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# Descriptions of two new Scaphidiinae from South-India

(Coleoptera: Staphylinidae)

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Abstract: Two new species of Scaphidiinae from South India are described, *Scaphicoma kejvali* **n. sp.** and *Scaphisoma nilgiriense* **n. sp.** The number of species of Scaphidiinae known from the South Indian states Kerala and Tamil Nadu amounts at present to 48.

Keywords: Coleoptera, Staphylinidae, Scaphidiinae, taxonomy, South India.

#### Introduction

Recently, I received from my colleague Z. KEJVAL, Domažlice, Czech Republic, new South Indian material of the myxomycetophagous, respectively mycophagous staphylinid subfamilies Dasycerinae and Scaphidiinae. Surprisingly, the material from Kerala contained a new species of *Scaphicoma* Motschulsky, and that from Tamil Nadu contained a new species of *Scaphisoma* Leach. This is a remarkable result of efficient field work, because the South Indian Scaphidiinae were extensively explored and studied (LÖBL, 1979), and the occurrence of unknown taxa in the area appeared improbable.

The material treated below was generously donated to the Geneva Muséum d'histoire naturelle (MHNG). For methods see LÖBL 1979.

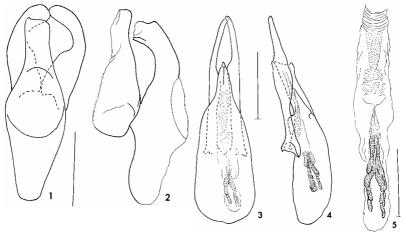
# **Descriptions**

## Scaphisoma nilgiriense n. sp.

Holotype male: India, Tamil Nadu, Nilgiri Hills, 10km SW Thiashola reserve forest nr. Carrington estate, 74°35'E, 11°12'N, ca 2100, 14.–19.vi.1999, leg. Z. Kejval & M. Tryzna (MHNG).

Paratypes: with same data as holotype, 2 females (MHNG).

Description: Length 2.35-2.45 mm. Head, pronotum, hypomera, ventral side of thorax, and abdominal sternites 1 to 3 black or blackish-brown. Elytra bicolor, on largest part of disc ochreous, along suture, lateral margins and apices dark brown to black, large black spot covering about inner anterior half of elytral disc, black spot extended along base up to humeral area. Propygidium and pygidium black or dark brown with lighter apex, antennae, legs and tip of abdomen ochreous.



Figs. 1 and 2: *Scaphisoma nilgiriense* **n. sp.**, aedeagus, in dorsal and lateral views. Scale bar = 0.2 mm.

Figs. 3 to 5: Scaphicoma kejvali  $\mathbf{n}$ . sp., aedeagus, in dorsal and lateral views, internal sac (5) in detail. Scale bar = 0.2 mm (Figs. 3, 4) and = 0.1 mm (Fig. 5).

Antennae with length ration of segments III to XI as: 6: 16: 10: 26: 23: 18: 23: 24: 27 (holotype). Mesal side of segments IV to VI with long setae, following segments with long setae and short pubescence. Segment III short, triangular, slightly longer than wide; segment IV about 4 times

as long as wide; segment V hardly wider than segment IV, about 2.5 times as long as wide; segment VI weakly widened apically, widest subapically, slightly wider than segment IV, about 5 times as wide as long; segment VII much wider than segment VI, about 3 times as long as wide; segment VIII slightly wider than segment VI, almost 3 times as long as wide; segment XI about 4 times as long as wide. Pronotum and elytra lacking microsculpture. Pronotum moderately narrowed anteriorly, with lateral margins arcuate, lateral striae and carinae in dorsal view completely concealed or visible in middle part of lateral edge, discal punctation fine and dense, visible at low (16 times) magnification, consisting of punctures fairly well delimited, mostly about 4 to 8 times smaller than puncture intervals. Tip of scutellum exposed. Elytral apices truncate, with few minute denticles near inner angle, inner angle anterior line of outer angles, sutural margin flat anteriorly, slightly elevated in apical half, adsutural areas flat in anterior half, oblique in apical half, with sings row of fine punctures, sutural striae parallel, curved anteriorly along base to form basal striae extended about to basal mid-width. Elytral punctation similar to pronotal punctation, distinct on dark surface, almost indistinct on ochreous surface. Hypomera with few scattered, extremely fine punctures, lacking microsculpture. Mesepimera extremely finely punctate. Mesepimeral ridge as long as interval to mesocoxae. Metasternum flattened in middle, lacking impressions and microsculpture. Metasternal punctation sparse and very fine, on medio-apical area slightly denser and coarser than on remaining surface, antemetacoxal puncture rows absent. Submesocoxal lines arcuate, impunctate. Submesocoxal areas narrow, about 0.05 mm long, about as long as eighth of shortest interval between them and metacoxae. Metepisterna below plan of metasternum, gradually narrowed anteriorly, with almost straight suture. Metepisternal punctation as that on metasternal sides. Abdominal sternite 1 with microsculpture consisting of transverse lines and waves, except on basolateral areas lacking microsculpture. Following exposed abdominal segments with transversely striate microsculpture. Punctation on sternite 1 very fine and sparse, as that on metasternum. Submetacoxal lines arcuate, sparsely and very finely punctate, submetacoxal areas 0.10 mm long. Tibiae very weakly curved.

Male characters: Segments 1 to 3 of protarsi moderately widened, with tenant setae. Mesotarsi not widened. Apex of sternite 6 truncate. Aedeagus (Figs 1, 2) 0.52 mm long, moderately sclerotized. Median lobe elongate, narrow, basal bulb gradually narrowed proximally, with com-

pression plate oblique, oval, articular process small, slightly prominent, apical process arcuate and tubular, slightly widened at tip in lateral view. Parameres wide, arcuate in dorsal view, with very fine, short fringe in proximal half their mesal margin. Internal sac lacking sclerotized structures.

Comments: *Scaphisoma nilgiriense* is closely related with *S. binotatum* Achard and *S. diversicorne* Löbl. These three species share the particular form of the median lobe, with narrow basal bulb, compression plate small and apical process tubular or nearly so, and wide parameres. They are distinctive also by the antennae with segment IV setose and much longer than segment V. The new specie may be easily distinguished from the sympatric *S. binotatum* by its colour pattern (the elytra have a dark central spot in *S. binotatum*), and by the parameres strongly widened basally. It differs also by the internal sac of the aedeagus lacking distinct structures. The recently discovered *Scaphisoma diversicorne* (LÖBL, 2003) in Northeast India has the body uniformly black, except for the brown elytral apices. It is characterized by the very narrow and strongly curved apical process of the internal sac of the aedeagus and by the parameres deeply notched subapically.

### Scaphicoma kejvali n. sp.

Holotype male: India, Kerala, Cardamon Hills, 300m, 27-29.12.1993, ca 50 km NW Pathanamthitta, 77°05'E, 9°25'W, leg. B. BOUKAL & Z. KEJVAL (MHNG).

Paratypes: with same data as holotype, 8 males, 18 females (MHNG); Cardamon Hills, ca 50 km NW Pathanamthitta nr. Pambalyar river, 6.–9.V.1994, Z. KEJVAL, 1 male (MHNG).

Description: Length 2-2.05 mm, dorsoventral diameter 1.1 mm. Head ochreous, sometimes darkened posterior eyes. Most of pronotum, most of elytra and most of ventral side of body ochreous, as head or hardly darker than head. Pronotum with black or blackish basal and median fasciae. Median pronotal fascia usually wider than basal fascia, reaching to or almost up to anterior pronotal margin. Lateral pronotal striae and hypomera black. Elytra with adsutural areas black or blackish, and black along base, lateral margins and apices. Black basal band bisinuate, often shortened, not extended up to sutural striae. Black lateral band extended internally, posterior elytral mid-length, black adsutural area of-

ten slightly widened posterior elytral mid-length. Prosternum, mesosternum, narrow mesal part of mesepisternal, most of metasternum and abdominal venter uniformly ochreous. Most of mesepisterna, metepisterna, metepimera and lateral parts of metasternum black. Limits of dark metasternal area given about by line between outer edge of mesocoxal cavities and metepimera. Pygidium darkened, lateral parts of ventrite 5 usually darkened. Palpi and legs ochreous, antennae with segments 1 to 6 ochreous or yellowish, following segments usually darker, brown.

Antennae with length ration of segments III to VIII as: 12: 18: 21: 23: 18: 16. Pronotal punctation uniformly dense and very fine. Scutellum concealed. Hypomeral punctation somewhat finer and much sparser than pronotal punctation. Punctation on elytral disc uniform, slightly coarser than pronotal punctation. Adsutural puncture row irregular. Exposed abdominal tergites with punctulate microsculpture, normal punctation reduced. Mesosternum with low, often not clearly delimited, median ridge. Punctation on mesepisterna and lateral parts of metasternum about as sparse and fine as that on hypomera. Median part of metasternum weakly convex, densely punctate, punctures becoming slightly larger apically. Submesocoxal lines strongly arcuate, impunctate. Submesocoxal areas slightly longer than shortest interval between them and metacoxa (ratio 12/10). Metepisterna parallel, very narrow, much narrower than anterior part of epipleura. Abdominal ventrite 1 with punctulate microsculpture and large, lateral parts, lacking microsculpture in middle, following ventrites with punctulate microsculpture. Laterobasal parts of ventrite 1 distinctly, fairly densely punctate, some distinct punctures extended almost up to apical margin, most of ventrite 1 about as finely and sparsely punctate as lateral parts of metasternum.

Male characters: Segments 1 to 3 of protarsi weakly widened. Aedeagus (Figs 3-5) 0.63-0.64 mm long, internal sac with bifid, basal rod.

Comments: *Scaphicoma* Motschulsky is a distinctive genus, characterized by strongly approximate mesocoxa and metacoxa, in combination with strongly elongate tarsi. At present it includes 12 species, most from tropical and subtropical Asia, one was described from New Ireland and one from the Atlantic island "Fernando Po" (= Bioco) (LÖBL 1997). Only *S. arcuatum* (Champion) was hitherto known from India. This species is widely distributed in North India and Nepal, and was also recorded from Thailand and Yunnan (LÖBL 1999) but appears to be absent from Central

and South India. *S. arcuatum* may be readily distinguished from *S. kejvali* by the metasternal punctation (coarser and denser on lateral parts of the metasternum in the former species) and by its uniformly reddish-brown body. *S. cinctum* from Sumatra exhibits colour pattern on the ventral side of the body similar to that in *S. kejvali*, has the pronotum darkened basally and the elytra darkened laterally, but differs drastically from *S. kejvali* by the mesosternum sulcate medially. Two species of *Scaphicoma* are known to occur in Sri Lanka, *S. flavovittata* Motschulsky and *S. nigrovittata* (Achard). Both have a conspicuous colour pattern, including darkened lateral parts of the elytra, but lack the dark median band on the pronotum. In addition, these species differ by their antennal characters, and *S. nigrovittata* by the elytra having a dark median fascia and the abdominal ventrite 1 lacking microsculpture.

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