail: Ivan.lobl@bluewin.ch

LÖBL I. 2023: On the Scaphidiinae (Coleoptera: Staphylinidae) of Java, Indonesia. *Acta Musei Moraviae, Scientiae biologicae* **108(1–2)**: 1–34. – The following new species are described: *Baeoceroxidium inexpectatum* sp. nov., *Scaphicoma patens* sp. nov., *Scaphisoma bryanti* sp. nov., *S. drescheri* sp. nov., *S. multispinosum* sp. nov., *S. neglectoides* sp. nov., *S. planatoides* sp. nov., *S. posticum* sp. nov., *Scaphobaeocera basalis* sp. nov., *S. larga* sp. nov., *S. montisgedei* sp. nov., *S. spinigeroides* sp. nov., *S. truncata* sp. nov., *Scaphoxium corporaali* sp. nov., *S. dentatum* sp. nov., and *Xotidium reductum* sp. nov. *Scaphisoma flavapex* Achard is fixed by lectotype designation and redescribed. The male genital characters of *Scaphicoma ophthalmica* (Achard) are illustrated for the first time. *Baeocera incisa* (Löbl), *B. sarawakensis* Löbl, *Scaphisoma caudatum* Löbl, *S. chujoi* Löbl and *S. malaccanum* (Pic) are reported from Java for the first time. Keys to Javanese species of *Baeocera* Erichson, *Scaphicoma* Motschulsky, *Scaphisoma* Leach and *Scaphobaeocera* Csiki, and a check list of Javanese Scaphidiinae are provided.

Keywords. Shining fungus beetles, taxonomy, new taxa, new records, Sundaland

Introduction

To date, 37 species in eight genera of Scaphidiinae have been described or recorded from the Indonesian Island Java. The number encompasses three species of *Cyparium* Erichson, 1845 that may be easily distinguished by their respective colour pattern (OGAWA *et al.*, 2016), a single species of *Episcaphium* Lewis, 1893, *E. callosipenne* (Achard, 1922), widely distributed in Southeast Asia and notable by its tuberculate elytra, and twelve species of *Scaphidium* Olivier, 1795. The latter genus awaits adequate taxonomic study. The remaining taxa are members of the tribe Scaphisomatini Casey, 1893. Two Scaphisomatini genera, *Bironium* Csiki, 1909, with two Javanese species, and *Pseudobironium* Pic, 1920, with five Javanese species, have been dealt with in LÖBL & TANG (2013) and LÖBL *et al.* (2020), respectively. The present study focusses on the remaining genera of the tribe. It is based on earlier collections held mainly in the Museum Zoologicum Bogoriense in Cibinong and the Naturalis Biodiversity Center in Leiden, and on several more recent collections, mostly from Mount Gede in West Java.

Material and methods

The material examined or mentioned is deposited in the following collections:

MHNG	.....	Muséum d'histoire naturelle, Geneva
MNHL	.....	Museum of Natural History, London
MNHN	.....	Muséum national d'Histoire naturelle, Paris
MBBJ	.....	Museum Zoologicum Bogoriense, Cibinong
NBCL	.....	Naturalis Biodiversity Center, Leiden
NMPC	.....	National Museum, Prague
SAM	.....	South Australian Museum, Adelaide
SMNS	.....	Staatliches Museum für Naturkunde, Stuttgart

No information is available on the methods used by former researchers, such as G.E. Bryant, F.C. Drescher, or C.M.C. Brouéius van Nidek, to collect mycophagous and myxomycetophagous Scaphidiinae. However, it may be assumed they singled specimens from fungi growing on dead wood. Most of the modern specimens have been collected by sieving forest floor litter and rotten wood, and extracted in Winkler-Moczarski devices. The label data of the primary types are reproduced verbatim. The body length is measured from the anterior pronotal margin to the posterior inner angles of elytra. The widths are measured at the widest points of the respective body parts. The length/width ratios of antennomeres are measured on slide-mounted antennae at magnification of 200 times. The length/width of the mesepimera refer to their exposed part. Statements about metaventral and abdominal punctation do not refer to punctures margining subcoxal lines and statements about abdominal microsculpture do not refer to intersegmental membranes. The sides of the aedeagi refer to their morphological sides with the ostium situated dorsally, while in resting position rotated 90°. The dissected body parts are embedded in Euparal or Canada Balsam and fixed on a separate card on the same pin as the respective specimen. Information concerning the general distribution of the Javanese species follows LÖBL (2018) and his subsequent publications.

Results

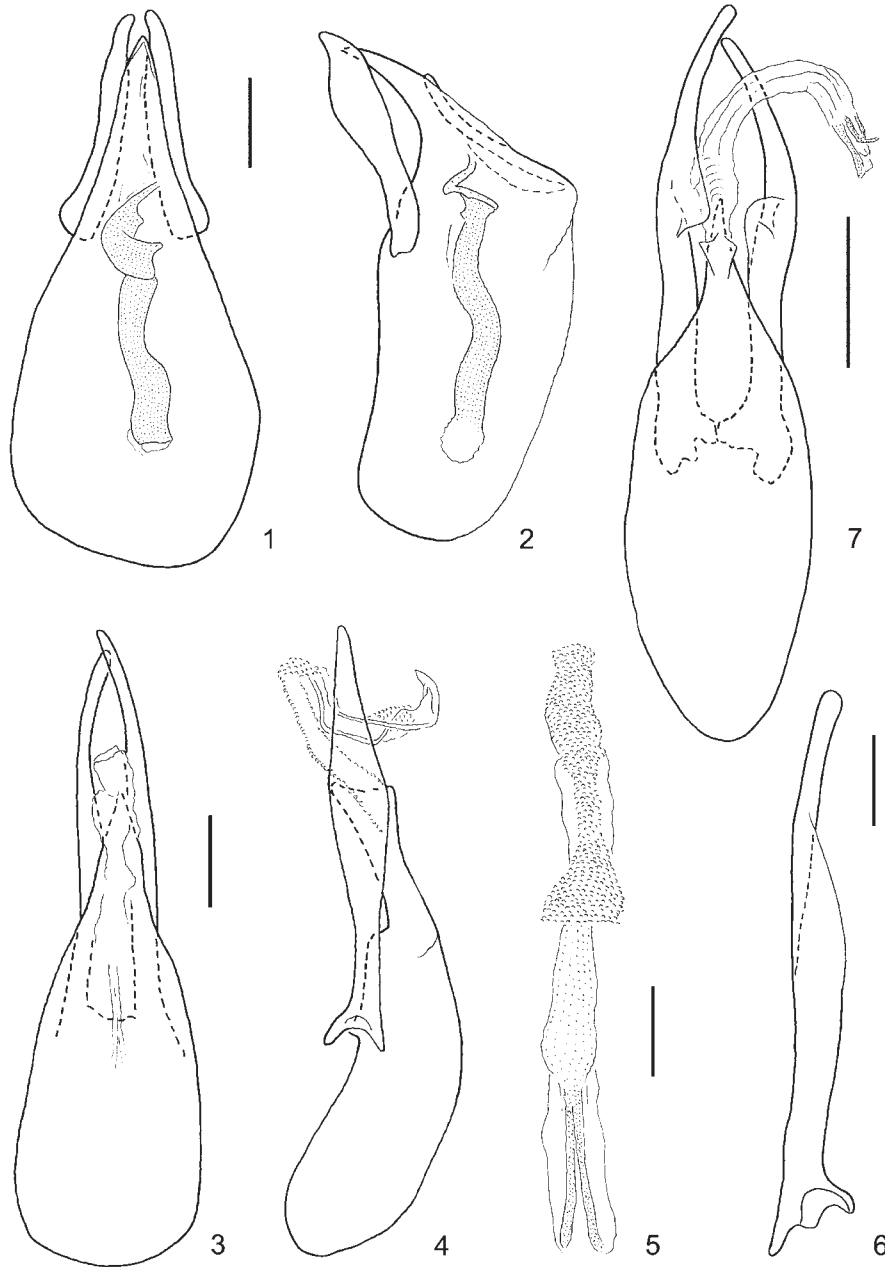
Baeocera Erichson, 1845

The genus comprises over 300 species, most of them occurring in Southeast Asia. They are usually common in moist forest floor litter. The sole species reported to date from Java is *Baeocera convexa* (Pic, 1920). The monophyly of the genus may be questioned in absence of robust synapomorphy, while the *Baeocera* group of genera (LESCHEN & LÖBL 2005) is well supported.

Key to Javanese species of *Baeocera*

- 1 Lateral parts of metaventrite appearing impunctate, metanepisternum separated by distinct suture. ***B. convexa* (Pic)**
- Lateral parts of metaventrite coarsely punctate, metanepisternum fused with metaventrite. **2**
- 2 Elytron coarsely punctate on anterior half, extremely finely punctate on posterior half. Parameres arcuate, gradually narrowed in dorsal view. ***B. sarawakensis* Löbl**
- Entire elytral disc distinctly punctate. Parameres straight, abruptly narrowed in dorsal view. ***B. incisa* (Löbl)**

Scaphidiinae of Java (Coleoptera: Staphylinidae)



Figs 1–7. Male genitalia. **1, 2** – *Baetoxidium inexpectatum* sp. nov., aedeagus in dorsal and lateral views, scale = 0.05 mm. **3–6** – *Scaphicomma pattens* sp. nov. **3, 4** – Aedeagus in dorsal and lateral views, scale = 0.1 mm. **5** – Ditto, internal sac in dorsal view, scale = 0.05 mm. **6** – Ditto, paramere in ventral view, scale = 0.05 mm. – **7** *Scaphicomma ophthalmica* (Achard), aedeagus in dorsal view, scale = 0.2 mm.

Records and comments

Baeocera convexa (Pic, 1920)

Comments. Only a single specimen of this species is currently known. LÖBL (1975, 1986) transferred the species from *Amalocera* to *Baeocera* and supplemented its description. PIC (1920) gave “Java” as its type locality. According to the original label, the specimen was collected in July 1892 by H. Frustorfer, at “Gn. Gedeh NW Preanger 4000’[feet]”.

Baeocera incisa (Löbl, 1973)

Material examined. 1, Java: W. Java, Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Agosti, Löbl & Burckhardt (MBBJ); 8, W. Java, Mt. Gede, 1400–1500 m, 24–28.V.1967, S. Kurbatov (MHNG).

Comments. The species is recorded for the first time from Java. It was known only from Sabah, East Malaysia.

Baeocera sarawakensis Löbl, 1987

Material examined. 45, Java: W. Java, Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Agosti, Löbl & Burckhardt (MBBJ, MHNG); 10, W. Java, Mt. Gede, 1400–1500 m, 24–28.V.1967, S. Kurbatov (MHNG); 1, Java, Preanger, Tjigembong, J.B. Corporaal (NBCL).

Comments. The species is recorded for the first time from Java. It was known from Sabah and Sarawak, East Malaysia.

Baeoceroxidium Ogawa & Löbl, 2013

The few known species of *Baeoceroxidium* have been originally assigned either to *Scaphisoma* [*B. micros* (Achard, 1923) from Japan] or to *Baeocera* [*B. piliferum* (Löbl, 1984) from India, and *B. pyricola* (Löbl, 1990), *B. schwendingeri* (Löbl, 1990) and *B. uncatum* (Löbl, 1990) from Thailand]. Although *Baeoceroxidium* resembles *Baeocera*, it may be readily distinguished by the thorax lacking corbiculum, the short basal angles of the pronotum, the bidentate mandibles, and the wide galea (OGAWA & LÖBL, 2013). A sixth species of *Baeoceroxidium* was found in Java.

New species

Baeoceroxidium inexpectatum sp. nov. (Figs 1, 2)

Type material. Holotype male, Java Mt. Gede, 1400 m, 25.V.66, Rougemont (MHNG).

Description. Length 1.25 mm, width 0.77 mm, dorsoventral diameter 0.74 mm. Body dark brown, apical abdominal segments and appendages ochraceous to light brown. Length/width ratios of antennomeres III 18/6: IV 20/6: V 25/7: VI 22/7: VII 33/13: VIII 19/7: IX 35/13: X 30/15: XI: 43/15. Pronotum with anterior margin bead broadly

interrupted; lateral margins evenly rounded; lateral margin carinae distinct in dorsal view; lateral margin striae impunctate; discal punctation very fine, hardly visible at magnification 50 times, consisting of poorly delimited punctures; basal angles extending posterior of mesepimera level, overlapping anterior part of metanepisterna. Scutellum completely concealed. Elytron weakly narrowed apicad, with lateral margin slightly rounded, lateral margin carinae visible in dorsal view, lateral margin stria impunctate, sutural stria parallel to suture, curved at base and forming basal stria extending laterad and joined with lateral stria; adsutural area flat, with puncture row; discal punctation fine, much coarser than pronotal punctation, punctures clearly delimited, puncture intervals mostly about two to three times as large as puncture diameters. Hypomeron punctate. Mesoventrite with median, pentagonal ridge clearly delimited by line. Mesanepisternum smooth. Mesepimeron large, nearly reaching margin of mesocoxa, four times as long as wide. Metaventrite with median area nearly flat, densely and coarsely punctate except on small smooth area in middle; lateral parts of metaventrite extremely finely punctate; submesocoxal areas 0.02 mm long, margined by dense row of elongate punctures extending laterad along margin of mesepimeron. Metanepisternum large, 0.09 mm wide, with deep, impunctate suture. Tibiae straight. Abdomen very finely punctate, ventrite I with dense basal row of 0.02 mm long wrinkles shortly interrupted in middle.

Male. Protarsomeres I to III slightly widened. Aedeagus (Figs 1, 2) 0.28 mm long.

Etymology. The species epithet is a Latin adjective meaning unexpected.

Differential diagnosis. The species is readily distinguished from its congeners by the parameres lacking distinct setae. Besides, it is distinguished also by its significantly smaller body, the apical process of the median lobe narrow and weakly incurved, and the sclerite of the internal sac weakly sinuate and with an asymmetrical apex, in combination.

Scaphicomma Motschulsky, 1863

The genus is characterized by its body strongly compressed laterally, basal angles of the pronotum rounded and not extending apicad, the mesepimera completely concealed, and the conspicuously elongate appendages. *Scaphicomma* comprises 20 species distributed in the tropics and subtropics of Asia, Melanesia, Australia, and Africa. Two species have been described from Java, the original description of one of them, *S. pallens* (Achard, 1921) has been complemented by LÖBL (1971). The newly examined samples comprise two species, one identified as *S. ophthalmica* (Achard, 1920), the second described below as new.

Key to Javanese species of *Scaphicomma*

- 1 Body light reddish-brown or ochraceous. Aedeagus with parameres abruptly narrowed posterior of mid-length, internal sac with U-shaped proximal sclerite. ***B. pallens* (Achard)**
- Body dark brown to blackish. Aedeagus with parameres not abruptly narrowed, internal sac lacking U-shaped sclerite. **2**
- 2 Parameres gradually narrowed posterior of mid-length, internal sac with two

- narrow proximal rods. *S. pattens* sp. nov.
 – Parameres abruptly widened posterior of mid-length, internal sac lacking long rods. *S. ophthalmica* (Achard)

New species

Scaphicoma patens sp. nov.

(Figs 3–6)

Type material. Holotype male, E. Java, Ijen pl[ateau], Nat. P. Sodong, 1800 m, 26–27.IV.1974, leg. Bolm (SMNS). Paratypes: 2 males, 1 female, with same data as holotype (SMNS, MHNG).

Description. Length 2.20–2.30 mm, width 1.0–1.10 mm, dorsoventral diameter 1.22–1.27 mm. Body dark brown, appendages light brown to ochraceous. Frons very finely punctate, at narrowest point between eyes 0.18–0.20 mm, largest diameter of eyes in lateral view 0.30–0.33 mm. Length ratios of antennomeres III 45: IV 65: V 70: VI 80: VII 65: VIII 63: IX 75: X 70: XI: 100. Pronotum with even, very fine punctation. Scutellum completely concealed. Elytron with sutural stria shallow, curved along basal margin and extending to basal mid-third, adsutural area flat. Elytral punctation near base nearly as fine as pronotal punctation, clearly coarser and denser on prevailing surface, consisting of well delimited punctures to part about as large as puncture intervals. Hypomeron, mesoventer and mesanepisternum very finely punctate. Mesosternum with mesal ridge low, not clearly delimited. Metaventrite convex and very finely punctate in middle; submesocoxal lines convex, impunctate; submesocoxal areas 0.12 mm long, slightly longer than shortest interval to metacoxa; area between submesocoxal lines and inner two thirds of metacoxa swollen and smooth; lateral areas of metaventrite distinctly punctate, with punctures sharply delimited, becoming sparser laterad. Metanepisternum about 0.04 mm wide, parallel, with straight suture and stria parallel to suture. Abdomen very finely punctate.

Male. Protarsomeres I to III distinctly widened, with tenent setae, protarsomere I narrower than apex of protibia. Aedeagus (Figs 3–6) 0.71.0.72 mm long.

Etymology. The species epithet is Latin adjective meaning clear, open.

Differential diagnosis. This species may be distinguished from its Javanese congeners, *S. pallens* and *S. ophthalmica*, by the aedeagal characters, notably by the shape of the narrow parameres. Besides, the body of *S. pallens* is much lighter. *Scaphicoma pulex* (Heller) from the Philippines and *S. gracilis* Löbl from New Ireland have similar aedeagi. The sclerite of the internal sac is short and bifid in *S. pulex*, that in *S. gracilis* is also short and nearly X-shaped, while the new species has two long, narrow rods.

Records and comments

Scaphicoma ophthalmica (Achard, 1920)

Material examined. 2, JAVA: W. Java, Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Agosti, Löbl & Burckhardt (MBBJ, MHNG).

Comments. The species was described from Bogor. The specimens examined comply with the original description and were found near the type locality. The aedeagal

characters are here illustrated for the first time. The shape of the parameres and the structure of the internal sac (Fig 7) are diagnostic.

***Scaphicoma pallens* (Achard, 1921)**

(Fig. 7)

Comments. The species was described from “Goenoeng Oengaran” [= Gunung Ungaran]. Its aedeagus is illustrated in LÖBL (1971). The species is not present in the examined material.

***Scaphisoma* Leach, 1815**

Members of the genus may be easily distinguished from other Asian Scaphisomati by the short third antennomere, reduced elytral vestiture, and distinct submetacoxal lines. *Scaphisoma* is with over 800 species the species-richest genus of the subfamily. Its distribution is nearly world-wide (LÖBL, 2018). The genus appears to be species-richer in Asia than in other areas, possibly due to the lack of adequate knowledge of its Afrotropical and Neotropical members.

Key to Javanese species of *Scaphisoma*

- 1 Elytron with shortened sutural stria, fine, irregular punctation, obliquely truncate apical margin and light apical fourth. Small species, body length below 1.5 mm. ***S. grouvellei* Achard**
- Elytral characters different. Body often longer. **2**
- 2 Pronotum uniformly ochraceous or yellowish. **3**
- Pronotum ochraceous with dark basal pattern, or dark brown to blackish. **5**
- 3 Body length about 1.60–1.90 mm. Aedeagus with basal bulb expanded apically and overlapping apical process, parameres symmetrical. **4**
- Body length 2.05–2.10 mm. Aedeagus with basal bulb not expanded apically, parameres asymmetrical. ***S. chujoi* Löbl**
- 4 Elytron with sutural stria parallel to suture between strongly diverging anterior section and apical half of sutural length. Male ventrite I lacking sexual characters. Apices of parameres expanded proximally in dorsal view. ***S. binhanum* (Pic)**
- Elytron with sutural stria converging from base to apex. Male ventrite I with two minute denticles. Apices of parameres not or hardly expanded proximally in dorsal view. ***S. dohertyi* Pic**
- 5 Pronotum ochraceous with dark basomedian pattern. **6**
- Pronotum unicolor, dark. **8**
- 6 Elytron on prevailing surface darker than pronotum, sutural stria of elytron strongly converging to suture from base to apex. **7**
- Elytron on prevailing surface as light as pronotum, sutural stria of elytron

- weakly converging to suture. *S. bryanti* sp. nov.
- 7 Dark pronotal patch well delimited, limited onto basal third of pronotal mid-length and notched. *S. testaceomaculatum testaceomaculatum* (Pic), male
- Dark pronotal patch poorly delimited, extending over most of mesal part of pronotum, not notched. *S. aspectum* Löbl, male
- 8 Elytron with sutural stria extending laterad to form basal stria. 9
- Elytron with sutural stria starting near pronotal lobe, basal stria absent. 11
- 9 Pronotal punctation much finer than elytral punctation. Antennomere IV elongate, 3 to nearly 5 times as long as wide. 10
- Pronotal and elytral punctation similar. Antennomere IV very short, wider than long. *S. neglectoides* sp. nov.
- 10 Ventrite I with submetacoxal areas 0.03 mm long, about as long as tenth of shortest interval to apical margin of ventrite, submesocoxal lines parallel.
- *S. planatoides* sp. nov.
- Ventrite I with submetacoxal areas 0.06–0.08 mm long, about as long as third of shortest interval to apical margin of ventrite; submesocoxal lines strongly convex. *S. drescheri* sp. nov.
- 11 Elytra with discal punctation conspicuously coarse and forming oblique rows. Hypomeron with strigulate microsculpture. 12
- Elytral punctation not in rows. Hypomeron lacking microsculpture. 13
- 12 Punctation on centre of pronotum much finer than that near lateral margins. Internal sac of aedeagus lacking bunches of elongates spines.
- *S. rouyeri* Pic, 1916
- Punctation on centre and along lateral margins of pronotum similar. Internal sac of aedeagus with bunches of elongate spines. *S. multispinosum* sp. nov.
- 13 Elytra with sutural striae strongly converging from base to apex. 14
- Elytra with sutural striae entirely or to large part parallel. 17
- 14 Elytral disc with punctation inconspicuous, finer than that on adsutural area or on pronotum. Body about 1.25–1.35 mm long. *S. jacobsoni* Löbl
- Elytral disc with punctation distinct, similar to, or coarser than that on adsutural area and on pronotum. 15
- 15 Body about 1.25–1.35 mm long. Elytron with large light subbasal spot extending to elytral mid-length, and yellowish at apex.
- *S. oblongomaculatum* Motschulsky
- Body about 1.80–2.20 mm long. Elytron with small light subbasal spot not extending up to elytral mid-length, apex of elytron darkened. 16
- 16 Elytron with anterior margin of subapical spot emarginate.
- *S. testaceomaculatum testaceomaculatum* (Pic), female
- Elytron with anterior margin of subapical spot not emarginate.
- *S. aspectum* Löbl, female
- 17 Elytron unicolor, or with indistinctly lightened apical area. 18

- Elytron with distinct bicolorous patter. 20
- 18 Metaventrite with apicomesal impression, strigulate microsculpture and antecoxal puncture rows. Aedeagus lacking flagellum. 19
- Metaventrite with two apicomesal striae, lacking apicomesal impression, strigulate microsculpture, and antecoxal puncture rows. Aedeagus with flagellum extruded in repos. *S. caudatum* Löbl
- 19 Body 1.40–1.85 mm long, dark brown to blackish. Aedeagus with parameres expanded apically, each bearing large lobe prominent apically.
..... *S. malaccanum* (Pic)
- Body 1.10–1.20 mm long, light reddish brown. Aedeagus with parameres narrowed apically, each bearing small lobe prominent basoventrally.
..... *S. javanum* Löbl
- 20 Elytron dark brown to blackish with light subbasal spot and yellowish apical third. Aedeagus with parameres not expanded apically.
..... *S. luteomaculatum* Pic
- Elytron dark reddish-brown with yellowish apical third. 21
- 21 Punctuation on elytral disc coarser than pronotal punctuation. Antennomere IV more than twice as long as III, antennomere V about 1.3 times as long as antennomere IV and hardly longer than antennomere VI. Aedeagus with parameres expanded apicad. *S. posticum* sp. nov.
- Punctuation on elytral disc finer than pronotal punctuation. Antennomere IV about 1.5 times as long as III, antennomere V nearly twice as long as antennomere IV and much shorter than antennomere VI. *S. flavapex* Achard

New species

***Scaphisoma bryanti* sp. nov.**

(Figs 8, 9)

Material examined. Holotype male, Kawah Manok, Java, G. E. Bryant. 10.iv.09 (NHML). Paratype female, with same data as holotype (MHNG).

Description. Length 2.92–2.95 mm, width 1.65–1.67 mm. Head and most of pronotum ochraceous. Basal margin of pronotum black; black area expanded mesally and nearly reaching pronotal mid-length, forming notched spot. Elytron ochraceous on prevailing surface, black or blackish along basal and lateral margins, and along suture up to light apical seventh. Dark lateral band expanding anterior of lateral mid-length to form small transverse band nearly reaching elytral mid-width. Margin of dark basal area irregular, denticulate and expanding along sutural stria to form wide band reaching somewhat posterior of elytral mid-length. Small light brown spot present on subapical elytral area. Epipleuron blackish. Hypomeron ochraceous with narrowly darkened basal and ventral margins. Venter of mesothorax and metathorax black. Ventrite I blackish on prevailing surface, becoming lighter apicad. Following ventrites yellowish. Appendages ochraceous to yellowish. Length/width ratios of antennomeres III 16/10: IV 40/9: V 60/9: VI 68/11:

VII 65/15: VIII 55/10: IX 68/15: X 57/15: XI: 73/17. Pronotum and elytra lacking microsculpture. Pronotum with rounded lateral margins, lateral carinae visible in dorsal view, lateral margin stria impunctate, discal punctation extremely fine, hardly visible at 100 times magnification. Tip of scutellum exposed, triangular. Elytron rather strongly narrowed apicad, with lateral margin oblique posterior of basal third; lateral margin carina exposed in dorsal view; lateral margin stria punctate; apical margin rounded; inner apical angle situated posterior of level of outer apical angle; apical crenulation present; sutural margin not raised; sutural stria shallow, starting at or posterior of level of scutellum, gradually converging to suture, adsutural area flat, near scutellum about 0.08–0.09 mm wide, very finely punctate; discal punctation much coarser than that on pronotum, punctures not clearly delimited, puncture intervals mostly about two to three times as large as puncture diameters. Hind wings fully developed. Hypomeron smooth. Mesanepisternum extremely finely and sparsely punctate, lacking microsculpture. Mesepimeron well five times as long as wide, nearly twice as long as interval between its tip and mesocoxa. Metaventrite with strigulate microsculpture, very finely and sparsely punctate; median area of metaventrite convex, lacking impressions or stria; antecoxal puncture rows present, poorly distinct. Submesocoxal areas about 0.04 mm long, about as long as seventh of shortest interval to metacoxa; submesocoxal lines nearly parallel, very finely punctate. Metanepisternum flat, lacking microsculpture, slightly narrowing anteriad, with suture straight except at rounded anterior angle. Protibiae and metatibiae straight, mesotibiae curved. Ventrites with strigulate microsculpture and punctation as fine and sparse as than on metaventrite. Ventrite I with submetacoxal areas 0.06–0.07 mm long, about as long as fourth of shortest interval to apical margin of ventrite, submetacoxal lines convex, very finely punctate.

Male. Protarsomeres and mesotarsomeres I to III distinctly widened, narrower than apex of protibia. Apical margin of ventrite VI subangulate, lacking distinct lobe. Aedeagus (Figs 8, 9) 1.01 mm long.

Etymology. The species is named in honour of its collector, Gilbert Ernest Bryant (1878–1965).

Differential diagnosis. The conspicuous colour pattern of the pronotum of this new species is similar to that of *S. testaceomaculatum*, but the elytra are light on a much larger surface. The latter species differs notably by the elytra with sutural striae deep and much more converging to the suture, and the adsutural areas coarsely punctate. Unlike *S. testaceomaculatum*, *S. bryanti* has a symmetrical aedeagus and is a members of the *S. pictum* group. It may be distinguished from other species of the group by its large body size and the colour of the pronotum and elytra.

***Scaphisoma drescheri* sp. nov.**

(Figs 10, 11)

Type material. Holotype male, G. Oengaran [= Ungaran] Java Drescher [printed] c. o Djomblans I 1936 – 500 m [handwritten] (MBBJ).

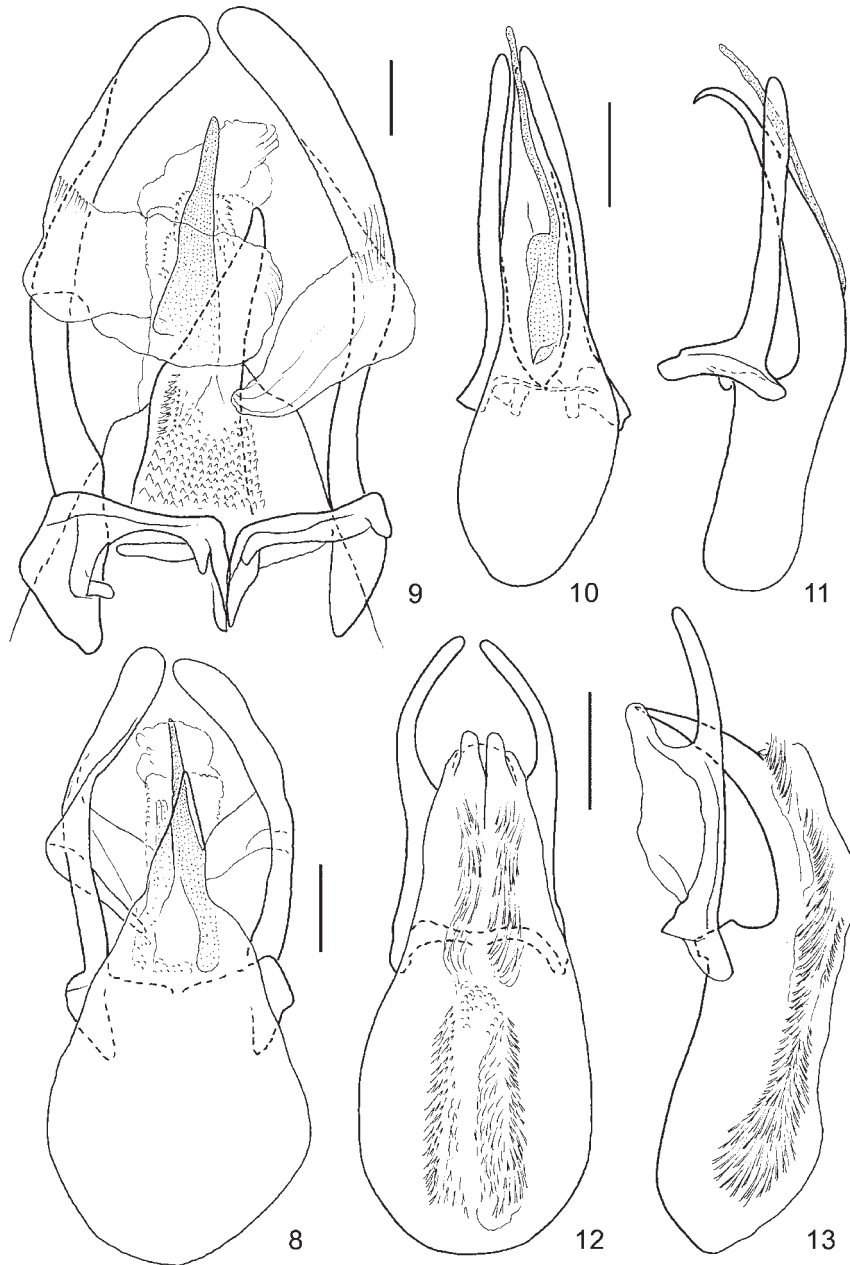
Description. Length 1.95 mm, width 1.32 mm. Head and body dark reddish-brown, elytra becoming lighter apical, abdomen, femora, and tibiae lighter than thorax, tarsi, and

antennae yellowish. Length/width ratios of antennomeres III 12/9: IV 21/7: V 40/8: VI 50/10: VII 55/15: VIII 47/11: IX 54/15: X 53/15: XI: 63/15. Pronotum and elytra lacking microsculpture. Pronotum with rounded lateral margins, lateral carinae concealed in dorsal view, lateral margin stria punctate, discal punctation fine, hardly visible at magnification 20 times, finer and sparser on centre than near basal and apical margins. Tip of scutellum exposed, triangular. Elytron rather weakly narrowed apicad, with lateral margin oblique posterior of basal third; lateral margin carina exposed in dorsal view; lateral margin stria impunctate; apical margin rounded; inner apical angle situated on level of outer apical angle; apical crenulation present; sutural margin raised; sutural stria deep, parallel with suture, curved at base to form basal stria extending to elytral basal width, adsutural area flat, about 0.09 mm wide near scutellum, finely punctate; discal punctation much coarser than that on pronotum, poorly delimited, puncture intervals mostly about as large to twice as large as puncture diameters. Hind wings fully developed. Hypomeron smooth. Venter of thorax lacking microsculpture. Mesanepisternum extremely finely and sparsely punctate. Mesepimeron about three times as long as wide, slightly shorter than interval between its tip and mesocoxa. Metaventrite coarsely and densely punctate on apicomeral area and on area between mesocoxae and metacoxae, several coarse punctures on lateral areas, very finely punctate on most of lateral surface and between mesocoxae; median area of metaventrite convex, with shallow apical impression, lacking stria; antecoxal puncture rows absent. Submesocoxal areas about 0.08 mm long, about as long as half of shortest interval to metacoxa; submesocoxal lines subtriangular, distinctly punctate. Metanepisternum flat, narrowing anteriorly, with suture broadly rounded in posterior half, oblique anteriorly. Tibiae straight. Abdomen with punctulate microsculpture and very fine and sparse punctation. Ventrite I with submetacoxal areas 0.06–0.08 mm long, about as long as third of shortest interval to apical margin of ventrite; submetacoxal lines strongly convex, finely punctate.

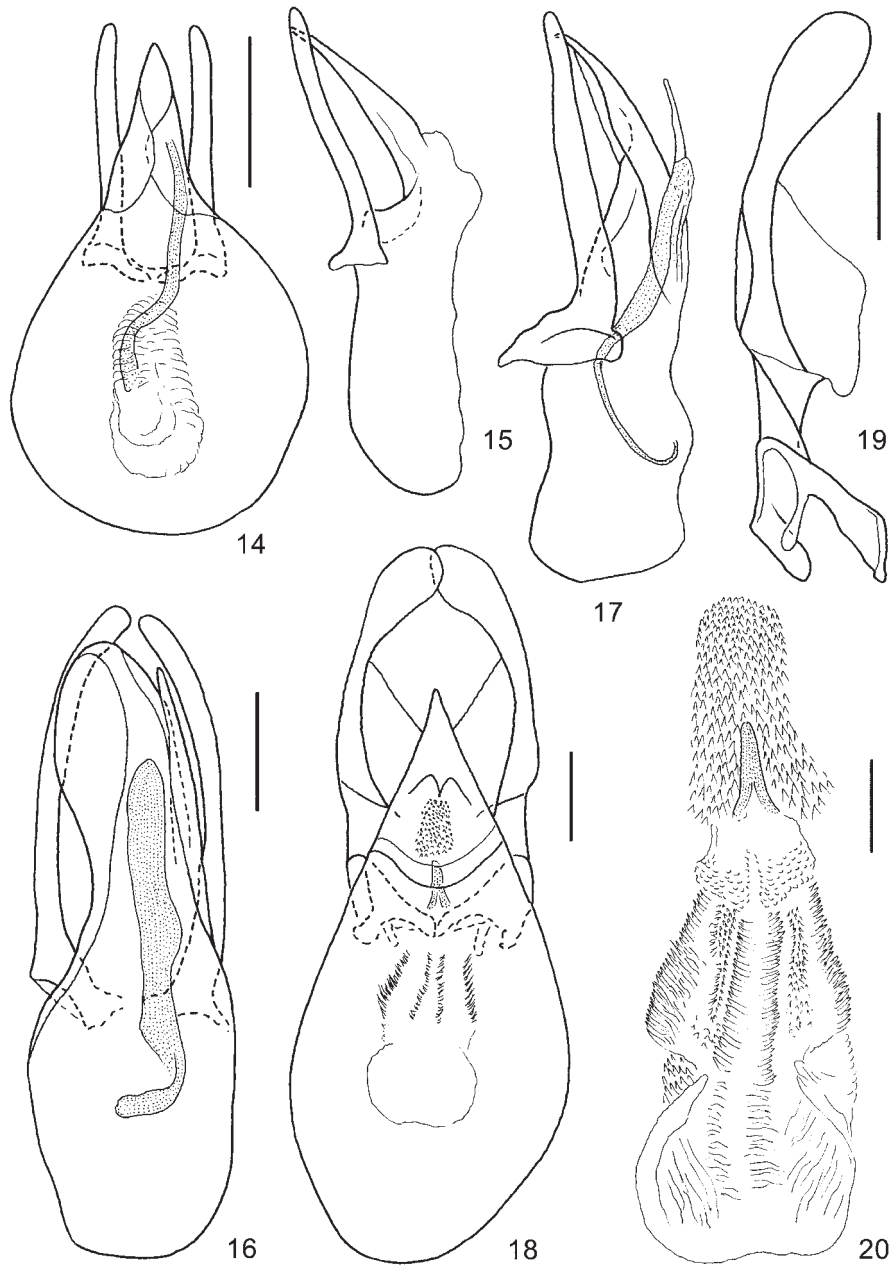
Male. Protarsomeres I to III distinctly widened, narrower than apex of protibia. Apical margin of ventrite VI with rounded lobe. Aedeagus (Figs 10, 11) 0.51 mm long.

Etymology. The species is named in honour of its collector, Friederich Carl Drescher (1874–1957), who was affiliated to the Museum Zoologicum Bogoriense.

Differential diagnosis. The aedeagal characters suggest relationships with the species of the *S. subalpinum* group known currently from temperate areas of the northern hemisphere. The narrow median lobe with an acute, incurved tip, the narrow and nearly straight parameres and the proximally thickened internal sac are features shared with *S. weigeli* Löbl, 2019 from China and *S. divali* Löbl, 2023 from South India. The new species may be easily distinguished from *S. weigeli* and *S. divali* by the punctulate abdominal microsculpture. It differs also notably from *S. weigeli* by the parameral bases strongly expanded and from *S. divali* by the parameres narrowing posterior of basal third (lateral view).



Figs 8–13. Male genitalia. **8** – *Scaphisoma bryanti* sp. nov., aedeagus in dorsal view, scale = 0.2 mm. **9** – Ditto, in ventral view, without proximal part of basal bulb, scale = 0.1 mm. **10, 11** – *Scaphisoma drescheri* sp. nov., aedeagus in dorsal and lateral views, scale = 0.1 mm. **12, 13** – *Scaphisoma multispinosum* sp. nov., aedeagus in dorsal and lateral views, scale = 0.1 mm.



Figs 14–20. Male genitalia. **14, 15** – *Scaphisoma neglectoides* sp. nov., aedeagus in dorsal and lateral views, scale = 0.1 mm. **16, 17** – *Scaphisoma planatoides* sp. nov., aedeagus in dorsal and lateral views, scale = 0.2 mm. **18–20** – *Scaphisoma posticum* sp. nov. **18** – Aedeagus in dorsal view, scale = 0.1 mm. **19** – Ditto, paramere in ventral view, scale = 0.05 mm. **20** – Ditto, internal ac in dorsal view, scale = 0.05 mm.

Scaphisoma multispinosum sp. nov.

(Figs 12, 13)

Type material. Holotype male, JAVA: W. Java Mt. Gede, 50km SE Bogor, 1400–1600 m 5–6.XI.1989 Löbl Agosti, Burckh[ardt] #3 (MBBJ). Paratypes, 3 males, 3 females, with same data as holotype (MBBJ, MHNG); 1 female: Java, Preanger, G. Patoeha, 5000 feet, 24.III.1928, F.C. Drescher (MBBJ).

Description. Length 1.50–1.60 mm, width 1.0–1.08 mm. Head and most of body reddish-brown, apices of elytra somewhat lighter, abdomen and appendages ochraceous to yellowish. Length/width ratios of antennomeres III 14/7: IV 30/5: V 54/6: VI 45/6: VII 55/9: VIII 45/7: IX 58/9: X 57/10: XI: 70/13. Pronotum and elytra lacking microsculpture. Pronotum with rounded lateral margins, lateral carinae hardly visible in dorsal view, lateral margin stria punctate, discal punctation fine and sparse, on prevailing surface hardly visible at magnification 40 times, becoming somewhat coarser and denser near basal margin, forming patch of rather coarse and dense punctures anterior of pronotal lobe. Tip of scutellum exposed, triangular. Elytron moderately narrowed apicad, with lateral margin rounded; lateral margin carina distinct in dorsal view; lateral margin stria punctate; apical margin rounded; inner apical angle situated in level with outer apical angle; apical crenulation present; sutural margin not raised; sutural stria starting posterior of scutellum, parallel with suture; adsutural area flat, about 0.05 mm wide, to part coarsely punctate; discal punctation very coarse and dense, forming oblique rows extending to apical third of elytron, with puncture intervals smaller than puncture diameters, intervals between rows larger than puncture diameters; punctation near elytral apex irregular and less coarse. Hind wings fully developed. Hypomeron with strigulate microsculpture. Mesanepisternum lacking microsculpture, very finely and sparsely punctate. Mesepimeron seven times as long as wide and twice as long as interval between its tip and mesocoxa. Metaventricle flattened on apicomeral area, lacking impressions or stria, with strigulate microsculpture evanescent on most of lateral areas, punctation coarse on mesal area, very fine on lateral areas; antecoxal puncture rows present. Submesocoxal areas about 0.02 mm long, about as long as tenth of shortest interval to metacoxa; submesocoxal lines parallel, distinctly punctate. Metanepisternum flat, narrowing anteriorly, with suture rounded. Tibiae straight. Abdomen with strigulate microsculpture. Ventricle I densely and rather coarsely punctate near intercoxal process, remaining abdominal punctation very fine and sparse; submetacoxal areas 0.05–0.06 mm long, about as long as half of shortest interval to apical margin of ventricle; submetacoxal lines convex, punctate.

Male. Protarsomeres I to III slightly widened. Ventricle VI with triangular, about 0.10 mm long lobe. Aedeagus (Figs 12, 13) 0.63–0.69 mm long.

Etymology. The species epithet is a Latin adjective referring to the spinose internal sac of the aedeagus.

Differential diagnosis. This species is a member of the *S. rouyeri* group (see LÖBL, 1981) and its aedeagal characters suggest relation to the Philippine *S. banguiense* Löbl, 1972. These two species share apical halves of the parameres strongly narrowed and the internal sac bearing two admesal spine bunches. The new species may be distinguished by the spine-bunches interrupted in middle and consisting of long spines uneven in apical

and proximal halves of the internal sac. The internal sac of *S. banguiense* has the spine bunches consisting of evenly long spines, uninterrupted in middle, and the spines much shorter than those of *S. multispinosum*.

***Scaphisoma neglectoides* sp. nov.**

(Figs 14, 15)

Type material. Holotype male, F. C. DRESCHER G. Tangkoeban Prahoe 4000–5000 Voet Preanger, Java 13.VII.1934 [printed, date handwritten] (MBBJ). Paratypes, 2 females, with same data as holotype (MBBJ, MHNG); 1 female, Java, Banjoewangi, 1909, Mac Gillavry (NBCL).

Description. Length 2.0–2.05 mm, width 1.37–1.40 mm. Body light brown, legs ochraceous, antennae light brown. Length/width ratios of antennomeres III 13/13: IV 11/12: V 38/12: VI 48/13: VII 65/16: VIII 46/14: IX 54/15: X 55/16: XI: 60/16. Pronotum and elytra lacking microsculpture. Pronotum with rounded lateral margins, lateral carinae hardly visible in dorsal view, lateral margin stria impunctate, discal punctation extremely fine, hardly visible at magnification 60 times. Tip of scutellum exposed, triangular. Elytron moderately narrowed apicad, with lateral margin oblique posterior of basal third; lateral margin carina concealed in dorsal view; lateral margin stria impunctate; apical margin truncate; inner apical angle situated in level with outer apical angle; apical crenulation present; sutural margin not raised; sutural stria shallow, parallel with suture, curved at base and forming basal stria reaching outer third of elytral basal width; adsutural area flat, near scutellum about 0.06 mm wide, very finely punctate; punctation on basal third of disc scattered, slightly coarser than that on pronotum, punctures poorly delimited; punctation becoming denser and less fine apicad, puncture intervals posterior basal third mostly about three to five times as large as puncture diameters. Hind wings fully developed. Hypomeron smooth. Venter of mesothorax and metathorax lacking microsculpture, very finely and sparsely punctate. Mesepimeron about three times as long as wide and nearly as long as interval between its tip and mesocoxa. Metaventrite lacking impressions or stria; antecoxal puncture rows absent. Submesocoxal areas about 0.05 mm long, about as long as fourth of shortest interval to metacoxa; submesocoxal lines convex, distinctly punctate. Metanepisternum flat, narrowing anteriorly, with suture straight except at rounded anterior angle. Protibiae straight, mesotibiae and metatibiae slightly curved. Abdomen very finely and sparsely punctate. Ventrite I lacking microsculpture, with submetacoxal areas 0.05–0.06 mm long, about as long as fifth to fourth of shortest interval to apical margin of ventrite; submetacoxal lines convex, coarsely punctate. Following ventrites with punctulate microsculpture.

Male. Protarsomeres I to III distinctly widened, narrower than apex of protibia. Ventrite VI with rounded lobe. Aedeagus (Figs 14, 15) 0.68 mm long.

Etymology. The species epithet refers to the similar species *S. neglectum*, the Greek *oides* means similar.

Differential diagnosis. The aedeagus suggest relationship with the species of the *S. subalpinum* group currently known only from temperate areas of the northern hemisphere. The structures, such as the simple flagellum, are similar to those of *S. neglectum* Löbl, 2003 and *S. styloides* Löbl, 2000 from China. The new species may be

easily distinguished by the short antennomere III, the light body colour, the fine elytral punctation and the metaventrite lacking impression and entirely very finely punctate.

***Scaphisoma planatoides* sp. nov.**

(Figs 16, 17)

Type material. Holotype male, Leg. H. LUCHT K.O. Blawan Idjen-Plateau, Java 900–1500 Ms. 5.II.1934 [printed, date handwritten] (MBBJ).

Description. Length 2.26 mm, width 1.58 mm. Head, thorax, most of elytra and abdomen reddish brown. Apical fifth to fourth of elytra yellowish. Appendages reddish-brown, lighter than thorax. Length/width ratios of antennomeres III 20/9: IV 33/7: V 48/9: VI 53/13: VII 60/18: VIII 55/13: IX 60/15: X 64/16: XI: 80/17. Pronotum and elytra lacking microsculpture. Pronotum with rounded lateral margins, lateral carinae exposed in dorsal view, lateral margin stria punctate, discal punctation coarse and very dense, punctures poorly delimited, visible at magnification 15 times, puncture intervals to large part about puncture diameters. Tip of scutellum exposed, triangular. Elytron weakly narrowed apicad, with lateral margin rounded near base and apex, oblique in middle third; lateral margin carina exposed in dorsal view, except in middle third; lateral margin stria punctate; apical margin rounded; inner apical angle situated posterior of outer apical angle level; apical crenulation present; sutural margin not raised; sutural stria deep, posterior scutellum parallel with suture up to apical third of sutural length, curved near base and extending along basal margin to form shallow basal stria reaching elytral mid-width; adsutural area flat, near scutellum about 0.09 mm wide, punctate; discal punctation much coarser than that on pronotum, punctures well delimited, puncture intervals mostly about up to twice as large as puncture diameters. Hind wings fully developed. Hypomeron smooth. Mesanepisternum extremely finely and sparsely punctate, lacking microsculpture. Mesepimeron about three times as long as wide and about as long as interval between its tip and mesocoxa. Metaventrite with strigulate microsculpture on narrow area between metacoxae, lacking microsculpture on remaining surface, very finely and sparsely punctate on lateral areas and between mesocoxae; middle of metaventrite convex, densely and coarsely punctate, punctures sharply delimited; lacking stria, apicomeral area impressed; antecoxal puncture rows absent. Submesocoxal areas about 0.05 mm long, about as long as fifth of shortest interval to metacoxa; submesocoxal lines nearly convex, coarsely punctate. Metanepisternum flat, lacking microsculpture, narrowing anteriorly, with suture straight except at rounded anterior angle. Tibiae straight. Abdomen with strigulate microsculpture and very fine and sparse punctation, similar to that on metaventral sides. Ventrite I with submetacoxal areas 0.03 mm long, about as long as tenth of shortest interval to apical margin of ventrite, submetacoxal lines parallel, coarsely punctate.

Male. Apical margin of ventrite VI subangulate, lacking distinct lobe. Aedeagus (Figs 16, 17) 0.92 mm long.

Etymology. The species epithet derived from the Latin adjective *planatus*, referring to the expanded flattened apical process of the aedeagus, and the Greek *oides* meaning similar.

Differential diagnosis. The aedeagal characters of this new species suggest relationship

with *S. scurrile* Löbl & Ogawa, 2016 from Palawan. *Scaphisoma planatoides* may be distinguished by the shape of the apical process of the median lobe narrowing proximally, the shape of the more robust and sclerotized internal sac, and, in external characters, by its larger body, the light apical area of the elytra, the longer antennae with the antennomere IV about 1.5 times as long as the antennomere III, the mesepimeron about as long as the interval to the mesocoxa, and the submesocoxal lines convex.

***Scaphisoma posticum* sp. nov.**

(Figs 18–20)

Type material. Holotype male, Java occident. Pengalengan, 4000', 1893, H. Fruhstorfer (MHNG). Paratypes, 1 male, West Java, Preanger, G. Patoeho, 5000', 19–25.IX.1926, F.C. Drescher (MBBJ); 1 male, West Java, Preanger, G. Tangkoeban Prahoe, 4000–5000', 11.III.1920, F.C. Drescher (MBBJ); 2 males, 2 females, W. Java, Mt. Gede, 50 km SE Bogor, 1400–1600 m, 5–6.XI.1989, Löbl, Agosti, Burckhardt (MBBJ, MHNG).

Description. Length 1.80–2.05 mm, width 1.15–1.20 mm. Head, thorax, most of elytra and abdomen reddish-brown. Apical third of elytra yellowish. Appendages reddish-brown, lighter than thorax. Length/width ratios of antennomeres III 17/8: IV 40/7: V 53/8: VI 52/8: VII 62/15: VIII 45/8: IX 56/13: X 49/13: XI: 60/17. Pronotum and elytra lacking microsculpture. Pronotum with rounded lateral margins, lateral carinae exposed in dorsal view, lateral margin stria impunctate, discal punctation very fine and rather dense, punctures poorly delimited, hardly visible at magnification 20 times, puncture intervals clearly larger than puncture diameters. Tip of scutellum exposed, triangular. Elytron weakly narrowed apicad, with lateral margin rounded near base, nearly oblique in middle third; lateral margin carina exposed in dorsal view; lateral margin stria punctate; apical margin truncate; inner apical angle situated about the level of outer apical angle; apical crenulation present; sutural margin raised; sutural stria deep, gradually converging to suture, curved near base, not extending along basal margin; adsutural area flat, near scutellum about 0.08 mm wide, irregularly punctate; discal punctation very fine near base, on prevailing surface much coarser than that on pronotum, with punctures well delimited, puncture intervals mostly about as large to twice as large as puncture diameters. Hind wings fully developed. Hypomeron smooth. Mesanepisternum extremely finely and sparsely punctate, lacking microsculpture. Mesepimeron about four times as long as wide and slightly shorter than interval between its tip and mesocoxa. Metaventrite lacking striae or longitudinal impressions, with strigulate microsculpture evanescent between mesocoxae and on most of lateral areas, punctation very fine and dense between mesocoxae, very fine and sparse on most of lateral areas; middle of metaventrite convex, flattened anterior of metacoxal process and conspicuously densely and coarsely punctate, punctures sharply delimited; antecoxal puncture rows consisting of coarse punctures. Submesocoxal areas about 0.05 mm long, as long as fourth of shortest interval to metacoxa; submesocoxal lines convex, coarsely punctate. Metanepisternum flat, lacking microsculpture, narrowing anteriorly, with suture straight except at rounded angles. Tibiae straight. Abdomen with strigulate microsculpture and very fine and sparse punctation, similar to punctation on metaventral sides. Ventrite I with submetacoxal areas 0.05 mm long, about as long as fourth of shortest interval to apical

margin of ventrite, submetacoxal lines convex, coarsely punctate.

Male. Protarsomeres I to III distinctly widened, narrower than apex of protibia. Apical margin of ventrite VI with triangular lobe about 0.08 mm long. Aedeagus (Figs 18–20) 0.73–0.82 mm long.

Etymology. The species epithet is a Latin adjective meaning behind.

Differential diagnosis. The species resembles *S. flavapex* by its size, colour, and sutural striae. It may be easily distinguished by the much longer antennomere IV, the antennomeres V and VI nearly evenly long, the elytral punctation coarser than the pronotal punctation, the metaventrite bearing microsculpture and with a patch of coarse punctures, the antemetacoxal puncture rows present, the ventrite I with submetacoxal areas much smaller and the submetacoxal lines coarsely punctate.

Records and comments

Scaphisoma aspectum Löbl, 2015

Material examined. 4, East Java, Ijen Nat. Park, 1800 m, Sodong, 26–27.II.1994, leg. Bolm (SMNS, MHNG).

Comments. The species is known from Bali and Java. Other specimens from the Ijen National Park were reported in Löbl, 2018.

Scaphisoma binhanum (Pic, 1922)

Comments. The species is obviously widely distributed in Asia. It was described from Vietnam and subsequently reported from India, Nepal, Thailand, and Java.

Scaphisoma caudatum Löbl, 1975

Material examined. 4, W. Java, Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Löbl, Agosti, Burckhardt #2 (MBBJ, MHNG).

Comments. The species was based on a few specimens found at Singapore. It has not been recorded subsequently.

Scaphisoma chujoi Löbl, 1982

Material examined. 1, Java, Gn. Slammat, Batoerraden, 10.IV.1927, F.C. Drescher (MBBJ).

Comments. The species is currently known in three specimens collected in Sarawak and Sabah (LÖBL, 2023). This is the first Javanese record.

Scaphisoma dohertyi Pic, 1915

Material examined. 2, Java, Gn. Slammat, Batoerraden, 6.II.1930, F.C. Drescher (MBBJ); 1, Depok, 5.X.1947, C. v. Nidek (NBCL); 1, Java, Depok, Jan. (SAM).

Comments. This species is widely distributed in Southeast Asia, from South China and North India to East Malaysia and Sumbawa.

***Scaphisoma flavapex* Achard, 1921**

Type material. Lectotype by present designation, female, labelled: Ranoe Koembala Groote Meer. 2000 sl. (handwritten) / Jacobson byden Interioe Java or (handwritten on round label / TYPE (red label, printed) / Museum Leiden Det: (printed) / *Scaphosoma flavapex* Type (handwritten by Achard) J. Achard det. (printed) / Mus. Nas. Pragae Inv. 18726 (printed on red label) / *Scaphisoma flavapex* Ach. det Löbl 1975 (printed, *flavapex* Ach. and 75 handwritten) / Lectotype (red label, printed) / *Scaphisoma flavapex* Achard det. Löbl, 2023 (NMPC).

Redescription. Length 2.06 mm, width 1.40 mm. Head, pronotum, most of elytra and abdomen dark reddish-brown. Apical third of elytra yellowish, yellowish area slightly expanded near suture, and more expanded along lateral margin. Venter of thorax lighter than pronotum. Ventrites I and II darker than metaventricle, following ventrites lighter. Femora and tibiae light reddish-brown, tarsi yellowish. Antennomeres I to IV yellowish, following antennomeres light brown. Length/width ratios of antennomeres III 13/10: IV 18/9: V 34/10: VI 53/13: VII 58/18: VIII 36/17: IX 50/15: X 46/16: XI: 53/18. Pronotum and elytra lacking microsculpture. Pronotum with rounded lateral margins, lateral carinae exposed in dorsal view, except near basal angle; lateral margin stria punctate, discal punctation rather coarse and dense, punctures well delimited, visible at magnification 16 times, puncture intervals mostly two or three times as large as puncture diameters, in part about as large as puncture diameters. Exposed part of scutellum minute, triangular. Elytron weakly narrowed apicad, with lateral margin weakly rounded; lateral margin carina hardly visible in dorsal view; lateral margin stria punctate; apical margin truncate; inner apical angle anterior level of outer apical angle; apical crenulation present; sutural margin raised; sutural stria deep, gradually converging to suture, curved near base, not extending along basal margin; adsutural area flat, near scutellum about 0.08 mm wide, irregularly, very finely punctate; discal punctation very fine near base, finer than pronotal punctation, punctures fairly well delimited, puncture intervals mostly about three to five times as large as puncture diameters. Hind wings fully developed. Hypomeron smooth. Mesanepisternum extremely finely and sparsely punctate, lacking microsculpture. Mesepimeron about five times as long as wide and clearly longer than interval between its tip and mesocoxa. Metaventricle lacking striae or longitudinal impressions, lacking microsculpture, with mesal area slightly convex, nearly evenly densely and finely punctate; antecoxal puncture rows absent. Submesocoxal areas about 0.04 mm long, nearly as long as fifth of shortest interval to metacoxa; submesocoxal lines convex, finely punctate. Metanepisternum flat, lacking microsculpture, narrowing anteriorly, with straight suture. Protibiae straight, mesotibiae and metatibiae slightly curved. Abdomen with strigulate microsculpture and punctation very fine and sparse, finer than punctation on metaventricle. Ventricle I with submetacoxal areas 0.10 mm long, somewhat shorter than third of shortest interval to apical margin of ventrite, submetacoxal lines convex, very finely punctate.

Comments. ACHARD (1921) based the species on an unspecified number of specimens

from “Smeroe: Ranoe Koembala, Groote Meer (E. Jacobson)”. The single specimen preserved in the Achard’s collection (NMPC) complies with the published data. Its right elytron is broken off and missing. The fixation by the lectotype designation is considered necessary because other similar and sympatric species, not necessarily conspecific syntypes may exist.

***Scaphisoma grouvellei* Achard, 1920**

Comments. The single known specimen is preserved in the MNHN. The specimen is a female, labelled MUSEUM PARIS Coll. A. Grouvelle 1915 (printed) / Java orient. Montes Tenéger 4000’ 1890 H. Fruhstorfer (printed on bluish label) / Scaphosoma Gouvellei nsp TYPE (handwritten by Achard) J. Achard det. (printed) / TYPE (printed) MNHN, Paris EC25214 (printed). The specimen is unavailable for examination but the supplied photography provides information used to key the species. According to the photography, the Achard’s statement about the anterior and posterior pronotal margins “liseré de flave” and the “tiers apical des élytres flave” are misleading. Only the apical fourth of the elytra is light, the apical margins of the elytra are truncate and notably oblique, so that the inner apical angle is situated well posterior of the level of the outer apical angles, and the sutural striae of the elytra are shortened.

***Scaphisoma jacobsoni* Löbl, 1975**

Material examined. 1, Java, Buitenzorg [=Bogor], Jan. A.M. Lea & wife (SAM); 2, Depok, 5.X.1947 C. v. Nidek (NBCL).

Comments. The species is known from Indonesia, East Malaysia, and Thailand.

***Scaphisoma javanum* Löbl, 1979**

Comments. The species was based on specimens collected at Kebun Raya, Bogor, East Java. It is absent from the new collections studied. The species was reported also from East Malaysia, the Philippines and Thailand.

***Scaphisoma luteomaculatum* Pic, 1915**

Material examined. 1, Tjipokon, 28.V.1950, C. v. Nidek (NBCL); 1, Gunung Slamet, Batoerraden, 6.II.1930, F.C. Drescher (MBBJ); 1, same data but 7–9.VIII.1926 (MBBJ); 1, Preanger, Gn. Tangkoeban Prahoe, 4000–5000’, 7.XI.1928 (MBBJ); 1, same data but 13.VII.1934 (MBBJ); 1, Preanger, Gunung Patoeha, 5000’, 19–25.IX.1926, F.C. Drescher (MBBJ); 1, same data but 15–22.V.1928 (MBBJ); 3, Batavia [= Jakarta], Dec. 1908, E. Jacobson (NBCL); 1, C. Java, Gunung Merapi, ca 1500 m, 11.VII.1972, G. Rougemont (MHNG); 1, Lake Telaga Warna, Pass between Puncak and Cibodas, 12.VIII.1975, J. Robert (MHNG); 1, East Java, Ijen Nat. Park, 1800 m, Sodong, 26–27.II.1994, leg. Bolm (SMNS).

Comments. The species is wide-spread in the Sundaland, and known also from the Philippines and Myrmar.

***Scaphisoma malaccanum* (Pic, 1915)**

Material examined. 12, W. Java, Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Löbl, Agosti, Burckhardt #2 (MBBJ, MHNG).

Comments. This species was so far known from West and East Malaysia, and from the Philippines. It was transferred from *Baeocera* to *Scaphisoma* in LÖBL (1973), its diagnostic characters are given in the latter paper and in LÖBL (2023).

***Scaphisoma obliquemaculatum* Motschulsky, 1863**

Material examined. 2, Tjilatjap, 8.IX.1925, F.C. Drescher (MBBJ); 5, Preanger, Gn. Tangkoeban Prahoe, 4000–5000', 14.I.1930 (MBBJ); 1, Bogor, 250 m, 13.II.1944, R. van der Klip (MBBJ).

Comments. The species is widely distributed in Southeast Asia. It was described from Ceylon (Sri Lanka) and subsequently reported from Indonesia, East Malaysia, Thailand, Vietnam, and the Mascarene Archipelago.

***Scaphisoma rouyeri* Pic, 1916**

Comments. The species was described from “Mt. Smerou” [= Gunung Semeru], East Java. The species was reported also from Kalimantan, East Malaysia, and Thailand. It is not present in the examined collections.

***Scaphisoma testaceomaculatum testaceomaculatum* (Pic, 1915)**

Material examined. 14, W. Java, Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Löbl, Agosti, Burckhardt #3 (MBBJ, MHNG); 1 Java, Preanger, Gn. Tangkoeban Prahoe, 4000–5000', 13.VIII.1924, F.C. Drescher (MBBJ); 1, same data but 20.II.1929 (MBBJ); 2, same data but 21.IV.1930 (MBBJ); 1, same data but 21.IX.1930 (MBBJ); 10, same data but 24.III.1930 (MBBJ); 6, same data but 13.VII.1934 (MBBJ); 1, same data but XII.1937 (MBBJ); 2, same data but 22.VIII.1928 (MBBJ); 1, same data but 17.XII.1932 (MBBJ); 1, same data but V.1934 (MBBJ); 1, Gunung Slamet, Batoerraden, 23–27.II.1928, F.C. Drescher (MBBJ); 5, K. O. Blawan, 900–1500 m, Idjen Plateau, V.1940, F.C. Drescher (MBBJ).

Comments. ACHARD (1921) recorded the species from Pengalengon, Preanger and Goenoeng Oengaran [=Gunung Ungaran]. Pic (1920) described a new variety of *S. testaceomaculatum*, *conjunctum*, from Sumatra: Si Rambé, distinguished by the joining elytral spots. According to the ICZN, Art. 45.6.4 (1999) the latter nomen is deemed to be subspecific.

***Scaphobaeocera* Csiki, 1909**

Most members of the genus have elytra with parasutural striae and strigulate microsculpture. Such species may be easily distinguished from other taxa sharing a laterally compressed body. Species of *Scaphobaeocera* lacking these characters may be

distinguished from other taxa with laterally compressed body by their large mesepimera and the prominent basal angles of the pronotum, in combination with an aciculate maxillary palpomere IV. The genus comprises 123 Old World, Australian and Pacific species. The single known Javanese species, *S. kraepelini* (Pic, 1933) from “Buitenzorg” [= Bogor], was redescribed by LÖBL (2015). This species was not found in the examined samples which comprise five new species.

Key to Javanese species of *Scaphobaeocera*

- 1 Dorsum of body light brown, lacking microsculpture, not iridescent. Elytra lacking parasutural striae. **2**
- Dorsum of body blackish to black, elytra with microsculpture, to part or entirely iridescent. Elytra with parasutural striae. **3**
- 2 Metanepisternum with convex suture; antennomere IX 1.8 times as long as antennomere VIII. Aedeagus with narrow, convoluted flagellum. *S. kraepelini* (Pic)
- Metanepisternum strongly narrowed anteriorly; antennomere IX about 1.6 times as long as antennomere VIII. Aedeagus with robust, proximally angulate flagellum. *S. larga* sp. nov.
- 3 Antennomeres VI and VIII conspicuously short, antennomere VIII about 1.4 times as long as wide and as long as fifth of antennomere VII. *S. montisgeniei* sp. nov.
- Antennomeres VI and VIII elongate, antennomere VIII about 2.5 times as long as wide and in length exceeding half of antennomere VII. **4**
- 4 Basal bulb of aedeagus with apicoventral, prominent tooth-like process. Apex of apical process acute, apex of parameres truncate. Hypomera with microsculpture. *S. spinigeroides* sp. nov.
- Basal bulb of aedeagus without prominent process, apex of parameres rounded. Hypomera lacking microsculpture. **5**
- 5 Aedeagus with apex of apical process truncate, base of flagellum moderately widened. *S. truncata* sp. nov.
- Aedeagus with apex of apical process acute, base of flagellum bulbous. *S. basalis* sp. nov.

New species

Scaphobaeocera basalis sp. nov.

(Figs 21, 22)

Type material. Holotype female, JAVA: W. Java Cibodas, 50 km E Bogor, 1400–1600 m, 5–6.XI.1989, Löbl, Agosti, Burckh[ardt] #3a (MBBJ). Paratype male, JAVA: W. Java Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Agosti, Löbl, Burckhardt #2a (MHNG).

Description. Length 1.55–1.67 mm, width 0.83–0.95 mm, dorsoventral diameter 0.88–0.98 mm. Head and body blackish, apical abdominal segments and appendages brown. Length/width ratios of antennomeres: III 24/6: IV 17/6: V 30/6: VI 25/7: VII 41/9:

VIII 25/8: IX 45/9: X 38/10 XI 43/10. Pronotum not iridescent, lacking microsculpture, extremely finely punctate. Scutellum completely concealed. Elytron with strigulate microsculpture and weakly iridescent, sutural stria shallow, starting at side of pronotal lobe, parasutural stria hardly visible posterior of elytral mid-length, evanescent anterior. Elytral punctation as fine and sparse as pronotal punctation. Hypomeron lacking stria, appearing impunctate. Mesoventrite with mesal ridge. Mesanepisternum lacking microsculpture, with punctation very fine and sparse, similar to that on metaventral sides. Metaventrite flattened in middle, lacking mesal stria, finely and densely punctate on posterior two thirds and with short pubescence; lateral parts of metaventrite with strigulate microsculpture; submesocoxal lines parallel, appearing impunctate, submesocoxal areas about 0.02 mm long. Metanepisternum flat, 0.05–0.07 mm wide, narrowing anterior, with deep, slightly curved suture. Tibiae straight. Ventrites with strigulate microsculpture. Ventrite I with punctation similar to that on metaventral sides; basal puncture row hardly visible.

Male. Protarsomeres I to III strongly widened, with distinct tenent setae, protarsomere I as wide as apex of protibia. Aedeagus (Figs 21, 22) 0.49 mm long.

Etymology. The species epithet is a Latin adjective meaning basic.

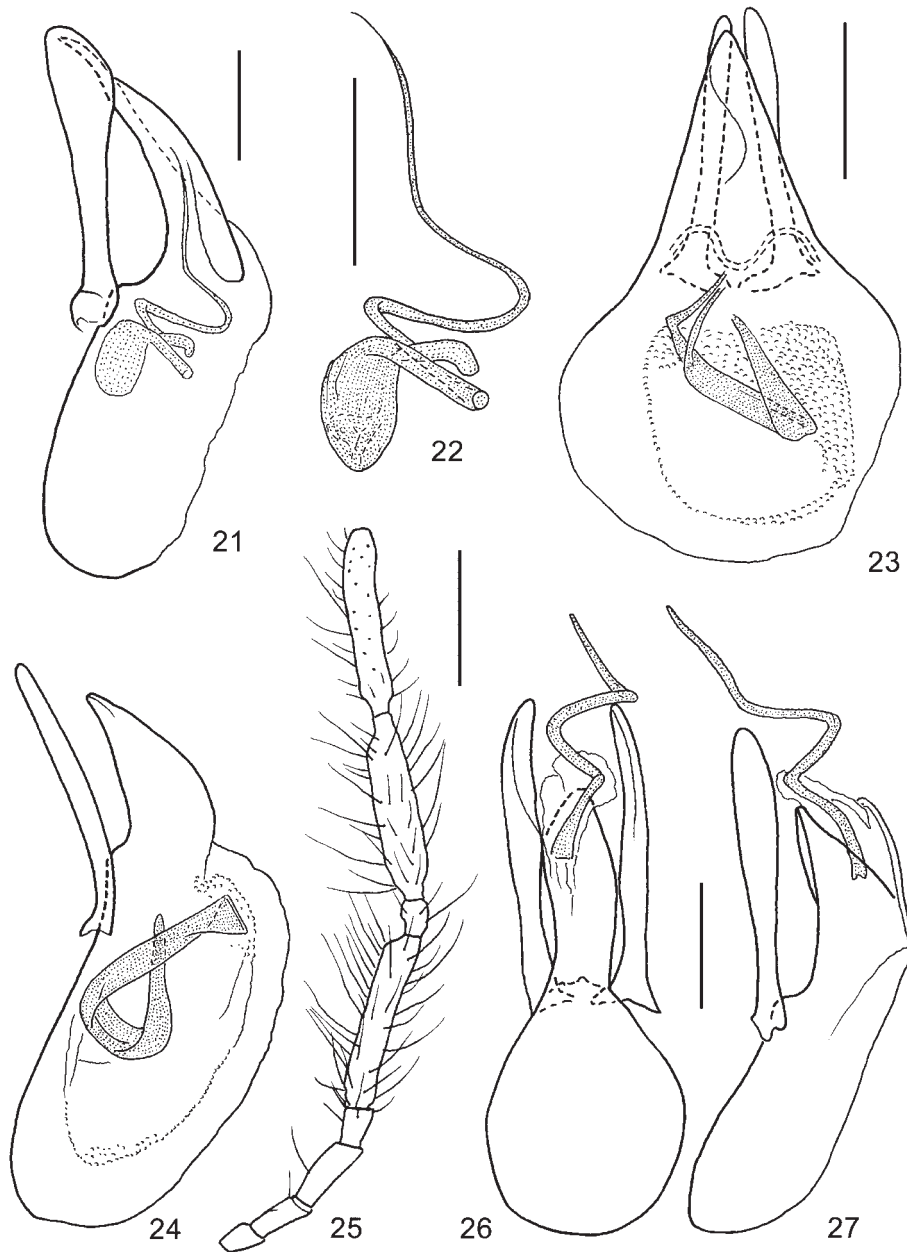
Differential diagnosis. The aedeagal characters suggest relationship with *S. lombokensis* Löbl, 2015. The new species may be easily distinguished by its large and much darker body, the lateral parts of metaventrite bearing microsculpture, the tip of the median lobe acute and the parameres gradually widening posterior.

***Scaphobaeocera larga* sp. nov.**

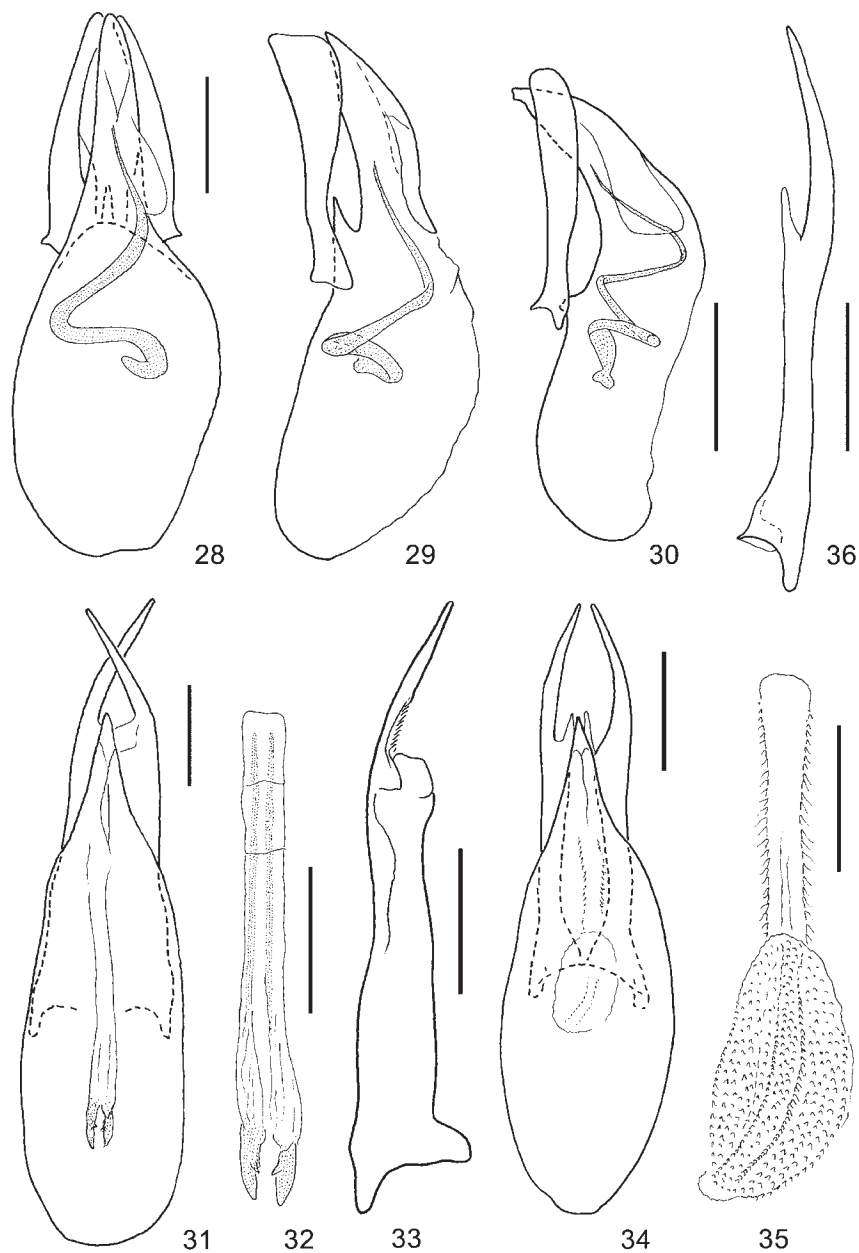
(Figs 23, 24)

Type material. Holotype male, JAVA: W. Java Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Agosti, Löbl, Burckhardt #2a (MBBJ). Paratypes, 3 males, 3 females, with the same data as holotype (MBBJ, MHNG).

Description. Length 1.02–1.05 mm, width 0.60–0.65 mm, dorsoventral diameter 0.65–0.70 mm. Head and most of body light brown, metaventrite usually somewhat darkened, apical abdominal segments yellowish, legs about as light as or slightly lighter than body, antennomeres yellowish. Length/width ratios of antennomeres: III 15/6: IV 21/6: V 23/6: VI 20/7: VII 30/10: VIII 20/7: IX 33/12: X 33/12: XI 45/14. Thorax, elytra and abdomen lacking microsculpture, not iridescent. Pronotal and elytral punctation similar, extremely fine. Scutellum completely concealed. Elytron with sutural stria shallow, starting at side of pronotal lobe; parasutural stria absent. Venter of thorax lacking microsculpture. Hypomeron lacking stria, appearing impunctate. Mesoventrite with short mesal ridge, not extending posterior mesoventral mid-length. Mesanepisternum as metaventral sides very finely and sparsely punctate. Metaventrite weakly convex in middle, flattened anterior of metaxocal process, lacking mesal stria, finely and densely punctate and with short pubescence on posterior two thirds; submesocoxal lines parallel, distinctly punctate, submesocoxal areas about 0.02–0.03 mm long. Metanepisternum flat, 0.05–0.06 mm wide, not narrowing anterior, with deep, straight suture. Tibiae straight. Ventrite I with punctation similar to that on metaventral sides; basal puncture row distinct, outer punctures somewhat elongate.



Figs 21–27. Male genitalia and antenna. **21** – *Scaphobaeocera basalis* sp. nov., aedeagus in lateral view, scale = 0.1 mm. **22** – Ditto, internal sac, scale 0.1 mm. **23, 24** – *Scaphobaeocera larga* sp. nov., aedeagus in dorsal and lateral views, scale = 0.1 mm. **25** – *Scaphobaeocera montisgedei* sp. nov., antennomeres III to XI, scale = 0.1 mm. **26, 27** – Ditto, aedeagus in dorsal and lateral views, scale = 0.1 mm



Figs 28–36. Male genitalia. **28, 29** – *Scaphobaeocera spinigeroides* sp. nov., aedeagus in dorsal and lateral views, scale = 0.1 mm. **30** – *Scaphobaeocera truncata* sp. nov., aedeagus in lateral view. **31–33** – *Scaphoxium corporaali* sp. nov. **31** – Aedeagus in dorsal view, scale = 0.1 mm. **32** – Ditto, internal sac, scale = 0.1 mm. **33** Ditto, paramere in ventral view, scale = 0.1 mm. **34–36** – *Scaphoxium dentatum* sp. nov. **34** – Aedeagus in dorsal view, scale = 0.1 mm. **35** – Ditto, internal sac, scale = 0.05 mm. **36** – Ditto, paramere in ventral view, scale = 0.1 mm.

Male. Protarsomeres I to III slightly widened, with indistinct tenent setae, protarsomere I narrower than apex of protibia. Aedeagus (Figs 23, 24) 0.34–0.35 mm long.

Etymology. The species epithet is a Latin adjective meaning rich.

Differential diagnosis. The species shares most of its external diagnostic characters with *S. kraepelini*. However, it may be distinguished by the straight metanepisternal suture. The aedeagal characters of this new species differ notably from all congeners, especially by the shape of the looped flagellum and the broad median lobe.

***Scaphobaeocera montisgedei* sp. nov.**

(Figs 26, 27)

Type material. Holotype male, Java Mt. Gede, 1400 m, 25.V.66, Rougemont (MHNG).

Description. Length 1.50 mm, width 0.88 mm, dorsoventral diameter 0.91 mm. Body black, apex of abdomen dark brown, appendages light brown. Length/width ratios of antennomeres: III 14/10: IV 18/8: V 25/9: VI 15/8: VII 57/10: VIII 11/8: IX 60/13: X 58/10 (antennomere XI missing on the sole antenna present). Pronotum not iridescent, lacking microsculpture, extremely finely punctate. Tip of scutellum exposed. Elytron with microsculpture, iridescent near suture, sutural stria deep, starting at side of pronotal lobe, parasutural stria distinct. Elytral punctation as fine and sparse as pronotal punctation. Ventral side of thorax lacking microsculpture. Hypomerone lacking stria, appearing impunctate. Mesoventrite with mesal ridge and longitudinal striae. Mesanepisternum extremely finely punctate. Metaventricle weakly convex in middle, with mesal stria extending from anterior margin to mid-length; distinct setigerous punctures on narrow area between mesocoxa and metacoxa and anterior metacoxal process, few scattered and extremely fine punctures on lateral areas; submesocoxal lines parallel, very finely punctate, submesocoxal areas about 0.02 mm long. Metanepisternum flat, 0.05 mm wide, not narrowing anteriorly, with deep, straight suture. Protibiae and mesotibiae straight, metatibiae broken off, lacking. Ventrites lacking microsculpture. Ventricle I with punctation similar to that on sides of metaventricle; basal puncture row rather coarse, interrupted in middle, punctures becoming somewhat elongate laterad.

Male. [Tarsi broken off, lacking.] Aedeagus (Figs 26, 27) 0.41 mm long.

Etymology. The species epithet is the Latinized name of Mount Gede.

Differential diagnosis. Only four species, *S. escena* Löbl, 2011, *S. junlei* Löbl, 2018, *S. yunnana* Löbl, 2018 and *S. zdenae* Löbl, 1992, possess similar antennae, with the antennomeres III to VI and VIII very short, compared to the strongly elongate antennomeres VII and VIII to XI. Notable for these species is the antennal pubescence, with long, erect setae on the antennomeres VII and IX to XI (Fig. 25). The new species is distinguished from the Philippine *S. escensa* and Chinese *S. junlei* by the aedeagus with its median lobe narrowing posteriorly of the basal bulb and blunt at apex, the parameres weakly widening apically, and the middle section of the flagellum strongly incurved. *Scaphobaeocera yunnana* shares with *S. montisgedei* an acute tip of the median lobe while its flagellum is only moderately curved. The genital characters of the Nepalese *S.*

zdenae are unknown. However, the species may be easily distinguished from *S. montisgenei* by its metaventral microsculpture and the much larger metanepisterna.

***Scaphobaeocera spinigeroides* sp. nov.**

(Figs 28, 29)

Type material. Holotype male, Java Mt. Gede, 1400 m, 25.V.1966, Rougemont (MHNG).

Description. Length 1.36 mm, width 0.70 mm, dorsoventral diameter 0.77 mm. Head, thorax, nearly entire elytra and most of ventrite blackish, narrow apical area of elytra, apex of ventrite I and following ventrites brown, femora and tibiae reddish-brown, tarsi and antennae yellowish. Length/width ratios of antennomeres: III 20/5: IV 20/5: V 25/6: VI 22/6: VII 26/9: VIII 18/7: IX 26/13: X 30/14: XI 37/15. Pronotum not iridescent, lacking microsculpture, extremely finely punctate. Scutellum completely concealed. Elytron with strigulate microsculpture and iridescent, sutural stria deep, starting at side of pronotal lobe, parasutural stria distinct. Elytral punctation as fine and sparse as pronotal punctation. Hypomeron lacking stria, with strigulate microsculpture, appearing impunctate. Mesoventrite with mesal ridge not reaching margin of mesocoxal process, lacking striae. Mesanepisternum extremely finely punctate, lacking microsculpture. Metaventrite lacking microsculpture, impressed in middle, with mesal stria extending from anterior margin to mid-length; with scattered, relatively large punctures and very short pubescence on apicomedian area, extremely finely punctate on lateral areas; submesocoxal lines slightly convex, finely punctate, submesocoxal areas about 0.03 mm long. Metanepisternum flat, 0.06 mm wide, narrowing anteriorly, with deep, arcuate suture. Tibiae straight. Abdomen with strigulate microsculpture, very finely punctate. Ventrite I with punctation similar to that on metaventral sides; basal puncture row fine, interrupted in middle, punctures not elongate.

Male. Protarsomere I to III strongly widened, slightly narrower than apex of protibia. Aedeagus (Figs 28, 29) 0.44 mm long.

Etymology. The species epithet refers to the similarity of the new species with *S. spinigera*.

Differential diagnosis. This new species is similar and related with *S. spinigera* Löbl, 1979. It may be distinguished by the antennomeres III and IV evenly long, the antennomere XI clearly longer than the antennomere X, the metaventrite lacking microsculpture, the metanepisterna narrower and with rounded suture, the spine-like process of the median lobe much shorter, and the parameres not extending posterior of the tip of the median lobe and obliquely truncate at apex.

***Scaphobaeocera truncata* sp. nov.**

(Fig. 30)

Type material. Holotype male, JAVA: W. Java Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Agosti, Löbl, Burckhardt #2a (MBBJ). Paratype male, with the same data as holotype (MHNG).

Description. Length 1.21–1.25 mm, width 0.66–0.68 mm, dorsoventral diameter 0.74–0.76 mm. Head, pronotum, elytra, venter of thorax and ventrite I dark brown to

blackish, following ventrites light brown to yellowish. Femora rufous, tibiae, tarsi and antennae yellowish. Length/width ratios of antennomeres: III 16/6: IV 23/6: V 20/6: VI 22/7: VII 27/10: VIII 20/8: IX 31/10: X 34/11: XI 40/13. Pronotum not iridescent, lacking microsculpture, extremely finely punctate. Scutellum completely concealed. Elytron with strigulate microsculpture and iridescent, sutural stria deep, starting at side of pronotal lobe, parasutural stria absent. Elytral punctation as fine and sparse as pronotal punctation. Ventral side of thorax lacking microsculpture. Hypomerone lacking stria, appearing impunctate. Mesoventrite with mesal ridge. Mesanepisternum and sides of metaventrite very finely and sparsely punctate. Metaventrite flat in middle, lacking mesal stria, finely and densely punctate on entire mesal area, with short pubescence; submesocoxal lines parallel, appearing impunctate, submesocoxal areas hardly 0.02 mm long. Metanepisternum flat, 0.03 mm wide, not narrowing anteriorly, with shallow, slightly curved suture. Tibiae straight. Ventrites with strigulate microsculpture. Ventrite I with punctation similar to that on metaventral sides; basal puncture row absent.

Male. Protarsomeres I to III distinctly widened, narrower than apex of protibia. Aedeagus (Fig. 30) 0.32–0.34 mm long.

Etymology. The species epithet is a Latin adjective meaning truncate.

Differential diagnosis. The aedeagal characters of this species suggest relationship with *S. lombokensis* and *S. basalis*. It is distinguished from them by the shape of the basal section of the flagellum. This new species differs from *S. lombokensis* notably by the gradually widening parameres and the dark body. It may be easily distinguished from *S. basalis* by its small body size and the truncate apex of the median lobe.

Scaphoxium Löbl, 1979

Scaphoxium is characterized notably by the hypomera expanded and lobed apicoventrally, in combination with the concealed mesepimera, the basal angles of pronotum not extending apicad, and the metanepisternal suture usually shortened. *Scaphoxium* currently comprises 49 species, additional two are in the studied samples. The genus is distributed throughout the Palaetropics, extending in north-east to Japan and south-eastward to Melanesia and Northeast Australia.

Scaphoxium corporaali sp. nov.

(Figs 31–33)

Type material. Holotype male, J. B. CORPORAAL JAVA-Preanger 6 Tjigembong 45 [numbers handwritten] / ZMA. INS. 5117722 (NBCL).

Description. Length 1.48 mm, width 0.77 mm, dorsoventral diameter 0.80 mm. Head and body dark reddish-brown, apex of abdomen ochraceous. Antennae light brown. Length/width ratios of antennomeres as: III 20/4: IV 20/4: V 24/5: VI 25/6: VII 33/9: VIII 24/8: IX 32/10: X 32/12: XI 45/12. Pronotum very finely punctate. Scutellum concealed. Elytron with sutural stria starting about 0.30 mm posterior of pronotal lobe, punctation nearly as fine as pronotal punctation, hardly visible at magnification 30 times.

Hypomeron punctate, with short oblique stria, upper anterior part swollen. Mesoventrite shallowly impressed in middle, impunctate, lacking microsculpture and without mesal ridge. Mesoventral process flat, lacking carinae, notched. Metaventricle lacking microsculpture, with patch of conspicuous, coarse punctures in middle part of lateral areas, slightly convex in middle; submesocoxal lines convex, punctate; submesocoxal areas about 0.05 mm long, about as long as two thirds of shortest interval between them and apical metaventral margin. Metanepisternum flat, parallel-sided, with suture slightly shortened, impressed and punctate. Abdomen very finely punctate, ventrites with punctulate microsculpture.

Male. Protarsomeres I to III hardly widened. Aedeagus (Figs 31–33) 0.62 mm long.

Etymology. The species is named after its collector, the Dutch entomologist Johannes Bastiaan Corporaal.

Differential diagnosis. Two of the five known Sundaland congeners, *S. bilobum* Löbl, 2015 and *S. opacum* Löbl, 2022, share with *S. corporaali* the metaventral patches of coarse punctures. However, these species differ from *S. corporaali* notably by the aedeagal characters. The long filamentous proximal section of the internal sac of *S. corporaali* is shared with *S. opertum* Löbl, 2021 from Sabah, while the parameres and the sclerites of the internal sac are distinct.

***Scaphoxium dentatum* sp. nov.**

(Figs 34–36)

Type material. Holotype male, JAVA: W. Java Cibodas, 50 km E Bogor, 1400 m, 3–6.XI.1989, Agosti, Löbl, Burckhardt #2a (MBBJ). Paratypes, 2 males, 1 female, with same data as the holotype (MBBJ, MHNG).

Description. Length 1.25–1.35 mm, width 0.62–0.67 mm, dorsoventral diameter 0.60–0.75 mm. Head and body dark reddish-brown, apex of abdomen yellowish, femora and tibiae reddish-brown, tarsi yellowish, antennomeres I to VI yellowish, antennal club light brown. Length/width ratios of antennomeres as: III 24/6: IV 18/6: V 30/6: VI 26/6: VII 41/9: VIII 27/8: IX 45/9: X 38/10: XI 46/10. Pronotum very finely punctate. Scutellum concealed. Elytral punctation nearly as fine as pronotal punctation, hardly visible at 30 times magnification, sutural striae starting about 0.10 mm posteriad of pronotal lobe. Hypomeron punctate, with short oblique stria, upper anterior part swollen. Mesoventrite impunctate, lacking microsculpture and without mesal ridge. Mesoventral process impressed, with two very low and short carinae, slightly notched. Metaventricle lacking microsculpture, very finely punctate, convex in middle; submesocoxal lines convex, punctate; submesocoxal areas about 0.04 mm long, about as long as half of shortest interval between them and apical metaventral margin. Metanepisternum flat, parallel-sided, with suture impunctate, slightly shortened. Abdomen very finely punctate, ventrites I to IV lacking obvious microsculpture, apical ventrites with punctulate microsculpture.

Male. Protarsomeres I to III hardly widened. Aedeagus (Figs 34–36) 0.70–0.77 mm long.

Etymology. The species epithet is a Latin adjective meaning dentate.

Differential diagnosis. This new species may be readily distinguished from *S. corporaali* by the metaventricle lacking patches of coarse punctures. The shape of the parameres bearing an elongate subapical lobe narrowing to tip is shared with *S. simulans* Löbl, 1971 from Sri Lanka, *S. sparsum* Löbl, 1979 from India, Nepal and Thailand, *S. intermedium* Löbl, 1984 reported from India, Thailand and China, and *S. hartmanni* Löbl, 2001 from Nepal. The new species is distinguished from them by the internal sac bulbous basally and lacking rods or other sclerotized structures.

Xotidium Löbl, 1992

This genus was reviewed by OGAWA & LÖBL (2016). It comprises ten Southeast Asia species, and a single species from Australia, Mauritius, and Madagascar each. Members of the genus have approximate mesotibiae and metatibia, as those of *Scaphicoma*, *Scaphobaeocera*, *Scaphoxium* and *Toxidium* LeConte, 1860. They may be readily distinguished from the similar *Scaphoxium* by the margin of the hypomera not lobed, from *Scaphobaeocera* by the basal angles of pronotum not extending posteriad, and from *Toxidium* by the aciculate maxillary palpomere IV. The 2-segmented labial palpus is an autapomorphy of *Xotidium*. A single species has been found in the examined collections.

New species

Xotidium reductum sp. nov.

(Figs 37–39)

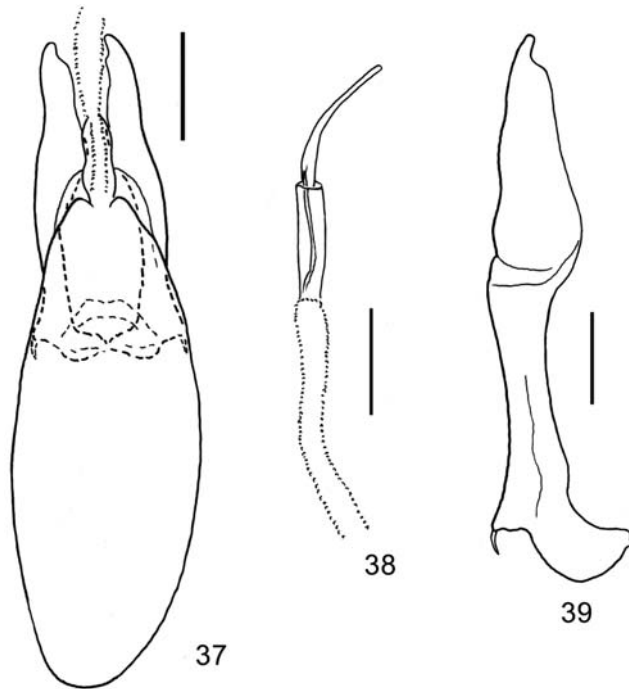
Type material. Holotype male, Java Mt. Gede, 1400 m, 25.V.1966, Rougemont (MHNG).

Description. Length 1.38 mm, width 0.83 mm, dorsoventral diameter 0.78 mm. Head and body dark brown, apical abdominal segments and appendages light brown to yellowish. Antennae long, length/width ratios of antennomeres III 25/6: IV 30/5: V 32/6: VI 38/7: VII 36/10: VIII 45/7: IX 47/9: X 43/12: XI 44/16. Dorsal surface of body very finely punctate. Scutellum completely concealed. Elytron with sutural stria rather deeply impressed, curved along pronotal lobe and extending along base to humeral area, not joining lateral stria; adsutural area flat. Metaventricle convex in middle; submesocoxal areas 0.03 mm long, about as long as half of shortest interval to metacoxa; punctation on ventral side of thorax very fine, few distinct punctures margining outer section of submetacoxal lines excepted. Mesepimeron and metanepisternum completely concealed. Abdomen lacking microsculpture and very finely punctate.

Male. Protarsomeres I to III hardly widened. Aedeagus (Figs 37–39) 0.62 mm long.

Etymology. The species epithet is a Latin adjective meaning reduced.

Differential diagnosis. The new species shares with *X. heissi* Ogawa & Löbl, 2016, *S. montanum* (Löbl, 1971) and *X. uniforme* Löbl, 1992 a flagellum longer than half of the length of the median lobe. It is distinguished by the expanded apical section of the parameres which is about as long as half of the total parameral length and abruptly narrowed at apices. It differs also from *X. montanum* and *X. uniforme* by the internal sac bearing extremely fine scale-like structures, and by lacking spinose structures along the ejaculatory duct.



Figs 37–39. Male genitalia. **37** – *Xotidium reductum* sp. nov.; aedeagus in dorsal view, scale = 0.1 mm. **38** – Ditto, internal sac, part extending beyond tip of parameres, in dorsal view, scale = 0.1 mm. **39** – Ditto, paramere in ventral view, scale = 0.05 mm.

Checklist of Javanese Scaphidiinae

<i>Cyparium bowringi</i> Achard, 1922	Indonesia: Java; China; India
<i>Cyparium javanum</i> Löbl, 1990	Indonesia: Java
<i>Cyparium variegatum</i> Achard, 1920	Indonesia: Java
<i>Episcaphium callosipenne</i> (Achard, 1922)	Indonesia: Java, Sumatra; East and West Malaysia
<i>Scaphidium anthrax</i> Achard, 1920	Indonesia: Java
<i>Scaphidium disclusum</i> (Achard, 1924)	Indonesia: Java
<i>Scaphidium disconotatum</i> Pic, 1915	Indonesia: Java; “Borneo”
<i>Scaphidium jacobsoni</i> Achard, 1921	Indonesia: Java
<i>Scaphidium javanum</i> Pic, 1915	Indonesia: Java
<i>Scaphidium longicolle</i> Pic, 1915	Indonesia: Java, Kalimantan; Brunei
<i>Scaphidium rubritarse</i> Pic, 1915	Indonesia: Java; Nepal
<i>Scaphidium striatipenne striatipenne</i> Gestro, 1879	Indonesia: Java, Sumatra
<i>Scaphidium striatipenne ornatipenne</i> (Achard, 1922)	Indonesia: Java
<i>Scaphidium striatum</i> Pic, 1920	Indonesia: Java
<i>Scaphidium subelongatum</i> Pic, 1915	Indonesia: Java; East Malaysia
<i>Scaphidium tricolor</i> Achard, 1920	Indonesia: Java, Sumatra
<i>Baeocera convexa</i> (Pic, 1920)	Indonesia: Java
<i>Baeocera incisa</i> (Löbl, 1973)	Indonesia: Java; East Malaysia
<i>Baeocera sarawakensis</i> Löbl, 1987	Indonesia: Java; East Malaysia

I. LÖBL

<i>Baeoceroxidium inexpectatum</i> sp. nov.	Indonesia: Java
<i>Bironium elegans</i> Löbl, 1977	Indonesia: Java; East and West Malaysia; Singapore; Thailand
<i>Bironium testaceum</i> (Pic, 1931)	Indonesia: Java
<i>Pseudobironium horaki</i> Löbl & Tang, 2013	Indonesia: Java; East Malaysia
<i>Pseudobironium javanum</i> Löbl & Tang, 2013	Indonesia: Java
<i>Pseudobironium schuhi</i> Löbl & Tang, 2013	Indonesia: Java
<i>Pseudobironium sparsepunctatum</i> (Pic, 1915)	Indonesia: Java; East Malaysia; Philippines
<i>Pseudobironium vitalisi</i> (Achard, 1920)	Indonesia: Java, Kalimantan, Sumatra; East Malaysia
<i>Scaphicomma ophthalmica</i> (Achard, 1920)	Indonesia: Java
<i>Scaphicomma pallens</i> (Achard, 1921)	Indonesia: Java
<i>Scaphicomma patens</i> sp. nov.	Indonesia: Java
<i>Scaphisoma aspectum</i> Löbl, 2015	Indonesia: Bali, Java
<i>Scaphisoma binhanum</i> (Pic, 1922)	Indonesia: Java; China; India; Nepal; Thailand; Vietnam
<i>Scaphisoma bryanti</i> sp. nov.	Indonesia: Java
<i>Scaphisoma caudatum</i> Löbl, 1975	Indonesia: Java; Singapore
<i>Scaphisoma chujoi</i> Löbl, 1982	Indonesia: Java; East Malaysia
<i>Scaphisoma drescheri</i> sp. nov.	Indonesia: Java
<i>Scaphisoma dohertyi</i> Pic, 1915	Indonesia: Java, Bali, Sumbawa; China; India; East and West Malaysia; Thailand; Vietnam
<i>Scaphisoma flavapex</i> Achard, 1921	Indonesia: Java
<i>Scaphisoma grouvellei</i> Achard, 1920	Indonesia: Java
<i>Scaphisoma jacobsoni</i> Löbl, 1975	Indonesia: Bali, Java, Sumatra; East Malaysia; Thailand
<i>Scaphisoma javanum</i> Löbl, 1979	Indonesia: Java; East Malaysia; Philippines; Thailand
<i>Scaphisoma luteomaculatum</i> Pic, 1915	Indonesia: Bali, Buru, Java, Lombok, Sumatra, Sumbawa; East Malaysia; Myanmar; Philippines
<i>Scaphisoma malaccanum</i> (Pic, 1915)	Indonesia: Java; Malaysia: Sabah, West Malaysia; Philippines
<i>Scaphisoma multispinosum</i> sp. nov.	Indonesia: Java
<i>Scaphisoma neglectoides</i> sp. nov.	Indonesia: Java
<i>Scaphisoma obliquemaculatum</i> Motschulsky, 1863	Indonesia: Java, Kalimantan, Sulawesi, Sumatra, Sumbawa; East Malaysia; Mascarene Archipelago; Sri Lanka; Thailand; Vietnam
<i>Scaphisoma platanoides</i> sp. nov.	Indonesia: Java
<i>Scaphisoma rouyeri</i> Pic, 1916	Indonesia: Java, Kalimantan; East Malaysia; Thailand
<i>Scaphisoma testaceomaculatum</i> s. str. (Pic, 1915)	Indonesia: Java
<i>Scaphisoma posticum</i> sp. nov.	Indonesia: Java
<i>Scaphobaeocera basalis</i> sp. nov.	Indonesia: Java
<i>Scaphobaeocera kraepelini</i> (Pic, 1933)	Indonesia: Java
<i>Scaphobaeocera larga</i> sp. nov.	Indonesia: Java
<i>Scaphobaeocera montisgedei</i> sp. nov.	Indonesia: Java
<i>Scaphobaeocera spinigeroides</i> sp. nov.	Indonesia: Java
<i>Scaphobaeocera truncata</i> sp. nov.	Indonesia: Java
<i>Scaphoxium corporaali</i> sp. nov.	Indonesia: Java
<i>Scaphoxium dentatum</i> sp. nov.	Indonesia: Java
<i>Xotidium reductum</i> sp. nov.	Indonesia: Java

Acknowledgements

The field work was supported by the Lembaga Ilmu Pengetahuan Indonesia, Jakarta, and Puslitbang Biologi, Lipi, Bogor. Oscar Vorst arranged the loan of the Javanese Scaphidiinae held in the collections of the Naturalis Biodiversity Center, Leiden and Woro Anggraitoningoih arranged that of the Museum Zoologicum Bogoriense. Jiří Hájek of Prague made the type material of *Scaphisoma flavapex* Achard available for study. Late Peter Hammond of London, Eric G. Matthews of Adelaide, and Wolfgang Schawaller of Stuttgart provided specimens held in the collections they curated. Additional material was collected and kindly donated to the MHNG by Sergei Kurbatov of Moscow and the late Guillaume de Rougemont. My wife Daniela, Daniel Burckhardt of Basel and Donat Agosti of Zürich assisted in field and have made the sojourn in Indonesia enjoyable. Christina Lehmann-Graber (MHNG) kindly assisted with the graphics. Cristophe Rivier (MNHN) provided photos of *Scaphisoma grouvellei*, and Antoine Mantilleri (MNHN) kindly assisted.

References

- ACHARD J. 1920: Notes sur les Scaphidiidae de la faune Indo-Malaise. *Annales de la Société entomologique de Belgique* **60**: 123–136.
- ACHARD J. 1921: Notes sur les Scaphidiidae du Musée de Leyde. *Zoologische Mededeelingen* **6**: 84–91.
- ICZN 1999. *International Code of Zoological Nomenclature. Fourth Edition*. International Trust of Zoological Nomenclature, London, xxix + 306 pp.
- LESCHEN R.A.B. & LÖBL I. 2005: Phylogeny and classification of Scaphisomatini Staphylinidae: Scaphidiinae with notes on mycophagy, termitophily, and functional morphology. *Coleopterists Society Monographs* **3**: 1–63.
- LÖBL I. 1971: Scaphidiidae der Noona Dan Expedition nach den Philippinen und Bismark Inseln (Insecta, Coleoptera). *Steenstrupia* **1**: 247–253.
- LÖBL I. 1972: Über die Arten-Gruppe *rouyeri* der Gattung *Scaphisoma* Leach (Coleoptera Scaphidiidae). *Archives des sciences* **34**: 153–168.
- LÖBL I. 1973: Über einige orientalische Scaphidiidae (Coleoptera) aus dem Museo Civico di Storia Naturale di Genova und Muséum National d'Histoire Naturelle de Paris. *Nouvelle Revue d'Entomologie* **3**: 149–160.
- LÖBL I. 1975: Beitrag zur Kenntnis der orientalischen Scaphisomini (Coleoptera, Scaphidiidae). *Mitteilungen der Schweizerischen entomologischen Gesellschaft* **48**: 269–290.
- LÖBL I. 1982: Little known and new Oriental species of the genus *Scaphisoma* Leach (Coleoptera, Scaphidiidae). Pp. 5–16. *Special Issue to the Memory of retirement of Emeritus Professor Michio Chûjô*. Association of the Memorial Issue of Emeritus Professor Michio Chûjô, Nagoya, 145 pp.
- LÖBL I. 1986: Scaphidiidae (Coleoptera) nouveaux ou peu connus de l'Asie du sud-est. *Archives des sciences* **39**: 87–102.
- LÖBL I. 2015: On the Scaphidiinae (Coleoptera: Staphylinidae) of the Lesser Sunda Islands. *Revue suisse de Zoologie* **122**(1): 75–120.
- LÖBL I. 2018: *Coleoptera: Staphylinidae: Scaphidiinae*. World Catalogue of Insects. Volume 16, xvi + 418 pp.
- LÖBL I. 2023: Estimates of global biodiversity and costs of biodiversity research revisited, with a review of Sabah *Scaphisoma* Leach and descriptions of 56 new species (Coleoptera: Staphylinidae: Scaphidiinae). *Revue suisse de Zoologie* **130**(2): in press.
- LÖBL I., Leschen R.A.B. & Kodada J. 2020: Review of the Asian species and cladistic analysis of *Bironium* Csiki (Coleoptera: Staphylinidae: Scaphidiinae) with comments on biogeography. *Annales Zoologici (Warszawa)* **70**(4): 711–736.

I. LÖBL

- LÖBL I. & Smetana A. 2021: On the *Baeocera* Erichson (Coleoptera: Staphylinidae: Scaphidiinae) of Sabah, Malaysia, and a tale on mystified biodiversity. *Journal of Insect Biodiversity* **23**(2): 23–42.
- LÖBL I. & Tang L. 2013: A review of the genus *Pseudobironium* Pic. (Coleoptera: Staphylinidae: Scaphidiinae). *Revue suisse de Zoologie* **120**: 665–734.
- OGAWA R. & LÖBL I. 2013: A revision of the genus *Baeocera* in Japan, with a new genus of the tribe Scaphisomatini (Coleoptera: Staphylinidae: Scaphidiinae). *Zootaxa* **3652**(3): 301–326.
- OGAWA R. & LÖBL I. 2016: A review of the genus *Xotidium* Löbl, 1992 (Coleoptera, Staphylinidae, Scaphidiinae), with description of five new species. *Deutsche entomologische Zeitschrift* **63**: 155–169.
- OGAWA R., LÖBL I. & MAETO K. 2016: A new species of the genus *Cyparium* from northern Sulawesi, Indonesia (Coleoptera: Staphylinidae: Scaphidiinae). *Acta entomologica Musei nationalis Pragae* **56**(1): 195–201.
- PIC M. 1920: Coléoptères exotiques en partie nouveaux. *L'Echange, Revue linnéenne* **36**: 22–24.