

On the Scaphisomatini (Coleoptera: Staphylinidae: Scaphidiinae) of the Philippines

Ivan LÖBL

Muséum d'histoire naturelle, Case postale 6434, CH-1211 Genève 6, Switzerland

Taxonomy, new species, Coleoptera, Staphylinidae, Scaphidiinae, Scaphisomatini, Philippines

Abstract. Philippine members of three informal Scaphisomatini groups are reviewed. The *Birocera* group is represented by two genera, *Birocera* and *Bironium*, comprising six species. *Birocera basicollis* is described as new, *B. punctatissima* is redescribed and reported for the first time from the Philippines. *Bironium* is represented by four species, one of them, *B. pustulatum*, is described as new. Keys to the Philippine species of *Birocera* and *Bironium* are given. The *Amalocera* group is represented by a single species, *Pseudobironium banonense* (Pic, 1931), and *Pseudobironium obscuricolle* (Pic, 1947) is placed in its synonymy. The *Toxidium*-group is represented by members of *Scaphicoma* and *Scaphoxium*. *Scaphoxium alesi* is described as new, and *S. taylori* is reported for the first time from the Philippines.

INTRODUCTION

The last account of Philippine Scaphidiinae was given in Löbl (1972). At that time the group was still treated as a separate staphylinoid family, and almost only material from old collections was available for study. Since then, I have tried to gather new material and reviewed the Philippine Cypariini and Scaphidiini (Löbl 2006). In addition to specimens collected together with Jan Kodada (Bratislava, Slovakia) in 1995 in the Lagunas Province of Luzon and in central Palawan, significant additional material comes again from the Lagunas Province, the Cordillera Central of Luzon, and a few cites of Leyte and Mindanao. Thus, the knowledge of Philippine scaphidiines remains lacunar, even with the extensive new collections actually available for study.

The present paper deals with members of three small Scaphisomatini groups, the *Birocera* group, the *Amalocera* group, and the *Toxidium* group, as defined in Leschen & Löbl (2005). Other Scaphisomatini taxa will be dealt with in separate studies. Notable is the presence of three species of *Birocera* Löbl in Luzon. The genus was so far known only by two species, both from Sulawesi. The *Amalocera* group is represented in the Old World by a single genus, *Pseudobironium* Pic, with one species known to occur in the Philippines. The *Toxidium* group appears under-represented in the Philippines, compared to areas in south-east Asia from where adequate data on scaphidiines are already available.

MATERIAL AND METHODS

The specimens treated below were collected either by hand, on fungi on dead wood, in rotten wood, or found in sifted samples of forest litter and extracted in Winkler-Moczarski devices or in Berlese devices. No information about the habitat is available for some of them.

The methods used are as in my previous studies (e.g., Löbl 1990, 1992). The terminology is as in Leschen & Löbl (2005).

The acronyms of institutions in which the material is housed are as follows:

- FMNH Field Museum of Natural History, Chicago, U.S.A.;
MHNG Muséum d'histoire naturelle, Geneva, Switzerland;
NMPC National Museum, Prague, Czech Republic;
NHMW Naturhistorisches Museum, Wien
NMPC Národní museum, Praha
SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany;
ZMB Zoologisches Museum, Berlin, Germany.

TAXONOMY

Birocera group *Birocera* Löbl, 1970

This genus currently includes two species, *B. punctatissima* (Reitter, 1880) and *B. derougemonti* Löbl, 1983, both reported only from Sulawesi, Indonesia. The former species and an additional one are represented in the Philippine collections examined. A redescription of *B. punctatissima* is given below because the diagnostic characters of this species have not yet been adequately given.

KEY TO THE SPECIES OF *BIROCERA*

- 1 Entire pronotal disc distinctly punctate, pronotal punctures much larger than frontal punctures. Pronotum lacking antebasal puncture row 2
- Most of pronotum covered by very dense and very fine punctation, appearing as punctulate microsculpture, finer than frontal punctation. Pronotum with conspicuous antebasal puncture row. *B. basicollis* sp. nov.
2 Pronotal punctation very dense, puncture diameters often about as large as puncture intervals. Elytral punctation coarse at base, becoming gradually finer apically, dense and distinct near apex *B. punctatissima* (Reitter)
- Pronotal punctation fairly dense, puncture diameters much smaller than puncture intervals. Elytral punctation coarse at base, becomes abruptly very fine beyond mid-length of elytra *B. derougemonti* Löbl

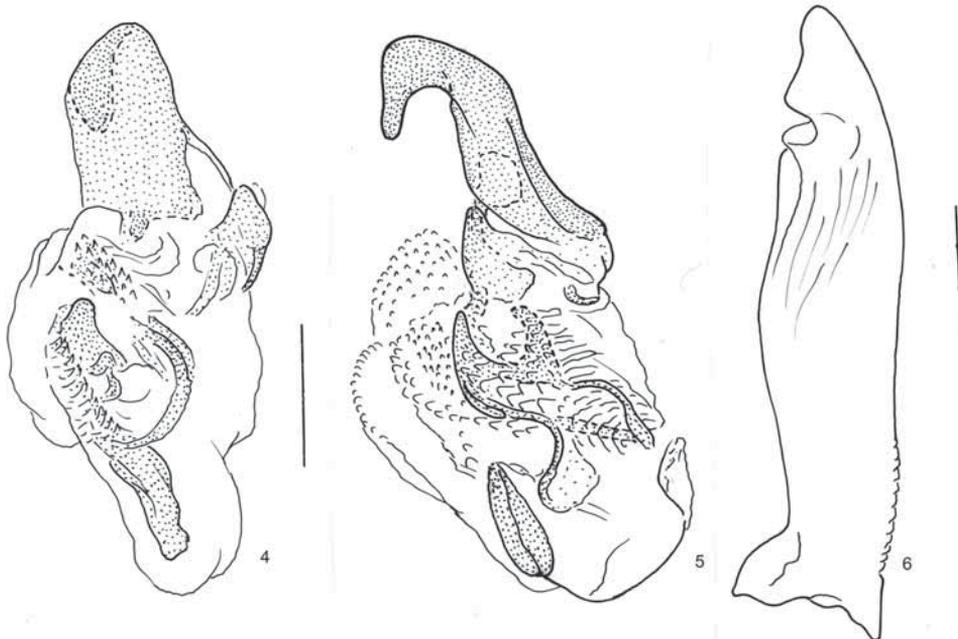
Birocera basicollis sp. nov. (Figs 1-5)

Type material. Holotype (♂): Luzon, Prov. Lagunas, Mt. Banahaw above Kinabuhayan, Cristalino trail, 600-700 m, 24.xi.1995, I. Löbl, (MHNG). Paratypes (2 ♀♀): with same data as holotype, (MHNG); (2 ♂♂): Luzon, Prov. Lagunas, Mt. Banahaw, 1 km from Kinabuhayan, 500 m, 26.xi.1995, leg. I. Löbl, (MHNG); (1 ♂, 1 ♀): Luzon, Lagunas Prov., Mt. Makiling above Mad Springs 400-700 m 19-22.xi.1995, leg. J. Kodada, (MHNG); Luzon, Los Banos, Mt. Makiling (200), 13.11.1992, leg. Schillhammer & Zettel, 2 ♂, 3 ♀ (NHMW, MHNG); (1 ♂, 1 ♀): Leyte, Visca N. Baybay, prim. forest, 200-500 m, 22.ii.1991, leg. W. Schawaller, (SMNS); (1♂): Mindanao, Cotabato Prov., Burunkot, Upi, 1500 ft., 1-6-1947, leg. F. G. Werner, log, unter chips, (FMNH); (2 ♂♂, 3 ♀♀): Mindanao, Davao Prov., 25 km NW of New Bataan, 20-22.v.1996, 1200 m, leg. Bolm, (SMNS, MHNG).



Figs 1-3. *Birocera basicollis* sp. nov.: 1-3- aedeagus in dorsal and lateral views, scale bars = 0.2 mm; 2- paramere in ventral view, scale bar = 0.1 mm.

Description. Length 1.9-2.2 mm, width 1.35-1.40 mm. Head and body black or blackish with reddish shine, abdomen and femora dark reddish-brown, tibiae lighter than femora, reddish-brown, tarsi and antennae light ochreous to yellowish. Frons and vertex very finely and rather sparsely punctate. Pronotum with lateral contours evenly arcuate in dorsal view, curved in middle in lateral view. Lateral margin striae exposed in dorsal view, impunctate; anterior margin stria uninterrupted, with puncture row widely interrupted in middle. Pronotal disc with punctation very dense and very fine, appearing as microsculpture, subbasal puncture row consisting of fairly coarse punctures, few additional, fairly coarse punctures present on basolateral area. Exposed part of scutellum triangular. Elytra with basal striae joined to lateral striae but shortened mesally, not reaching suture, sutural striae extended from apex almost up to basal third of sutural length, apical margins of elytra finely serrate. Elytral punctation coarse, coarser than pronotal antebasal punctures, very irregular in basal third, punctation beyond basal third consisting of very fine and sparse punctures and of few coarse punctures. Hypomeron impressed beyond mid-length, very finely punctate, with puncture row along anterior margin, lacking microsculpture. Pterothorax and abdomen as in *B. punctatissima*. Protibiae hardly curved, mesotibiae and metatibiae straight. Male. Segment 1 of protarsi



Figs 4-6. 4-5- *Birocera basicollis* sp. nov., internal sac in dorsal and lateral view, scale bar = 0.1 mm; 6-*Birocera punctatissima* (Reitter), paramere in ventral view, scale bar = 0.1 mm.

strongly widened, narrower than apex of protibiae, segments 2 and 3 wide, narrower than segment 1. Aedeagus (Figs 1 to 5) 0.65-0.85 mm long.

Habitat. Fungi grown on logs in rain forests, forest floor litter.

Distribution. Philippines: Luzon, Leyte, Mindanao.

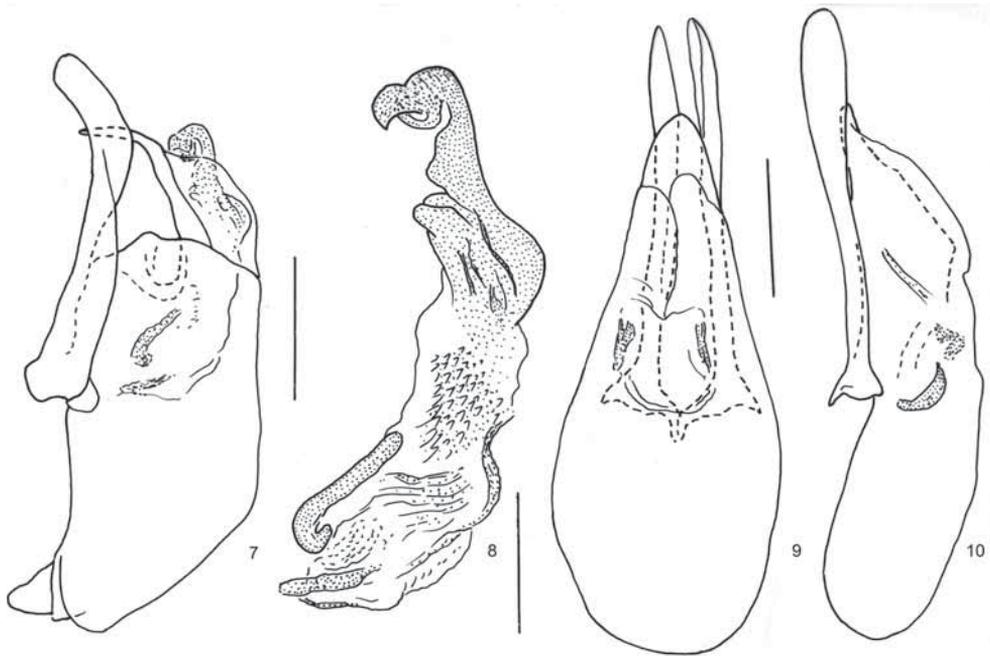
Comments. This species may be easily distinguished from its congeners by its peculiar pronotal punctation. In addition, it is characterized by the shape of the parameres of the aedeagus.

Etymology. The specific epithet is a combination of Latin *basis* and *collis*. It refers to the pronotal base that bears distinctive punctures.

***Birocera punctatissima* (Reitter, 1880)**
(Figs 6-8)

Omalocera punctatissima Reitter, 1880: 43.

Material examined. Luzon, Prov. Lagunas, Mt. Banahaw 1 km from Kinabuhayan, 500 m, 26.xi.1995, fungi on log, degraded rainforest, leg. I. Löbl, 4 spec., (MHNG); Luzon, Los Banos, Mt. Makiling (200), 13.11.1992, leg. Schillhammer & Zettel, 2 (NHMW); Leyte, Visca N. Baybay, cultiv. land, 3.iii.1991, leg. W. Schawaller et al., 10 spec., (SMNS, MHNG); Leyte, Visca N. Baybay, prim. forest, 200-500 m, 22.ii.1991, leg. W. Schawaller, 1 spec., (SMNS); Leyte, St. Cruz, Okt. 1915, leg. Böttcher, 1 spec., (ZMB); Mindanao, Davao Prov., 25 km NW of New



Figs 7-10. 7-8- *Birocera punctatissima* (Reitter): 7- aedeagus in lateral view, scale bar = 0.2 mm; 8- internal sac, scale bar = 0.1 mm; 9-10- *Bironium pustulatum* sp. nov., aedeagus in dorsal and lateral view, scale bar = 0.1 mm.

Bataan, 20-22.v.1996, 1200 m, leg. Bolm, 6 spec., (SMNS, MHNG).

Redescription. Length 2.0-2.2 mm, width 1.40-1.47 mm. Frons, vertex and body black, elytra sometimes becoming reddish apically, ventral side of head and abdominal ventrites dark brown or reddish-brown. Femora reddish-brown, tibiae and tarsi lighter than femora, antennae light ochreous or yellowish. Frons and vertex distinctly, densely punctate. Pronotum with lateral contours almost evenly arcuate, lateral striae exposed in dorsal view and punctate; lateral margins sinuate in lateral view; anterior margin stria punctate, widely interrupted in middle; discal punctation very dense, fairly coarse, consisting of well delimited punctures, many punctures as large as or larger than puncture intervals; discal microsculpture absent. Exposed part of scutellum triangular. Elytra with basal striae entire, fine, sutural striae short, not extended onto basal third of sutural length, apical margin finely serrate, punctation coarse and dense on basal half, becoming fine beyond mid-length or beyond basal two thirds of disc; lateral striae coarsely punctate. Metathoracic wings fully developed. Hypomeron shallowly impressed apically, with a puncture row along anterior margin, very finely punctate and with very scarce, punctulate microsculpture. Mesoventrite coarsely punctate, except near anterior margin; punctures along basolateral edges elongate. Mesepimera smooth along anterior and posterior margins, very coarsely and densely punctate inbetween, with punctures partly confluent. Metaventrite coarsely and densely punctate, except on narrow, smooth admesal areas, with punctures larger than intervals, not confluent. Metepisterna impunctate, with

suture deep, arcuate and coarsely punctate. Abdominal ventrites with distinct, punctulate microsculpture, very finely punctate; ventrite 1 with coarse metacoxal puncture row. Protibiae and metatibiae very weakly curved, mesotibiae straight. Male: Protarsi with segment 1 strongly widened, narrower than apices of protibiae, segment 2 moderately, segment 3 weakly widened. Aedeagus (Figs 6 to 8) 0.77-0.90 mm long.

Habitat. Fungi grow on large logs.

Distribution. Indonesia: Sulawesi; Philippines: Luzon, Leyte, Mindanao.

Bironium Csiki, 1909

The genus is Oriental in distribution, extending to New Guinea. It includes 28 species currently recognized as valid. The three species of *Bironium* previously reported from the Philippines are very similar in external characters and may be reliably separated only by their aedeagal characters (Löbl, 1972). The new collections include members of these three species, and an additional new species, well characterized by its colour pattern.

KEY TO THE PHILIPPINE SPECIES OF *BIRONIUM*

- 1 Body uniformly reddish-brown or blackish 2
- Body dark brown, elytra each with small rufous subhumeral spot and rufous subapical fascia
..... *B. pustulatum* sp. nov.
- 2 Aedeagus with apical process of median lobe long, weakly inclined, and parameres very narrow, almost evenly wide in dorsal and lateral views *B. trisulcatum* (Heller)
- Aedeagus with apical process of median lobe short, strongly inclined, parameres wide, uneven in dorsal and lateral views 3
- 3 Apical part of parameres strongly widened in dorsal view *B. bisulcatum* Löbl
- Parameres not widened apically in dorsal view, widest near middle in lateral view
..... *B. rufescens* Löbl

Bironium pustulatum sp. nov.

(Figs 9-10)

Type material. Holotype (♂): Philippines, Mindanao, Davao Prov., 25 km W of New Batan, 1200 m, 20-22.v.1996, leg. Bolm, (SMNS). Paratype (1 ♀): with the same data as the holotype, (MHNG).

Description. Length 1.85-1.95 mm, width 1.15-1.20 mm. Head and body dark brown. Elytra each with small, irregularly round, rufous spot situated posterior humeral area, and with subapical, transverse, rufous fascia. Margins of fascia not clearly delimited and irregular. Femora about as dark as body, tibiae lighter than femora, tarsi and antennae still lighter. Head and pronotum very finely punctate. Scutellum triangular, wider than long. Elytra with lateral contours oblique between basal sixth and apical two fifth, inner apical angles finely serrate; adsutural areas swollen, sutural striae deep, coarsely punctate. Elytral disc with two impressed and weakly oblique puncture rows, starting beyond basal sixth and extended about to apical sixth of discal length. Surface between puncture rows convex, punctures forming rows coarse; few additional coarse punctures situated laterally anterior section of

outer row and between anterior sections of both rows. Most of discal surface very finely punctate. Anterior half of lateral striae punctate, epipleural striae impunctate. Hypomera and mesepisterna extremely finely punctate. Shield of mesoventrite weakly convex, impunctate. Metaventrite weakly convex in middle, with coarse pit-like punctures along mesocoxal lines and anapleural suture, and with few additional coarse punctures on lateral parts. Metepisternal suture straight, punctate. Abdomen very finely punctate, ventrite 1 with coarse basal pit-like punctures. Tibiae very weakly curved. Male. Segments 1 to 3 of protarsi weakly enlarged, segments 2 and 3 similar, none of tarsomeres lobed apically. Aedeagus (Figs 9 and 10) 0.53 mm long.

Distribution. Philippines: Mindanao.

Comments. The long apical process of the median lobe and the very narrow parameres resembles those in *B. trisulcatum* (Heller) and *B. maculatum* Löbl. The new species also shares with *B. trisulcatum* the shape of the internal sac. It differs from *B. trisulcatum* by the parameres not narrowed apically in dorsal view, the apical process of the median lobe hardly inflexed, the much darker body with elytral spots and fasciae that are absent in *B. tricolor*, and by the impunctate middle part of the mesoventrite. The New Guinean *B. maculatum* possesses similar light elytral spots as *B. pustulatum*. These two species may be distinguished by the shape of the tibiae and the sclerotized pieces of the internal sac: the tibiae are sinuate, and the sclerites of the internal sac are large in *B. maculatum*.

Etymology. The specific epithet is a Latin adjective derived from *pustula* and refers to the presence of elytral spots.

Bironium bisulcatum Löbl, 1972

Bironium bisulcatum Löbl, 1972: 97.

Material examined. Palawan, Central, Cabayugan near Lion's Cave, rainforest, 1.xii.1995, litter, leg. I. Löbl, 3 spec., (MHNG); Palawan, Central, Cabayugan, 50 m, degrade forest, leaf litter, I. Löbl, 1 spec., (MHNG); Palawan, Central, 4 km N Fort Barton, 50 m, leaf litter and debris in forest above waterfalls, 29.xii.1996, G. Cuccodoro, 4 spec., (MHNG); Palawan, Central, Sabang, 50-100 m, degraded forest on slope, 30.ix.1995, J. Kodada & B. Rigová, 2 spec., (MHNG).

Habitat. Floor litter in rain forests.

Distribution. Philippines: Palawan.

Bironium rufescens Löbl, 1972

Bironium rufescens Löbl, 1972: 99.

Material examined. Leyte, Visca N. Baybay, prim. forest, 200-500 m, 19.ii.-10.iii.1991, leg. W. Schawaller & al., 29 spec., (SMNS, MHNG); Leyte, Lake Danao, forest edge, 500 m, 19.ii.-8.iii.1991, leg. W. Schawaller & al., 5 spec., (SMNS); Leyte, SW Abuyog, 8.iii.1991, forest 100-300 m, leg. W. Schawaller et al., 1 spec., (SMNS).

Distribution. Philippines: Leyte and Mindanao.

***Bironium trisulcatum* (Heller, 1917)**

Arachnoscaphula trisulcata Heller, 1917: 49.

Material examined. Luzon, Lagunas Prov., Mt. Banahaw above Kinabuhayan, Cristalino trail, 600-700 m, 24.xi.1995, forest litter, degraded rainforest, leg. I. Löbl, 1 spec., (MHNG); Luzon, Lagunas Prov., Mt. Makiling 4 km SE Los Banos, 9. and 12.iv.1977, leg. L. E. Watrous, 4 spec., (MHNG).

Habitat. Floor litter in degraded rain forests, rotten logs.

Distribution. Philippines: Luzon.

***Amalocera* group *Pseudobironium* Pic, 1920**

The genus comprises 24 species currently recognized as valid. Most are Oriental in distribution, two are known from Japan, Korea and Far East Russia. *Pseudobironium banonense* (Pic, 1931) and *P. obscuricole* (Pic, 1947) were described from the Philippines. The respective type material, consisting each of a single female, was examined and considered probably conspecific by Löbl (1970). *Pseudobironium* comprises a number of very similar species that cannot be reliably distinguished in absence of males. The new collections include males coming from different sites, belonging to a single species that cannot be distinguished from the previously known females. Consequently, the synonymy of *P. banonense* and *P. obscuricole* is here confirmed and formally established.

***Pseudobironium banonense* (Pic, 1931) (Figs 11-13)**

Scaphosoma banonense Pic, 1931: 3

Scaphosoma obscuricolle Pic, 1947: 2 **syn. nov.**

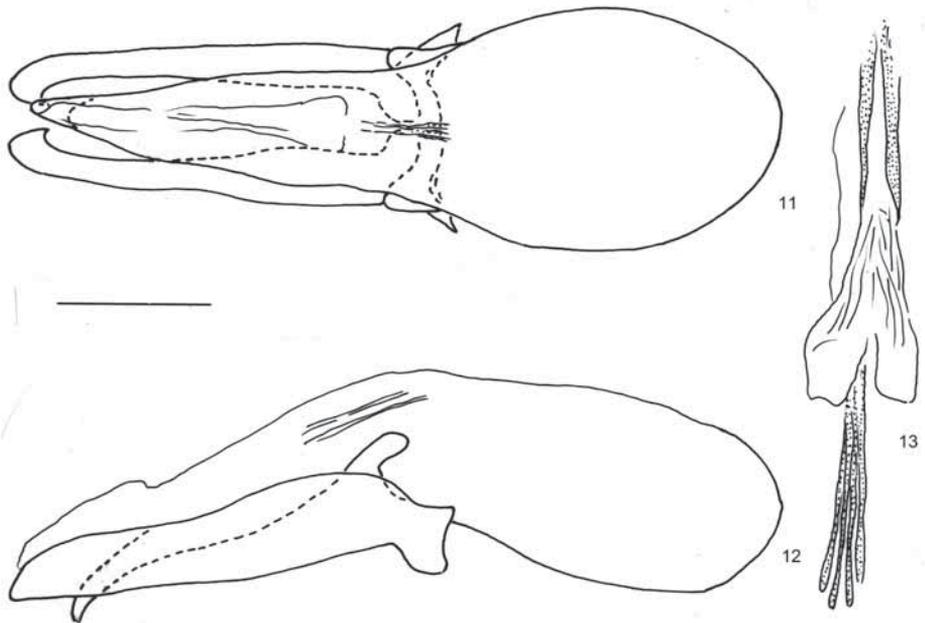
Material examined. Luzon, Prov. Lagunas, Mt. Banahaw above Kinabuhayan, 600-700m, 24.XI.1995, leg. J. Kodada & B. Rigová, 5 (MHNG); Prov. Lagunas, Mt. Makiling, 17-18.VI.1977, leg. M. Sató, 2 (MHNG); Mt. Makiling, Baker, 3 (NMPC); Mt. Makiling, 4 km SE Los Banos 11.IV.1977 / Berlese debris under bark LEWatrous, 1 (MHNG); Polillo, VIII.1915, leg. Böttcher, 1 (ZMB); Leyte, St. Cruz, X.1915, leg. Böttcher, 1 (ZMB); Leyte, St. Cruz, 1924, 1 (MNPC); Mindanao, 30 km NW Maramag, Bagongsilang, 1700m, 17 May 1996, leg. Bolm, 3 (SMNS, MHNG); Mindanao, Pt. Banga, 1924, 1 (MNPC); Mindanao, Iligan, Baker, 1 (MNPC).

Distribution. Philippines: Luzon, Polillo, Leyte, Mindanao.

Comments. This species may be distinguished from its congeners by the aedeagal characters (Figs 11 to 13), in particular by the hook-like shape of the parameral apices.

***Toxidium* group *Scaphicoma* Motschulsky, 1863**

This genus includes twelve Asian species, one species described from New Ireland, one from Queensland, and two from tropical Africa. Although the group is widely distributed, it is



Figs 11-13. *Pseudobironium banonense* (Pic): 11-12- aedeagus in dorsal and lateral view, scale bar = 0.2 mm; 13- internal sac, scale bar = 0.1 mm.

under-represented in collections. Some species of *Scaphicoma* exhibit conspicuous colour pattern that provides reliable diagnostic features. Several other species are similar in external and in genital characters. Two species are represented in the examined Philippine collections, both similar to the widely distributed *S. arcuata* (Champion, 1927).

KEY TO PHILIPPINE SPECIES OF *SCAPHICOMA*

- 1 Parameres of aedeagus not lobed, gradually narrowed beyond mid-length. Mesoventrite with low median ridge. Lateral parts of parameres with several larger punctures *S. pullex* (Heller)
- Parameres of aedeagus lobed and abruptly narrowed beyond mid-length. Mesoventrite lacking median ridge. Lateral parts of metaventrite very finely punctate species

Scaphicoma pullex (Heller, 1917)

(Fig. 15)

Toxidium pullex Heller, 1917: 50.

Material examined. Luzon, Lagunas, Mt. Makiling, above Mad Springs, 600-700 m, degraded rain forest, 19-22.xi.1995, leg. J. Kodada, 1 ♀, (MHNG); Leyte, Visca N. Baybay, sec. forest, 100-200 m, 27.ii.1991, leg. W. Schawaller et al., 2 spec., (SMNS, MHNG); Mindanao, Eagle Centre 1100 m, Baracatan N. slope of Mt. Apo, 19.viii.1983, leg. M. Sakai, 1 ♀, (MHNG).

Distribution. Philippines: Luzon, Leyte, Mindanao.

Comments. For the shape of the parameres see Fig. 15. The aedeagus of this species is illustrated in Löbl, 1971.

Scaphicoma species

(Fig. 14)

Material examined. Palawan, Puerto Princesa, Ivahig Penal Colony, 16 km of Puerto Princesa, 50-100 m, 1.iv.1983, # 83/70, leg. C. Lienhard, 1 ♂, (MHNG); Palawan Central, Sabang, 50-100 m, degraded forest on slope, 30.xi.1995, leg. J. Kodada, 1 ♂, (MHNG).

Distribution. Philippines: Palawan.

Comments. For the shape of the parameres see Fig. 14. It is possible that the specimens listed above belong to one of the previously inadequately known Asian species.

Scaphoxium Löbl, 1979

This genus is with 40 species distributed over large parts of Asia, Melanesia, northern Australia, Africa, and Seychelles. It is here reported for the first time from the Philippines. The examined material comes from Luzon, Palawan, Leyte and Mindanao. The specimens from Palawan and most of those from Luzon and Mindanao are identified as *S. taylori* Löbl, 1981. Five specimens from Luzon represent a species described below as new. Two additional specimens from Luzon, similar to *S. topali* Löbl, 1981, belong possibly to another new species but are in poor state and cannot be adequately treated.

KEY TO THE PHILIPPINE SPECIES OF *SCAPHOXIUM*

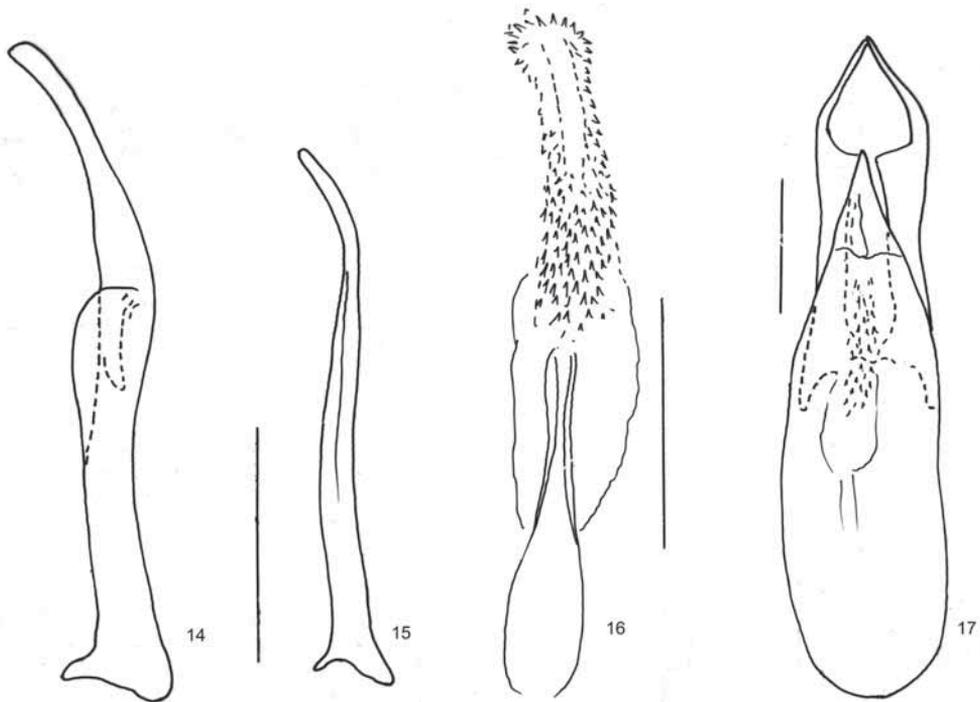
- 1 Antennomere XI about 1.5 times as long as antennomere X. Aedeagus with parameres angulate subapically .
..... *S. alesii* sp. nov.
- Antennomere XI about as long as or slightly longer than antennomere X. Aedeagus with parameres rounded subapically *S. taylori* Löbl

Scaphoxium alesii sp. nov.

(Figs 16-17)

Material examined. Holotype (♂): Philippines, Luzon, Laguna Prov. Mt. Makiling 4 km SE Los Banos, 11.iv.1977 / berlese debris under bark LEWatrous, (MHNG). Paratypes (1 ♂, 3 ♀♀): with the same data as the holotype, (MHNG).

Description. Length 1.30-1.40 mm, width 0.75-0.80 mm, dorsoventral diameter 0.80-0.84 mm. Body fairly light reddish-brown, femora and tibiae hardly lighter, apex of abdomen, tarsi and antennae distinctly lighter. Length ratio of antennomeres as: III 7: IV 9: V 9: VI 9: VII 12: VIII 10: IX 12: X 12: XI 19. Segments VII, VIII and XI each about 4 times



Figs 14-17. 14- *Scaphicoma* sp., paramere in ventral view; 15- *Scaphicoma pullex* (Heller), paramere in ventral view, scale bar = 0.2 mm; 16-17- *Scaphoxium alesi* sp. nov.; 16- internal sac, scale bar = 0.1 mm; 17- aedeagus in dorsal view, scale bar = 0.1 mm.

as long as wide, segment XI distinctly wider than segment VII. Pronotal punctation very fine, barely visible at 50x magnification. Scutellum concealed. Elytral punctation less fine than pronotal punctation; sutural striae starting about 0.10 to 0.15 mm posterior margin of pronotal lobe. Median impression of mesoventrite shallow, shield of mesoventrite not striate. Median part of metaventrite flattened apically and densely, very finely punctate. Lateral portion of metaventrite with few coarse and several fine punctures. Mesocoxal area about 0.05 mm long, shorter than interval between its margin and metacoxa, with distinct marginal punctures. Metepisternum slightly convex to flat, 0.06-0.08 mm wide, with suture straight, fairly wide. Abdomen with distinct punctulate microsculpture, except on smooth 1st ventrite; basal punctures distinct. Male. Segments 1 to 3 of protarsi weakly enlarged. Aedeagus (Figs 16 and 17) 0.53-0.56 mm long.

Habitat. Evergreen rain forest, debris under bark.

Distribution. Philippines: Luzon.

Comments. This species may be distinguished by the distinctly punctate lateral parts of the metaventrite, in combination with the apical antennomere strongly elongate and the

parameres of the aedeagus angulate subapically. It shares with *S. singlanum* Löbl, 1984 the internal sac of the aedeagus bearing a basal vesicle followed by spinose structures.

Etymology. Patronymic, the species is named in honour of Aleš Smetana, Ottawa, Canada, who is my oldest entomological friend.

***Scaphoxium taylori* Löbl, 1981**

(Figs 18-20)

Scaphoxium taylori Löbl, 1981: 101.

Material examined. Palawan, Central, 4 km N Port Barton, 50 m, 29.xii.1996, forest above waterfall, leg. G. Cuccodoro, 1 ♂, 1 ♀, (MHNG); Palawan, Central, Sabang, 50-100 m, degrad. rain forest on slope, 30.xi.1995, leg. J. Kodada, 2 ♂♂, 1 ♀, (MHNG); Palawan, Central, above San Rafael, ca 300 m, degraded forest on slope, 4. xii.1995, leg. J. Kodada, 1 ♀, (MHNG); Mindanao, 30 km NW of Maramag, Bagongsilang 1700 m, 13-17.v.1996, leg. Bolm, 1 ♂, 4 ♀♀, (SMNS, MHNG); Luzon, Mountain Prov., Mt. Data Lodge 2200-2300 m, 22-24.xii.79, leg. L. Deharveng & J. Orousset, 1 ♂, 3 ♀♀, (MHNG); same data but 2300 m, 26.vii.1985, leg. M. Sakai, 1 ♂, (MHNG).

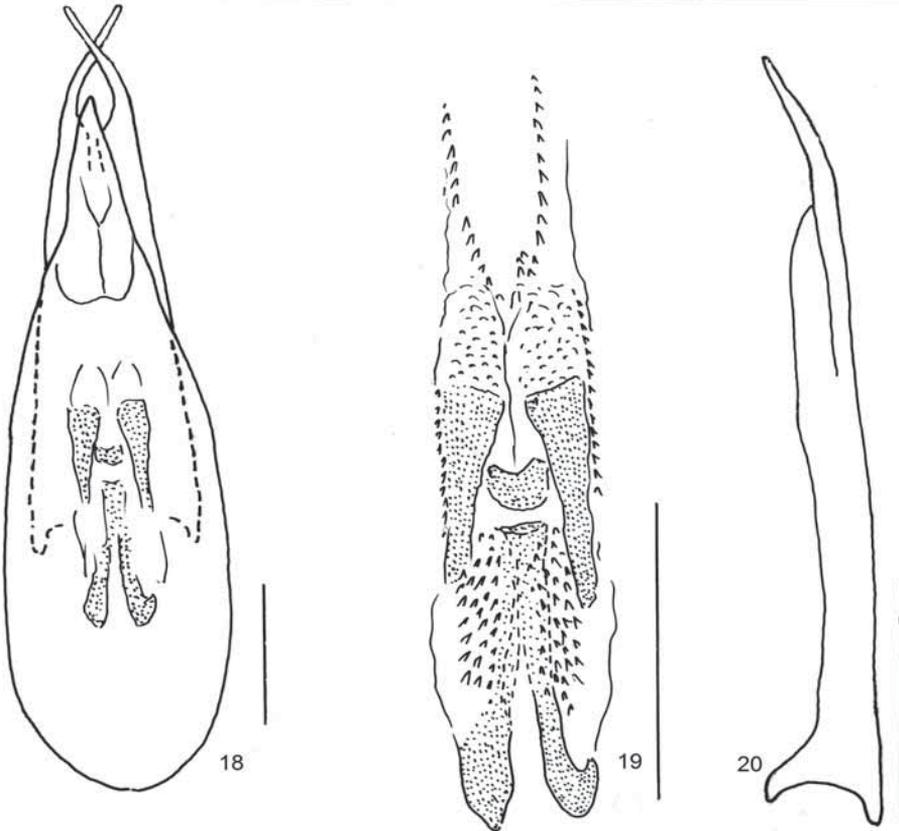


Fig. 18-20. *Scaphoxium taylori* Löbl from Sabang, scale bars = 0.1 mm; 18- aedeagus in dorsal view; 19- internal sac; 20- paramere in ventral view.

Distribution. Malaysia: Sarawak; Philippines: Luzon, Palawan, Mindanao.

Comments. The description of this species was based on a single male found near Kuching, Sarawak. The shape of the basal rods in the aedeagi of the Palawan and Mindanao specimens (Figs 18 to 20) differ slightly from that in the holotype. See also Löbl, 1981.

ACKNOWLEDGEMENTS. My wife Daniela, Mrs Božena Rigová and my colleague Jan Kodada, from Bratislava, Slovakia, have accompanied me and assisted in field work in the Philippines. Jan gave most generously the scaphidiines he collected to the Geneva museum. Some additional specimens were provided by two Geneva colleagues, Giulio Cuccodoro and Charles Lienhard. My special thanks are also due to Louis Deharveng and Jean Orousset, Paris, France, late Masataka Satô, Nagoya, Japan, and Larry E. Watrous, Ohio, USA, for the generous gifts of scaphidiines from their own collections. Additional material was made available for study by Johannes Frisch, Berlin, Germany, late Henry S. Dybas and Alfred F. Newton, Jr., both from Chicago, USA, Wolfgang Schwaller, Stuttgart, Germany and Harald Schillhammer, Wien, Austria.

REFERENCES

- HELLER K.M. 1917: Scaphidiidae von den Philippinen. *Wiener Entomologische Zeitung* 36: 41-50.
- LESCHEN R.A.B. & LÖBL I. 2005: Phylogeny and classification of Scaphisomatini (Staphylinidae: Scaphidiinae) with notes on mycophagy, termitology and functional morphology. *Coleopterists Society Monographs Patricia Vaurie Series* 3: 1-63.
- LÖBL I. 1970: Über einige Scaphidiidae (Coleoptera) aus der Sammlung des Muséum National d'Histoire Naturelle de Paris. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* 43: 125-132.
- LÖBL I. 1971: Scaphidiidae der Noona Dan Expedition nach den Philippinen und Bismark Inseln (Insecta, Coleoptera). *Steenstrupia* 1: 247-253.
- LÖBL I. 1972: Beitrag zur Kenntnis der Scaphidiidae (Coleoptera) von den Philippinen. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* 45: 79-109.
- LÖBL I. 1981: Zwei neue Arten der Gattung *Scaphoxium* Löbl (Coleoptera, Scaphidiidae). *Annales Historico-Naturales Musei Nationalis Hungarici* 73: 101-104.
- LÖBL I. 1990: Review of the Scaphidiidae (Coleoptera) of Thailand. *Revue Suisse de Zoologie* 97: 505-621.
- LÖBL I. 1992: The Scaphidiidae (Coleoptera) of the Nepal Himalaya. *Revue Suisse de Zoologie* 99: 471-627.
- LÖBL I. 2006: On the Philippines species of Cypariini and Scaphidiini (Coleoptera: Staphylinidae: Scaphidiinae). *Revue Suisse de Zoologie* 113: 23-49.
- PIC M. 1931: Nouveautés diverses. *Mélanges Exotico-Entomologiques* 57: 1-36.
- PIC M. 1947: [without title]. *Diversités Entomologiques* 2: 1-16.
- REITTER E. 1880: Die Gattungen und Arten der Coleopteren-Familie: Scaphidiidae meiner Sammlung. *Verhandlungen des Naturforschenden Vereines in Brünn* 18 [1879]: 35-49.

Received: 5.3.2011
Accepted: 30.3.2011

