

Stuttgarter Beiträge zur Naturkunde

Serie A (Biologie)

Herausgeber:

Staatliches Museum für Naturkunde, Rosenstein 1, D-70191 Stuttgart

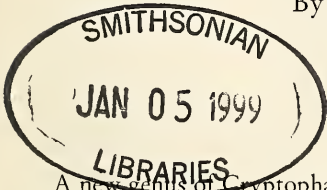
Stuttgarter Beitr. Naturk.	Ser. A	Nr. 572	6 S.	Stuttgart, 15. 6. 1998
----------------------------	--------	---------	------	------------------------

Scytomaria, a new genus of Cryptophagidae (Coleoptera) from the Nepal Himalayas<sup>\*)</sup>

By Georgy Lyubarsky, Moscow

With 6 figures

Summary



A new genus of Cryptophagidae, *Scytomaria* n.gen. (type species: *himalaica* n.sp.), is described from the Nepal Himalayas. This genus differs from other genera by the following features: 3-segmented antennal club with 3rd segment very elongated; median process and transverse ridge of the mentum present; gular sutures present; antennal grooves on head and prosternum absent; transverse line on the vertex of the head absent; pronotum with narrow marginal bead laterally and basally; prosternum without parallel lines, procoxal cavity closed internally and partially closed externally; metasubcoxal lines absent; tarsal formula 555; tarsomeres not lobed.

Zusammenfassung

Eine neue Gattung der Cryptophagidae, *Scytomaria* n.gen. (Typus-Art: *himalaica* n.sp.), wird aus dem Nepal Himalaya beschrieben. Diese Gattung unterscheidet sich von anderen Gattungen durch folgende Merkmale: 3gliedrige Antennenkeule, davon das 3. Glied sehr verlängert; Medianfortsatz und Querkiel auf dem Mentum vorhanden; Gularnähte vorhanden; Antennengruben auf Kopf und Prosternum fehlen; Querlinie auf dem Kopfscheitel fehlt; Pronotum mit engem Rand lateral und basal; Prosternum ohne Parallellinien; Procoxalhöhle innen geschlossen und außen teilweise geschlossen; Metasubcoxallinien fehlen; Tarsenformel 555; Tarsalglieder nicht gelappt.

1. Introduction

In recent years some new genera of Cryptophagidae were described from Nepal by LESCHEN (1996) (*Asternodea*, *Striatocryptus*) and by SEN GUPTA & PAL (1980) (*Himascelis*). Additionally, some new species of the genus *Anitamaria* Leschen 1996

<sup>\*)</sup> Results of the Himalaya Expeditions of J. MARTENS, no. 218. – For no. 217 see: Bonner zool. Beitr. 47, 1997. – J. M. sponsored by Deutscher Akademischer Austauschdienst and Deutsche Forschungsgemeinschaft.

are prepared for description by the author from the same country. Thus, Nepal possesses a quite diverse, autochthonous fauna of Cryptophagidae (besides the synanthropic species).

The present paper is based on the material lent to me by Dr. W. SCHAWALLER (Staatliches Museum für Naturkunde in Stuttgart). In this material a further new genus of Cryptophagidae was discovered. Its description is given below. The material described is deposited in the Staatliches Museum für Naturkunde in Stuttgart (*SMNS*) and the Zoological Museum of Moscow University (*ZMUM*).

Acknowledgments: I am very grateful to Dr. SCHAWALLER (Stuttgart) for the loan of the material, to Dr. ANTROPOV (Moscow) checking the English of an earlier draft, and to the Russian Foundation Fundamental Studying for awarding me a subsidiary grant (97-0448661).

## 2. Taxonomic part

### *Scytomaria* n.gen. (figs 1–6)

Type species: *Scytomaria himalaica* n.sp. (by monotypy).

#### Diagnosis

Body form elongate (fig. 1); pronotum more or less parallel-sided; greatest width at middle. Antennal club 3-segmented with 3rd segment very elongated. Median process and transversal ridge of mentum present. Gular sutures present. Antennal grooves on head and prosternum absent. Transverse line on vertex of head absent. Pronotum with lateral marginal bead narrow, present at base. Prosternum without parallel lines, procoxal cavity closed internally and partially closed externally; meta-subcoxal lines absent. Tarsal formula 555; tarsomeres not lobed.

#### Description

Head not constricted behind eye; boss on front of head absent; clypeus on the same plane as frons; tubercle on margin of frons absent; antennal grooves absent. Antenna with 3-segmented club; antennomere III 2times longer than antennomere IV; apical antennomere 2times longer than penultimate antennomere (fig. 1). Mandible with one dorsal tubercle; basal sensory pores present. Eye prominent, well developed; ocular setae absent. Line on vertex of the head absent. Subgenal spine absent. Median process on mentum present; transversal ridge on mentum present. Gular sutures present.

Pronotum parallel-sided, greatest width at middle; lateral marginal bead narrow, present in basal half; anterior margin straight; pronotal angularity absent; lateral margin with small knob at middle. Prosternal area punctate. Hypomer on with notch near procoxal cavity (fig. 2). Prosternum in front of procoxae short. Prosternal process without parallel lines; antennal grooves absent. Procoxal cavity closed internally, partially closed externally. Mesepimeron without pit, not fused with mesosternum. Mesosternum with parallel lines and procoxal rest; glandular duct present. Width of mesosternal process (fig. 3) equal to  $\frac{2}{3}$  of that of mesocoxa, the process with lateral processes. Metasternum without longitudinal line; intercoxal process as long as wide; glandular duct present.

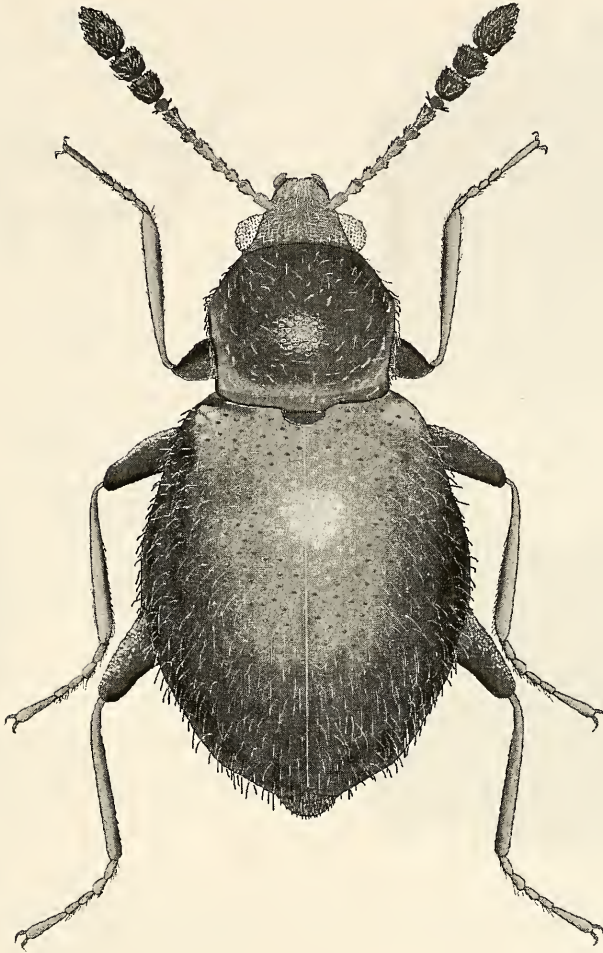


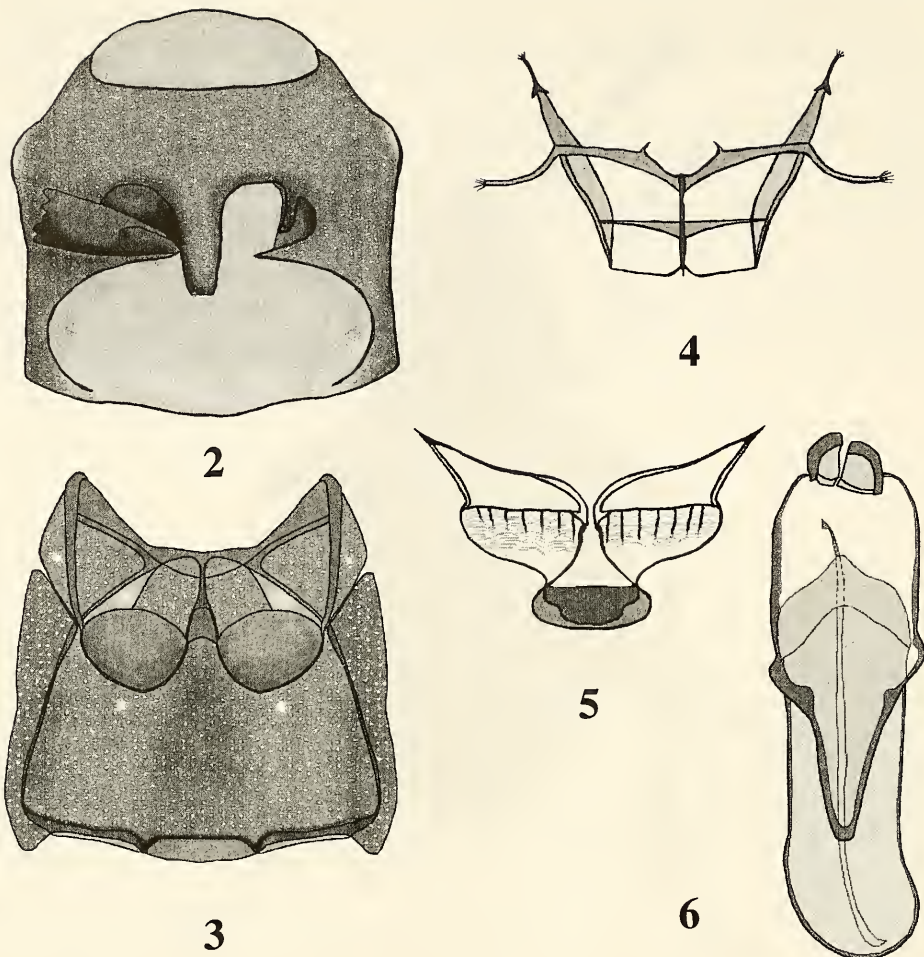
Fig. 1. *Scytomaria* n.gen. *himalaica* n.sp., dorsal view. — Body length 1.6–2.0 mm.

Microsculpture of the praescutum elongate variolate (fig. 5). Setae on anterior edge of the praescutum present. Scutellum transverse. Punctate striae on elytron absent. Epipleuron present to level of posterior margin of ventrite I. Hind wing present, marginal setae of leading edge extending beyond level of RA + ScP vein; basal blinding patch present;  $Cu_{3+4} + AA_{1+2}$ ,  $MP_4 + CuA_1$ ,  $MP_3$ ,  $CuA_{3+4}$  vein absent.

Tibia without apical fringe of spines, with two spurs. Tarsal formula 555 in both sexes; tarsomeres of male with modified setae, slightly or not lobed.

Ventrite I without diskal glandular duct; one lateral glandular duct present on ventrites I–IV.

Male: Orientation of aedeagus vertical. Apex of endophallus rounded. Arms of tegmen narrowly fused at the distal ends. Paramere loosely articulated (fig. 6). Spiculum gastrale narrow, asymmetrical.



Figs 2–6. *Scytomaria* n.gen. *himalaica* n.sp. – 2. Prosternum; – 3. metasternum; – 4. met-endosternite; – 5. praescutum; – 6. aedeagus.

#### Discussion

The genus *Scytomaria* n.gen. belongs to the subfamily Atomariinae. It clearly differs from the tribe Hypocoprini, however its place in the more evolved tribes Cryptafricini and Atomariini within the Atomariinae requires further study. A separate study will be devoted to this question, because the new genus cannot be placed in all existing tribes of Atomariinae (LESCHEN 1996) without detailed discussion. Here it is possible to make only preliminary remarks, concerning the differences of *Scytomaria* n.gen. from various groups of Atomariinae.

The differences from the Hypocoprini are the following: transverse line on vertex of the head absent (present in Hypocoprini); metasternal glandular ducts present (absent in Hypocoprini); one glandular duct at lateral edge of each ventrite present (absent in Hypocoprini).

The differences from *Ephistemus* and related genera are the following: prothorax parallel-sided (widened basally in *Ephistemus*); external closure of procoxal cavity partially closed (completely open posteriorly in *Ephistemus*); orientation of aedeagus in the abdomen vertical (horizontal in *Ephistemus*); arms of tegmen fused and forming an elongate process (arms separate and process shorter in *Ephistemus*); spiculum gastrale of male narrow (broad in *Ephistemus*); apical tibia fringe of spines absent (present in *Ephistemus*); basal binding patch of hind wing present (poorly developed in *Ephistemus*).

*Scytomaria* n.gen. is similar to the Atomariini in the following features: punctation in prosternal area present; median process of mentum present; transverse ridge on mentum present; glandular ducts on mesosternum present; surface of ventrite V unmodified, apex of endophallus rounded basally, hind wing binding patch present.

A strong similarity is observed also with Cryptafricini in the following features: apical antennomere 2times longer than previous antennomere; gular sutures present; pronotal bead present in basal half; procoxal cavity closed internally; pit on mesepimeron absent; concentration of setae at present pores of glandular ducts; glandular ducts on disk of ventrite I absent; orientation of aedeagus vertical; arms of tegmen fused and forming an elongate process; spiculum gastrale of male narrow; setae on anterior edge of praescutum present; marginal setae of leading edge of hind wing extending beyond level of RA + ScP vein; apical fringe of tibial spines absent.

### *Scytomaria himalaica* n.sp.

Holotype (♂): Nepal, Myagdi Distr., upper Myagdi Khola N Dobang, 2800–3100 m, 22.–24. V. 1995 leg. MARTENS & SCHAWALLER (SMNS).

Paratypes: Same data, 6 specimens SMNS, 3 specimens ZMUM.

### Description

Length 1.6–2.0 mm. Bicolourous, prothorax dark brown, elytra light brown. Body form parallel-sided, elongate, elytra convex laterally and much wider than prothorax. Body setae depressed, decumbent, short.

Head transverse, with prominent, hemispherical, finely faceted eyes, somewhat densely covered with small punctures, the latter on the average one diameter apart from their lateral neighbours. Antennae long, extending beyond the basis of prothorax. Segment I not curved, conical; segment II equal on length to the 1th, slightly thinner; segment III somewhat shorter and thinner; segment IV 1.5times shorter than 3rd; segment V very elongate and thin, clearly longer than 3rd; segment VI equal to 4th; segment VII equal to 3rd, but thinner; segment VIII subquadrate; segment IX lengthened; segment X slightly transverse; segment XI lengthened, longest of all antennomeres.

Prothorax broadest before middle, where it is 1.2times as broad as long, slightly shagreened, somewhat densely covered with small punctures, latter on the average one diameter apart from their lateral neighbours. Anterior edge straight, posterior edge slightly convex, with a weak lobe medially. Prothorax without basal pits, with deep transverse impression, lateral edge slightly bordered, slightly concave in basal half.

Elytra strongly convex, at shoulders much wider than prothorax, 2.4–2.6times as long as prothorax and about 1.2–1.3times as long as combined width, with humeral

prominence, without humeral tooth, slightly shagreened, puncture in basal part hardly stronger or equal to those on pronotal disk and about one diameter apart from their lateral neighbours on the average. Elytra separately rounded apically, apex of abdomen visible from dorsal view. Hind wings fully developed.

Aedeagus as in fig. 6.

#### Habitat

Mature subalpine forest with *Tsuga*, *Abies*, *Betula* and *Rhododendron*: soil litter and rotten wood.

#### 3. References

- RESCHEN, R. A. (1996): Phylogeny and revision of the genera of Cryptophagidae (Coleoptera: Cucujoidea). – Kans. Univ. Sci. Bull. **55**: 549–634; Lawrence.
- SEN GUPTA, T. & PAL, T. K. (1980): Ergebnisse der Bhutan Expedition 1972 des Naturhistorischen Museums in Basel. Coleoptera: Fam. Cryptophagidae, genus *Himascelis*. – Ent. basiliensia 5: 42–44; Basel.

Author's address:

GEORGY LYUBARSKY, Zoological Museum of Moscow State University, Herzenstreet 6, RUS-103009 Moscow, Russia.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Stuttgarter Beiträge Naturkunde Serie A \[Biologie\]](#)

Jahr/Year: 1998

Band/Volume: [572\\_A](#)

Autor(en)/Author(s): Lyubarsky Georgy Yu.

Artikel/Article: [Scytomaria, a new genus of Cryptophagidae \(Coleoptera\) from the Nepal Himalayas 1-6](#)