Zeitschrift: Mitteilungen der Schweizerischen Entomologischen Gesellschaft = Bulletin de la Société Entomologique Suisse = Journal of the Swiss Entomological Society

Band: 84 (2011)

Heft: 3-4

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Autor: Löbl, Ivan

DOI: https://doi.org/10.5169/seals-403026

MITTEILUNGEN DER SCHWEIZERISCHEN ENTOMOLOGISCHEN GESELLSCHAFT
BULLETIN DE LA SOCIÉTÉ ENTOMOLOGIQUE SUISSE
84: 109–112, 2011

A new species of *Scaphisoma* Leach (Coleoptera: Staphylinidae: Scaphidiinae) from Taiwan

IVAN LÖBL

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

Scaphisoma palposum is described from Taiwan. It is the fifth known scaphidiine species possessing a flattened and triangular apical palpomere, and may be readily distinguished from other species that have such a character. *Scaphisoma limbatum* Erichson and *Scaphisoma seorsum* (Löbl), both possessing similar maxillary palpi as *S. palposum*, are recorded from North East China and Taiwan, respectively. The record of *S. seorsum* is based on a teneral specimen.

Key words: Coleoptera, Staphylinidae, Scaphidiinae, *Scaphisoma*, taxonomy, Taiwan, Peoples' Republic of China.

INTRODUCTION

The scaphidiines exhibit fairly uniform maxillary palpi, with the apical, fourth segment being usually subcylindrical at base and gradually narrowed apically. Worldwide only four species are known to have an aberrant form of the fourth segment of the maxillary palpi: *Scaphisoma limbatum* Erichson, 1845 from Europe and occurring disjunctly in the Russian Far East, *Scaphisoma seorsum* (Löbl, 1965) from Japan, *Scaphisoma americanum* (Löbl, 1987) from the United States, and *Scaphisoma monticola* (Löbl, 1987) from North India and Nepal. The apical palpomere is in these species conspicuously flattened and triangular and has a groove along its outer margin (see Löbl 1987). Ganglbauer (1899) erected a new subgenus for *Scaphisoma limbatum*, *Caryoscapha*, based on that particular shape of the maxillary palpi. Subsequent authors (e.g., Winkler 1925; Horion 1949; Löbl 1987, 1997) used *Caryoscapha* as a valid genus. Kompantsev & Potockaya (1987) described the larva of *Caryoscapha limbatum* and noted the close relationship of *Caryoscapha* and *Scaphisoma* Leach, 1815. A phylogeny of the Scaphisomatini (Leschen & Löbl 2005) suggested paraphyly when *Caryoscapha* was considered valid. In fact, *S. limbatum* and the subsequently described *Caryoscapha* species may be members of the *Scaphisoma subalpinum* group, as defined in Löbl (1970), and the peculiar shape of their palpi may be a homoplasy. Therefore, *Caryoscapha* was formally synonymized with *Scaphisoma*, and its members were transferred to the latter genus by Leschen & Löbl, 2005.

While examining collections of Scaphidiinae from Taiwan, I found a specimen of an additional species possessing similar maxillary palpi as those in species placed previously in *Caryoscapha*. This specimen represents a new species that may be readily distinguished and is described below.

MATERIAL AND METHODS

The material studied is deposited in the collections of the Muséum d'histoire naturelle, Geneva, Switzerland (MHNG), Institute of Zoology, Chinese Academy of Sciences, Beijing, China (ZIB) and Entomological Laboratory of the Ehime University, Matsuyama, Japan (EUMC).

The body length is measured from the anterior pronotal margin to the inner apical angle of the elytra. The length ratio of the antennomeres is taken from a dry specimen. The first abdominal ventrite refers to the first visible one, i.e., to the 3rd morphological ventrite.

TAXONOMY

Scaphisoma palposum sp. n.

HOLOTYPE female: TAIWAN Hsinchu Co. Henhan Twnsh. near Hsinkuang vill., km 48/ rd no 60, env. 1800m S. Vít, 25.III.2008 # III 4 mont. forest, *Asplenium* litter (MHNG).

Description. Length 2.05 mm, width 1.50 mm. Body dark reddish-brown, elytra lighter at apices. Elytra somewhat translucid. Antennae and mouth-parts yellowish. Legs and apices of abdominal ventrites reddish. Tarsi slightly lighter than tibiae. Dorsal side of head, pronotum and elytra lacking microsculpture. Frons finely punctate. Length ratio of antennomeres as: III 5: IV 13: V 15: VI 17: VII 22: VIII 16: IX 21: X 21: XI 26. Segment IV very narrow, about 5 times as long as wide. Segments V and VI similar, segment VI hardly wider than V, both segments only slightly wider than segment IV and about 5 times as long as wide. Segment VII about 3 times as long as wide, twice as wide as segment VI. Segment VIII distinctly narrower than segment VII and wider than segment VI, about 3.5 times as long as wide. Segments IX and X each about as large as segment VII. Segment XI as wide as segment X, about 4 times as long as wide. Pronotum with lateral margins evenly rounded, moderately narrowed anteriad; lateral carinae hardly visible in dorsal view, lateral striae finely and densely punctate. Pronotal punctation distinct at low magnification (x 16 times), consisting of dense and fairly large, shallow and not well delimited punctures. Most of the puncture intervals notably larger than puncture diameters. Pronotal pubescence distinct, consisting of recumbent setae about 0.02 mm long. Hypomera impunctate, lacking microsculpture. Apical part of scutellum exposed. Elytra with weakly rounded lateral margins, moderately narrowed apically, with lateral carinae exposed in dorsal view, apical margins truncate, finely crenulate near inner angles, inner angles situated posterior level of outer angles, sutural margin not raised, adsutural areas flat, each with single, distinct puncture row; sutural striae rather shallow, parallel, curved along bases to form basal striae extended about to basal mid-width. Elytral punctation even, hardly coarser and somewhat denser than pronotal punctation, with puncture intervals mostly about twice as large as puncture diameters; pubescence similar to that on pronotum. Exposed abdominal tergites with punctulate microsculture. Punctation on basal two thirds of propygidium coarse and very dense, on mediobasal area with punctures about as large as intervals, near apex very fine. Punctation on base of pygidium fairly coarse and dense, becoming gradually finer apically, in apical half very fine. Mesoventrite extremely finely

punctate, with distinct pubescence. Mesepimera shorter that interval between them and mesocoxae, length ratio of mesepimeral line to anapleural line as 10/25. Metaventrite not microsculptured, shallowly impressed apicomedially, with coarse, very dense punctation anterior intercoxal process, puncture diameters larger than puncture intervals posterior middle, punctation becoming gradually finer and sparser anteriad. Lateral parts of metaventrite very finely and sparsely punctate. Mesocoxal line subparallel to coxa, densely and coarsely punctate. Mesocoxal area 0.03 mm long. Metepisterna flat, strongly narrowed anteriad, at widest point 0.16 mm, with straight suture. Abdominal ventrites with punctulate microsculpture; first ventrite coarsely and densely punctate, except near apical margin, and with long pubescence. Metacoxal line arcuate, coarsely punctate. Metacoxal area 0.03 mm long. Following abdominal ventrites very finely punctate.

Comments. This new species may be readily distinguished from the species having similar maxillary palpi by the much shorter mesepimera. The latter are in *S. seorsum* as long as, and in *S. limbatum*, *S. monticola* and *S. americanum* distinctly longer than the interval between them and the mesocoxae. In addition, the antennomere VI is much larger in those species. It is about as long as the antennomeres III to V combined in *S. limbatum*, *S. seorsum* and *S. americanum*, and as long as the antennomeres IV and V in *S. monticola*. *Scaphisoma limbatum*, *S. seorsum* and *S. americanum* have the punctation of the lateral parts of the metaventrite conspicuously coarse, much coarser than in *S. palposum*, while *S. monticola* has the metaventrite as the first abdominal ventrite very finely punctate.

New records:

Scaphisoma limbatum Erichson, 1845

Material examined. 4 males, 2 females, labelled: CHINA: Jilin Prov., Bai He. 750-800m. N 42°24.092' E 128°06.431' 1- 6.vi.2004. J. Cooter (ZIB, MHNG).

Comments. This is an Eurosibirian species, rare in Western Europe but often collected in Far East Russia. It was not yet reported from China.

Scaphisoma seorsum (Löbl, 1965)

Material examined. 1 female labelled: TAIWAN Wulai Taipei Hsien 17.V.1972 M. Sakai leg. (EUMC).

Comments. The specimen is teneral, therefore its identification is to be considered as tentative.

ACKNOWLEDGEMENT

My thanks are due to Mr. Stanislav Vít, Geneva, Switzerland, for the donation of his extensive collections of Taiwanese Scaphidiinae, including the specimen dealt with in the present paper, Jon Cooter, Hereford, UK for the material he collected in China, and the late Sadanari Hisamatsu, Matsuyama, Japan, for the loan of interesting material housed in the collections of the Ehime University, Matsuyama.

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Band 3. Staphylinoidea, II Theil. Scydmaenidae, Silphidae, Clambidae, Leptinidae, Platypsyllidae, Corylophidae, Sphaeriidae, Trichopterygidae, Hydroscaphidae, Scaphidiidae, Histeridae. Familienreihe Clavicornia. Sphaeritidae, Ostomidae, Byturidae, Nitidulidae, Cucujidae, Erotylidae, Phalacridae, Thorictidae, Lathridiidae, Mycetophagidae, Colydiidae, Endomychidae, Coccinellidae. — Carl Gerold's Sohn, Wien, iii +1046 pp.

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(received April 17, 2011; accepted September 9, 2011)