

***Irianscapha dimorpha*, an unusual new Scaphisomatini from Western New Guinea, and two new Indonesian species of *Scaphisoma* Leach (Coleoptera: Staphylinidae: Scaphidiinae)**

IVAN LÖBL

Abstract

Following new Scaphisomatini (Staphylinidae: Scaphidiinae) are described and illustrated: *Irianscapha dimorpha* gen. nov., sp. nov. from Western New Guinea, *Scaphisoma irideum* sp. nov. from the Moluccas, and *Scaphisoma latitarse* sp. nov. from Sulawesi.

Zusammenfassung

Folgende neue Scaphisomatini (Staphylinidae: Scaphidiinae) werden beschrieben und abgebildet: *Irianscapha dimorpha* gen. nov., sp. nov. aus dem westlichen Neuguinea, *Scaphisoma irideum* sp. nov. von den Molukken und *Scaphisoma latitarse* sp. nov. von Sulawesi.

Key words: Coleoptera, Staphylinidae, Scaphidiinae, Scaphisomatini, taxonomy, Indonesia

Introduction

The monophyletic *Scaphisoma* group currently includes two genera, *Scaphisoma* Leach, 1815 and *Kathetopodion* Löbl, 1982 (LESCHEN & LÖBL 2005). While *Scaphisoma* is with some 600 recognized species morphologically diverse and widely distributed (see LÖBL 1997), *Kathetopodion*, includes only two species described from Borneo and New Guinea (LÖBL 1982, LESCHEN & LÖBL 2005). The latter genus is unique within

the Scaphisomatini in having prognatous head and robust tarsi. These two genera differ also by the shape of the galea, narrow in *Kathetopodion*, wide in *Scaphisoma*. The *Scaphisoma* group is defined by a number of synapomorphies (LESCHEN & LÖBL 2005): short antennomere 3, mandible with a single apical tooth, apex of the hypomeron extending beyond the pronotum, apical pronotal angle acute, anterior pronotal bead obliterated in middle, mesometaventral articulation lacking sulcus, submetacoxal lines present and usually arcuate, and profemoral ctenidium present.

Recently, I have examined a small collection of scaphidiines from Western New Guinea that includes five specimens of a peculiar, undescribed Scaphisomatini species. Unlike other species of the group, it has the fifth abdominal tergite fully exposed and strongly sclerotized, and the following two tergites vertical in two specimens, or “normally” oblique in three specimens (Figs. 1, 2). The species is a member of the *Scaphisoma* group, as suggested by the short, subtriangular antennomere 3, most of the pronotal characters including absent corbiculum, the short dorsal pubescence, and the presence of profemoral ctenidium, but it lacks submetacoxal lines. It has neither the characters that define *Kathetopodion*. A more detailed study revealed additional features separating this species from *Scaphisoma* and *Kathetopodion*.



Figs 1 and 2. *Irianscapha dimorpha* gen. nov., sp. nov.

The study of the new Indonesian taxon gave me occasion to describe also two new Indonesian species of *Scaphisoma*, one from the Moluccas, the second from Sulawesi.

Material and methods

The material examined is housed in the collections of the Naturkundemuseum, Erfurt, Germany (NMEC), Naturhistorisches Museum, Wien, Austria (NHMW), and Muséum d'histoire naturelle, Genève, Switzerland (MHNG). The terminology follows LESCHEN & LÖBL (2005). The locality data are reproduced as given on the respective labels and the data from different labels are separated by a slash. The body length is measured from the anterior pronotal margin to the inner apical angle of the elytra, unless other statement. The abdominal sternites are counted from the first visible one (i.e., the third morphological sternite). The length and width ratios of the antennomeres is taken from antennae mounted in slides. The sides of the aedeagi refer to their morphological sides, rotated to 90° in the group.

Taxonomy

Irianscapha gen. nov.

Gender feminine. Type species: *Irianscapha dimorpha* sp. nov.

Diagnosis. Body robust, not compressed laterally. Dorsal vestiture reduced. Antennomere 3 short, subtriangular, antennomeres 6 to 11 strongly flattened. Mandibles each with single apical tooth. Galea narrow, about as wide as lacinia. Hypomera oblique. Corbiculum absent. Mesepimera distinct. Elytra with sutural striae. Profemoral ctenidium present. Mesocoxae and metacoxae distant. Tarsi narrow. Abdominal tergites 5 to 7 entirely exposed. Submetacoxal lines absent.

Description. Body strongly convex dorsally and strongly sclerotized. Head hypognathous. Eyes not notched, with weakly concave inner margins. Antennal insertion exposed, close to frontoclypeal suture. Interocular distance large. Labrum as Fig. 3, labral setae present, simple. Mandible (Fig. 5) with single apical tooth, lacking subapical serration. Maxillary palpi weekly acuminate, with three subapical setae on penultimate segment. Galea narrow, more than twice as long as wide (Fig. 6). Galeal brush apical, not extending onto inner margin. Lacinia weekly sclerotized, about as wide as galea, lacking inner and basal setae. Labial

palpi three-segmented, subequal in length, terminal palpomere apical, straight. Anterior margin of mentum simple, mentum with long setae and four spine-like sensilla, pores absent from mesal area (Fig. 4). Anterior margin of submentum weakly concave. Antennomere 3 short, subtriangular, antennomeres 6 to 11 asymmetrical and flat. Prothoracic corbiculum absent. Anterior margin of prothoracic cavity asetose. Hypomeron completely visible in lateral view, dorsally extending beyond angle of pronotum, overlapping base of metanepisterna. Prothoracic carina well developed, visible in dorsal view, not curved ventrally. Anterior bead of pronotum very fine, not obliterated in middle. Pronotal angle extending beyond anapleural suture, pronotal basal lobe well developed. Anterior spine on prosternal process present. Prepectus well defined. Mesoventral lines present, connected to mesocoxal cavities, impunctate. Outer margin of procoxal rest and mesocoxal line diverging. Mesoventral secondary lines absent. Mesoventral process paxillate. Mesepimeron exposed, about as long as half of lateral part of metaventrite. Mesocoxal process slightly narrower than mesocoxa. Meso- and metaventrite fused. Mesocoxae transverse, distant. Mesocoxal lines parallel to coxa, punctate, separated at middle. Metaventrite lacking setose patch, primary setae absent, discrimen and transverse premetacoxal lines absent. Metanepisterna mostly hidden under elytra. Metanepisternal suture impunctate. Metacoxae distant. Metacoxal process short. Lateral margins of tergites 3 to 5 and 7 carinate. Tergites 5 to 7 exposed, strongly sclerotized. Tergite 7 longer than tergite 6. Brick-wall pattern present on membranes of exposed sternites 1 to 4. Submetacoxal lines absent. Exposed sternites 1 to 4 each with transverse row of primary setae. Elytra without basal stria, with lateral stria. Epipleura very narrow, vertical. Profemoral ctenidium present. Mesofemur rounded in cross section. Mesotibia about as long as mesofemora, moderately longer than mesotarsi, lacking outer spines, with two inner apical spines. Mesotarsus with segment 1 about twice as long as segment 2. Metatarsus smooth, with segment 1 slightly longer than segments 2 and 3 combined. Empodium unisetose. Female styli narrow, with two apical setae.

Etymology. The name derives from Irian Jaya, the former name of Western New Guinea, and from the Greek scaphos, referring to the characteristic boat-like shape of the body in scaphidiines.

Irianscapha dimorpha sp. nov.

Holotype ♂, labelled: Indonesia, Irian Jaya Nabire area, road Nabire-Iraga, km 54, 03°29'517" S 135°43'913" E, 750m NN X.1997, LEK, leg. M. Balke. In NMEC.

Paratypes: 1 ♂, 3 ♀♀, with the same data as the holotype. In NMEC and MHNG.

Description. Length 1.15–1.40 mm, total length 1.60–1.72 mm, width 0.95–1.10 mm. Pubescence on dorsum of body very short, on metaventrite and abdominal ventrites fairly long. Obvious microsculpture absent from dorsal and ventral sides of body. Head and most of pronotum dark reddish brown, pronotum with light lateral spot situated in basal half, not touching basal margin. Hypomera about as light as pronotal spots. Elytra very dark brown to blackish, each with two light, yellowish transverse fasciae. Anterior, basal fascia distinctly larger than posterior fascia. Exposed abdominal tergites lighter or about as dark as dark elytral areas. Venter of body and appendages reddish brown, mesoventrite and lateral parts of metaventrite slightly darker than remaining surface of venter, tarsi barely lighter than tibiae. Frons very finely punctate, interocular space 0.19–0.21 mm, almost as half of head width. Antennae (Fig. 7) with length ration of antennomeres as: III 20: IV 25: V 35: VI 54: VII 70: VIII 68: IX 72: X 80: XI 90. Segment IV fairly short, about twice as long as wide. Segment V gradually widened apically, about 2.5 times as long as wide. Segment VI much larger than segment V, also about 2.5 times as long as wide. Segment VII distinctly longer and slightly wider than segment VI, almost 2.5 times as long as wide. Segment VIII hardly smaller than segment VII. Segments IX to XI evenly wide, XI 3 times as long as wide. Pronotum moderately narrowed anteriorly, in dorsal view lateral margin carinae exposed, lateral margins almost straight in basal half, curved in lateral view; basal lobe about 2.5 times as wide as long. Pronotal punctation fine and dense, punctures not well delimited, smaller than puncture intervals. Tip of scutellum exposed. Elytra weakly narrowed apically, with lateral margins evenly rounded in dorsal view, lateral margin carinae throughout exposed, apical margin rounded, serration near inner angles inconspicuous, sutural areas flat, each with single puncture row, sutural striae parallel, at base curved along pronotal lobe, not extending along basal margin. Lateral margin stria shortly curved at base. Supraepipleural

area with single row of coarse punctures along epipleural margin. Discal punctation of elytra coarse and dense, punctures well delimited, many about as large as or larger than puncture intervals. Tergites 5 to 7 either oblique and visible in dorsal view, or tergite 5 strongly inflexed and tergites 6 and 7 vertical and not visible in dorsal view. Tergites 5 and 6 with dense and coarse punctation consisting of punctures smaller than elytral punctures, tergite 7 with punctation about as coarse as elytral punctation. Hypomera, mesanepisterna and mesepimera smooth. Middle part of metaventrite convex and without impression. Most of centre and most of premetacoxal area of metaventrite impunctate. Most of lateral parts of metaventrite densely and coarsely punctate, coarse puncture extended along submesoxocal lines. Submesoxocal areas very narrow, hardly 0.02 mm. Mesepimeron about 3.5 times as long as wide and 4 times as long as interval to mesocoxa, with anterior and posterior margins slightly carinate. Metanepisternum very narrow, its exposed portion about 0.02 mm wide, parallel-sided. Metepimeron with stria along inner margin. Abdominal sternite 1 densely and coarsely punctate, punctures smaller than coarse punctures on metaventrite. Following three sternites with irregular, dense, transverse row of coarse punctures. Ventrite 7 densely and coarsely punctate. Protibiae straight, mesotibiae and metatibiae slightly curved.

Male characters. Protarsomeres hardly widened. Ventrite 8 without mesal lobe. Aedeagus (Figs 8–10) fairly sclerotized, 0.38 mm long, with ostium situated in apical part of the median lobe, apical process of median lobe strongly curved ventrally and tapering, parameres short, weakly sclerotized in apical two thirds of mesal side, internal sac with single long, tubular rod widened basally and forming subbasal loop. Membranes of internal sack lacking strigulate or spine-like structures.

Etymology. The species epithet refers to the abdominal dimorphism.

Comments. The habitus of *Irianscapha dimorpha* is certainly unusual and the taxon may be easily distinguished from all known Scaphidiines. It is placed in the *Scaphisoma* group, defined in LESCHEN & LÖBL(2005), and is considered allied to *Scaphisoma* Leach. *Irianscapha* and *Scaphisoma* share the broad, laterally not compressed body, widely separated mesocoxae, very short dorsal pubescence, short, asymmetrical antennomere 3, elongate antennomere 4, widened antennomere

es 6 to 11, antennal insertion situated close to clypeus, mandibles each with a single apical tooth, basal angles of the pronotum and hypomera prominent, overlapping mesepimera below elytral base, prothoracic corbiculum absent, and profemoral ctenidium present. *Irianscapha* is distinguished by the narrow galea, the base of the apical segment of the maxillary palpus narrower than the apex of the penultimate segment, apical segment of the labial palpus straight, anterior pronotal bead entire though very fine in middle, submetacoxal lines absent, abdominal sternites 1 to 3 and 5 carinate laterally, and abdominal tergite 5 exposed, similar to tergite 6.

A particularly conspicuous feature is the abdominal polymorphy: the tergites 5 to 7 are either “normally” oblique to the body axis, or only the tergite 5 is oblique and the following two tergites are vertical.

***Scaphisoma irideum* sp. nov.**

Holotype ♂, labelled: Indonesia N-Molucco Isl. Hal-mahera, Central Weda Selatan distr. Loleo. S env. Tilope vill. Leg. D. Telnov & K. Greke / 8 km SW, 10.IX.2007 sec. lowland forest under bark of rotten Ficus, 0° 13'58,16" N, 127°54'27,18" E / Collection Naturkundemuseum Erfurt. In NMEC.

Paratypes: 1 ♂, 4 ♀♀, with the same data as the holotype. In NMEC and MHNG.

Diagnosis. Pronotum iridescent, pronotum, abdominal terga and ventral side of body with strigulate microsculpture. Elytron with short basal stria. Aedeagus symmetrical, apical process of median lobe long, narrow, hook-shaped at apex, ventral process of median lobe weakly developed, parameres almost evenly wide and almost straight between ventral process and apex. Internal sac membranous.

Description. Length 1.70–1.75 mm, width 1.13–1.20 mm. Head, pronotum and elytra very dark brown to blackish, ventral side of body and abdomen slightly lighter to reddish-brown. Femora dark, about as dorsal side of body, tibiae, tarsi and antennae light reddish-brown. Antennae long (Fig. 12), length ration of antennomeres as follows: III 12: IV 33: V 43: VI 43: VII 50: VIII 45: IX 57: X 55: XI 68. Segment IV very narrow, about 5 times as long as wide. Segments V and VI evenly large, slightly wider and distinctly longer than segment IV, each almost 5.5 times as long as wide. Segment VII much wider than segment VI, about 3.5

times as long as wide. Segment VIII as narrow as segment VI, about 5.5 times as long as wide. Segments IX and X similar, segment X about as wide as segment VII and slightly wider than segment IX. Segment XI almost 6 times as long as wide. Pronotum with convex lateral margins, lateral margin carinae usually distinct in anterior half, discal punctation extremely fine, entire surface with microsculpture consisting of oblique striae providing iridescence. Minute point of scutellum exposed. Elytra fairly strongly narrowed apically, with lateral margin carinae throughout visible, apical margins truncate, inner apical angle situated posterior level of outer angles, apical serration reduced, sutural margins raised, adsutural areas flat, with single, irregular, dense row of fine punctures, sutural striae parallel from level of scutellum to apical third, in apical third converging, at base curved and extending closely along basal margin to form short basal striae reaching about mid-width of elytra (in dorsal view). Discal punctation fine and extremely dense, consisting of well delimited punctures, their diameters smaller than puncture intervals; pubescence comparatively distinct, microsculpture absent. Hind wing fully developed. Hypomera, lateral parts of mesoventrite and metaventrite, and exposed abdominal segments with strigulate microsculpture. Ventral side of thorax and abdomen extremely finely punctate, except for punctures margining submesocoxal and submetacoxal lines. Mesepimeron about 1.5 times as long as interval to mesocoxa, with acute tip. Metaventrite in middle weakly convex, with two basomedian impressions. Submesocoxal areas 0.05–0.06 mm long, with fine, distinct marginal punctures, submesocoxal lines convex. Metanepisterna almost flat, at widest point 0.15–0.17 mm wide. Submetacoxal areas 0.03–0.04 mm long, with very dense, fairly coarse and elongate marginal punctures, submetacoxal lines parallel. Tibiae straight. Male characters. Segments 1 to 3 of protarsi weakly widened. Abdominal sternite 6 with apical margin rounded. Aedeagus (Figs 11, 13) 0.32 mm long, symmetrical, rather weakly sclerotized. Median lobe long and narrow, with small basal bulb, apical process about 1.5 times as long as basal bulb, weakly inflexed, with tip robust and hook-like in lateral view. Ventral process of median lobe small. Parameres almost evenly wide between ventral process and apex and straight. Internal sac membranous. **Etymology.** The species epithet refers to the shiny surface of the specimens.

Comments. Only two species of *Scaphisoma* were reported from the Moluccas, *S. coarctatum* Löbl, 1976 and *S. toxopeusi* Löbl, 1976. Both are from Buru. They differ strongly from *S. irideum* in external and aedeagal characters and are certainly not closely allied. *Scaphisoma incomptum* Löbl, 1976 from Sumatra, *S. budemuense* Löbl, 1975 from New Guinea, and the Australian *S. perelegans* Blackburn, 1903 and *S. teres* Löbl, 1977 share some of the aedeagal characters (see LÖBL 1975, 1976, 1977), such as the symmetrical median lobe with small basal bulb and long apical process, poorly developed ventral process, almost straight parameres, and membranous internal sac (*S. incomptus* excepted for the latter character). As these characters are likely plesiomorphies, and in absence of a phylogeny, the species are not considered to form a monophyletic group. The new species differs clearly from all them by its external characters, including the microsculptured pronotum and venter of the body, the body size, the colour, and the length of the antennomeres. It may be easily distinguished from these species as from other Asian and Australian congeners by its iridescent pronotum.

***Scaphisoma latitarse* sp. nov.**

Holotype 1 ♂, labelled: Indonesia, S-E Sulawesi Kendari Airport 11.-14.2. 30 km W of Kendari 1994 leg. M. Strba & I. Jenis (NHMW).

Paratypes: 3 ♂♂, 9 ♀♀, with the same data as the holotype (NHMW, MHNG).

Diagnosis. Antennae very long. Elytra and pronotum uniformly dark. Disc and adsutural areas of elytron with similar, very dense punctation. Elytron with basal stria. Metaventricle lacking microsculpture. Submetacoxal areas parallel, shorter than submesocoxal areas. Abdominal microsculpture consisting of conspicuous striae and micropunctures. Aedeagus symmetrical, with large basal bulb, very large ostium, dorsal valves absent, parameres lobed apically, internal sac membranous basally, bearing pairs of very robust apical sclerites.

Description. Length 2.15–2.45 mm, width 1.39–1.60 mm. Dorsum of body very dark brown to black, head sometimes lighter than dorsal side of body, ventral side of body dark reddish-brown, antennae, tibiae and tarsi yellowish or very light reddish-brown, femora reddish-brown. Obvious microsculpture present on abdomen only. Antennomeres 3 to 6 slightly lighter than two

basal and following antennomeres. Antennae very long (Fig. 18), length ration of antennomeres as follows: III 15: IV 62: V 84: VI 73: VII 72: VIII 63: IX 80: X 68: XI 83. Segments IV to VIII narrow. Segment IV about 6 times as long as wide. Segment V hardly wider than segment IV, about 8 times as long as wide. Segment VI narrower than segment VII, about 10 times as long as wide. Segment VII hardly wider than segment V, about 7 times as long as wide. Segment VIII as narrow as segment VI, 9 times as long as wide. Segment IX slightly wider than segment VII, almost 8 times as long as wide. Segment X somewhat wider than segment IX, about 5.5 times as long as wide. Segment XI wider than segment X, about 5.5 times as long as wide. Pronotum moderately narrowed anteriorly, with lateral margin carinae not exposed, or in middle hardly visible in dorsal view; punctation dense and well visible, consisting of punctures well delimited, usually much smaller than puncture intervals. Minute tip of scutellum exposed. Elytra weakly narrowed apically, with lateral margins evenly rounded, lateral margin carinae usually exposed throughout in dorsal view, apical margins almost truncate, inner apical angle situated somewhat posterior of level or about in level with outer apical angles, apical serration distinct, sutural margin not raised, adsutural areas flat, with irregular, dense and very fine punctation covering most of its surface and similar to discal punctation. Sutural striae parallel in anterior halves, converging in apical third of elytra, curved along pronotal lobe outward and forming basal striae ending slightly beyond basal mid-width. Discal punctation fine and dense, in males consisting of fairly well delimited punctures with punctures intervals mostly 2 to 4 times as large as puncture diameters; in female consisting of sharply delimited punctures usually with diameters only somewhat smaller than puncture intervals. Hing wings fully developed. Exposed abdominal tergites with microsculpture consisting of short striae, pygidial punctation similar to that on elytra. Hypomera, mesoventrite and lateral parts of metaventricle lacking microsculpture, very sparsely and very finely punctate. Mesepimeron small, as long as or somewhat longer than third of interval to mesocoxa. Metaventricle in apical part with shallow median impression, at each side of impression densely and fairly coarsely punctate. Intercoxal margin concave. Submesocoxal lines convex, with dense and fairly fine marginal punctures separated by striae, submesocoxal

area about 0.06–0.07 mm long. Metanepisternum flat or slightly convex, about 0.14–0.15 mm wide, narrowed anteriorly, with suture deep, almost straight. Metepimeron with arcuate stria. Exposed abdominal sternites sparsely, very finely punctate, with conspicuous microsculpture consisting of extremely dense micropunctures and striae. Submetacoxal lines parallel, marginal punctures fairly fine, submetacoxal areas 0.05 mm long. Tibiae slightly curved, protibiae and mesotibiae thicker than metatibiae. Male characters. Elytra with discal punctation less dense than in female and not clearly delimited. Protibiae and mesotibiae thicker than in females. Segment 1 of protarsi and mesotarsi conspicuously widened, about as wide as apex of respective tibiae. Segments 2 and 3 of protarsi narrower than segment 1, still strongly widened, segment 2 of mesotarsi strongly widened, segment 3 of mesotarsi moderately widened. Abdominal sternite 5 with strongly concave apical margin, medioapical lobe of sternite 6 subtriangular, about 0.06 mm long. Aedeagus (Figs. 14–17) 1.25–1.37 mm long, strongly sclerotized, symmetrical. Median lobe with basal bulb large, oval, somewhat longer than apical process. Apical process inflexed, gradually narrowed, tip in lateral view thickened, dorsal margin near tip very finely crenulate. Ostium very large, not covered by valves. Parameres curved and in apical half strongly enlarged mesally by lobes, surfaces of lobes very finely variolate. Internal sac complex, in basal half forming membranous irregular tube, membranes very finely spinulate. Internal sac near centre widened and covered by long and very thin spine-like structures. Latter followed by small mesal rods and paired, very large, robust apical sclerites.

Etymology. The species epithet refers to the dilated male tarsomeres.

Comments. Only six species of *Scaphisoma* were so far reported from Sulawesi, five of them were described in Löbl, 1983 and are apparently endemics, and one, *S. obliquemaculatum* Motschulsky, 1863, is widely distributed (see Löbl, 1997). *Scaphisoma latitarse* differs conspicuously from these species in both, external and aedeagal characters. It shares several characters with members of the *S. sublimbatum* group, known from New Guinea and Australia (Löbl, 1975, 1977): the aedeagi are large, strongly sclerotized, lacking dorsal valves, have large ostium and lobed parameres, the internal sacs are basally membranous and bear robust apical teeth. The new species differs drastically from them

in having symmetrical aedeagus and the internal sac bearing pairs of robust sclerites. *Scaphisoma latitarse* differs notably from members of the *S. sublimbatum* group by its colour pattern, the elytral punctation, small mesepimera, and abdominal microsculpture.

The four males have notably sparser elytral punctation than the nine females available for study. Thus, this feature is assumed to be a secondary sexual character. So far, I have observed in *Scaphisoma* male secondary sexual characters affecting tarsi (in most species), and eventually tibiae, setal patches on median areas of the metaventre and abdominal sternites, shape of the sternites, apical serration of elytra, shape of the elytral apices, and in *S. testaceomaculatum* (Pic, 1915) also the colour pattern (unpublished). An eventual sexual variation in elytral punctation is reported here for the first time in the scaphidiines.

Acknowledgements

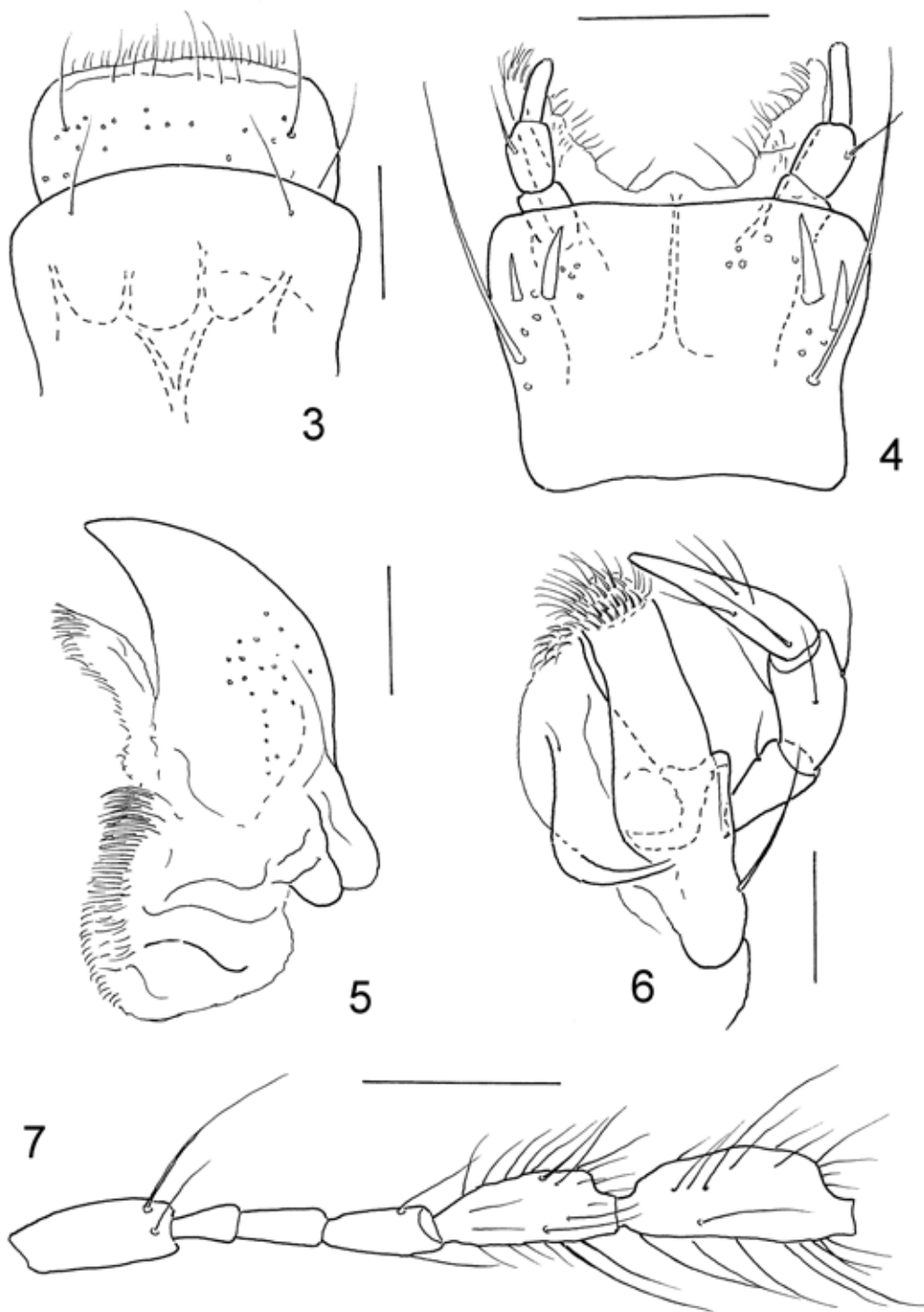
The material examined was made kindly available for study by my colleagues Matthias Hartmann, Erfurt, Germany and Harald Schillhammer, Wien, Austria. Michaël Blanc, Abondances, France, provided the photos of *Irianscapha dimorpha*.

References

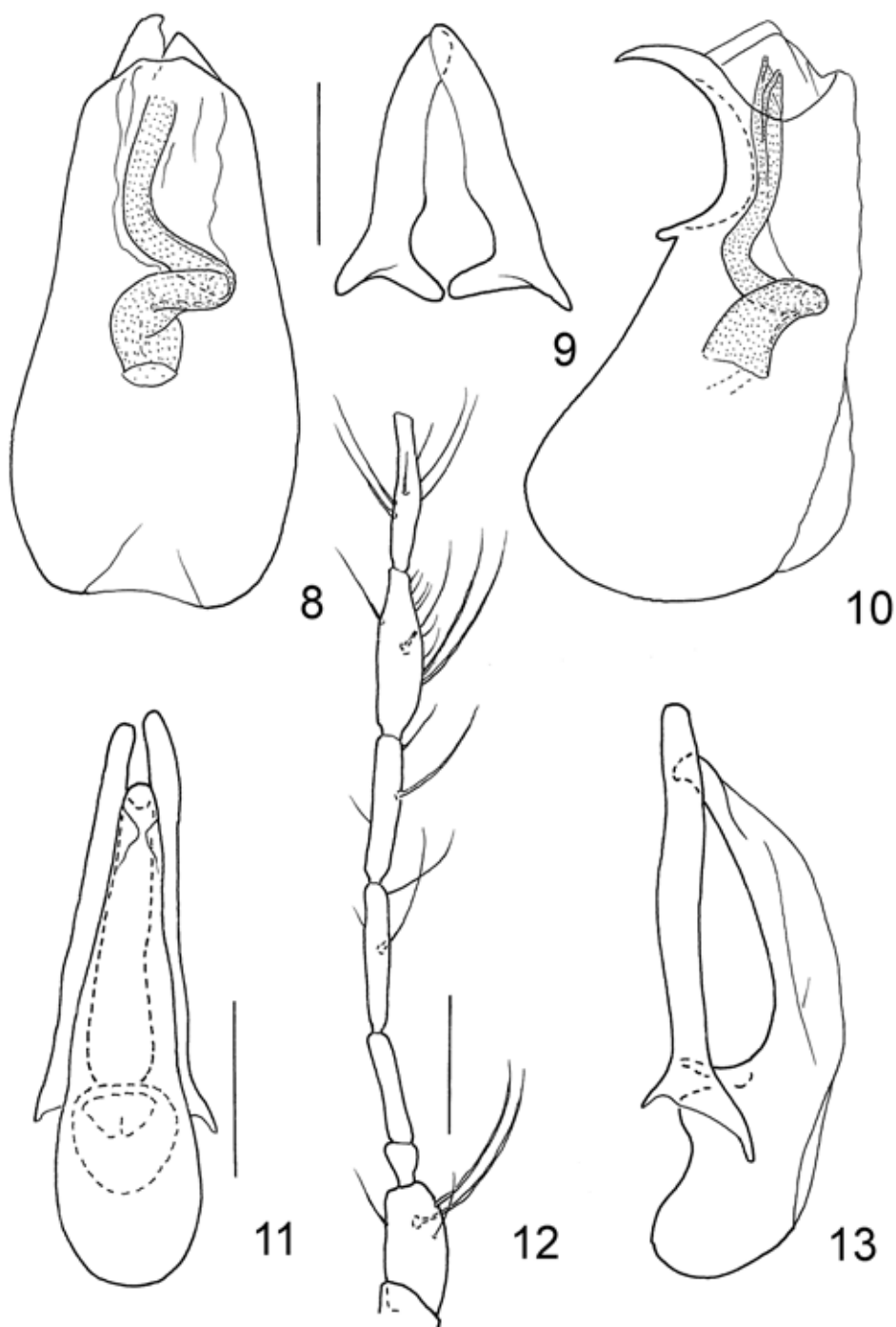
- LESCHEN, R. A. B. & I. LÖBL (2005): Phylogeny and classification of Scaphisomatini Staphylinidae: Scaphidiinae with notes on mycophagy, termitophily, and functional morphology. – *Coleopterists Society Monographs* 3: 1–63.
- LÖBL, I. (1975): Beitrag zur Kenntnis der Scaphidiidae (Coleoptera) von Neuguinea. – *Revue suisse de zoologie* 82: 369–420.
- (1976): Drei neue Arten der Gattung *Scaphisoma* Leach (Coleoptera, Scaphidiidae) aus Indonesien. – *Entomologische Berichten* 36: 8–11.
- (1977): Beitrag zur Kenntnis der Scaphidiidae (Coleoptera) Australiens. – *Revue suisse de zoologie* 84: 3–69.
- (1982): Sur l'identité de trois "Amalocera" de Bornéo (Coleoptera, Scaphidiidae). – *Revue suisse de zoologie* 89: 789–795.
- (1983): Sechs neue Scaphidiidae (Coleoptera) from Sulawesi, Indonesien. – *Mitteilungen der schweizerischen entomologischen Gesellschaft* 56: 285–293.
- (1997): Catalogue of the Scaphidiinae (Coleoptera: Staphylinidae). – *Instrumenta biodiversitatis* 1: xx + 190 pp.

Author's address:

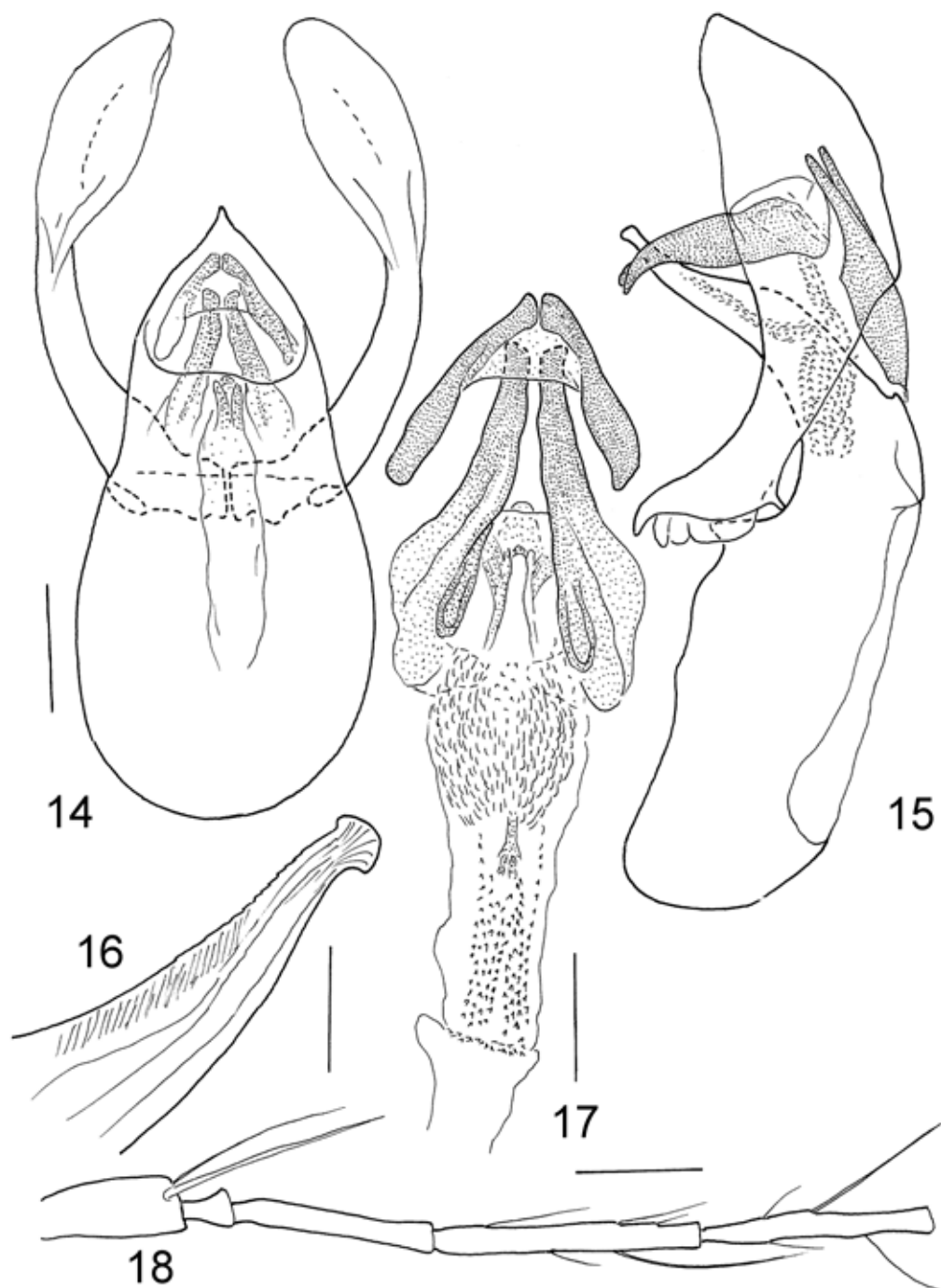
Ivan Löbl
Muséum d'histoire naturelle
Route de Malagnou 1
CH–1207 Genève
Switzerland



Figs 3 to 7. *Irianscapha dimorpha* gen. nov., sp. nov.; 3. Labrum; 4. Mentum and labium with palpi; 5. Mandible; 6. Maxilla with palpus; 7. Antennomeres II to VII. Scale bars for Figs 1 to 6 = 0.05 mm, for Fig. 7 = 0.1 mm.



Figs 8 to 13. *Irianscapa dimorpha* gen. nov., sp. nov., aedeagus; 8. Median lobe and internal sac in dorsal view; 9. Parameres in ventral view; 10. Median lobe with internal sac in lateral view. Figs 11 to 13. *Scaphisoma irideum* sp. nov. 11. Aedeagus in dorsal view; 12. Antennomeres II to VIII; 13. Aedeagus in lateral view. Scale bars = 0.1 mm.



Figs 14 to 18. *Scaphisoma latitarse* sp. nov.; 14 and 15. Aedeagus in dorsal and lateral views, internal sac extruded, in lateral view, scale bar = 0.2 mm; 16. Apical part of median lobe, in lateral view, scale bar = 0.05 mm; 17. Internal sac, dorsal view, scale bar = 0.1 mm; 18. Antennomeres II to VI, scale bar = 0.1 mm.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Veröffentlichungen des Naturkundemuseums Erfurt \(in Folge VERNATE\)](#)

Jahr/Year: 2012

Band/Volume: [31](#)

Autor(en)/Author(s): Löbl Ivan

Artikel/Article: [Irianscapha dimorpha, an unusual new Scaphisomatini from Western New Guinea, and two new Indonesian species of Scaphisoma Leach \(Coleoptera: Staphylinidae: Scaphidiinae\) 309-317](#)