

Zeitschrift: Entomologica Basiliensia
Herausgeber: Naturhistorisches Museum Basel, Entomologische Sammlungen
Band: 23 (2001)

Artikel: Nepalolaena kira gen.nov., sp.nov. from the Nepal Himalayas
(Coleoptera, Tenebrionidae)
Autor: Schawaller, Wolfgang
DOI: <https://doi.org/10.5169/seals-980866>

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 08.07.2025

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

Entomologica Basiliensia	23	277–282	2001	ISSN 0253–24834
--------------------------	----	---------	------	-----------------

Nepalolaena kira gen.nov., sp.nov. from the Nepal Himalayas (Coleoptera, Tenebrionidae)

by Wolfgang Schawaller^{*)}

Abstract. *Nepalolaena kira* gen.nov., sp.nov. (Coleoptera: Tenebrionidae, Laenini) from a restricted area within the Nepal Himalayas is described. The new taxon is characterised by pedunculate elytra without striae and no punctation, by long legs with long claviform femora, by an exceptionally small mentum, by narrow epipleura not widened anteriorly, by prominent eyes with large facets and by the probable lack of spermatheca or spermathecal tubules in the female reproductive tract. The pedunculate elytra combined with the relatively long legs may point to a high mobility of this beetle within the soil substrate.

Key words: Coleoptera – Tenebrionidae – Laenini – new genus – *Nepalolaena* – Nepal – Himalayas

Introduction

The Central Himalayas in Nepal are host to a high number of species of the tenebrionid genus *Laena* LATREILLE, 1829. KASZAB (1977) presented a key for 44 species, but further species as yet undescribed can be expected. Other Oriental genera of the Laenini are unknown from the Himalayas but occur in Sichuan (*Psilolaena* HELLER, 1923), in southern India (*Rhacolaena* KASZAB, 1979), on Sri Lanka (*Prolaena* KASZAB, 1980) and on Borneo (*Borneolaena* SCHAWALLER, 1998). In the southern hemisphere the Laenini occur on Madagascar and in southern Africa (ENDRÖDY-YOUNGA, *pers. comm.*).

Some Oriental Tenebrionidae were recently received for study at the Natural History Museum in Basel. Among these, a small series of Laenini was included, which represent a new genus. Further remarks on the taxonomy, phylogeny and zoogeography of this tribe have recently been published by SCHAWALLER (1998) in the course of describing another new genus of Laenini from Borneo-Sarawak.

Abbreviations

NHMB Naturhistorisches Museum Basel
SMNS Staatliches Museum für Naturkunde Stuttgart

Taxonomy

Nepalolaena gen.nov.

Type species: *Nepalolaena kira* sp.nov. by monotypy and present designation.

Genus diagnosis. With all characters of the Laenini including the lack of defensive glands in abdominal segments 7 and 8. Body of scydmaenid or anthicid shape. Head and

^{*)} Contribution to Tenebrionidae no. 34. – For no. 33 see: *Ent. Bl.* (2001) **97**: 43–48.

pronotum with rough punctation and with microgranulation between punctation, elytra glossy and without elytral striae and any other punctation, with irregular acute setation. Elytra pedunculate in shape with extremely narrowed base. Epipleures not widened anteriorly, very narrow at elytral apices but reaching tip of elytra. Mentum exceptionally small. Prominent eyes with large facets. Female reproductive tract probably without a spermatheca or spermathecal tubules. Legs relatively long and with long claviform femora.

Distribution. Central Nepal Himalayas.

Etymology. Combination of Nepal and the genus *Laena*, gender feminine.

Nepalolaena kira sp.nov. (Figs 1–8)

Material examined. Holotype (male): Nepal, Sindhupalchok Distr., Gangjwal, 2500 m, 6.–7.VI.1989 leg. M. Brancucci, NHMB.

Paratypes: Same data as holotype, 1 male 3 females NHMB, 1 male 1 female SMNS.

Description. Body ferruginous with legs somewhat lighter, with acute and whitish setation. Head uneven, with rough but flat punctation, distance between punctures equal to 0.5–5 diameters, surface between punctures with distinct microgranulation (magnification 50 \times); most of the punctures with seta; cheeks distinctly elevated, frons between cheeks impressed, clypeal suture present, distal margin of clypeus not excavated; eyes (Fig. 1) round and prominent, with large facets; terminal segment of maxillary palps broad (Fig. 6) and with a distal groove with dense sensilla; mentum (Fig. 6) exceptionally small, with an anterior prominent finger-like structure (? part of prementum) with a terminal tuft of long setae; antenna (Fig. 5) long, without club, antennomere III twice as long as antennomere II and longer than antennomere IV, last antennomere broad and asymmetrical, all antennomeres dull and densely setose. Pronotum (Fig. 1) with rough but flat punctation, punctures somewhat bigger than on head, distance between punctures equal to 0.5–5 diameters, surface between punctures with distinct microgranulation; most of the punctures with seta; all margins unbordered; surface of prosternum somewhat uneven, punctation distinctly wider than on pronotum; prosternal process not prolonged (Fig. 2). Elytra (Fig. 1) of pedunculate shape with extremely narrowed base, widest before middle, lateral margin to be seen only in distal third, tip somewhat prolonged; surface shiny, without any punctation but with irregular acute setation, without any setiferous umbilicate pore(s); epipleures distinctly separated, not widened anteriorly and not reaching base, very narrow at elytral apices. Without wings. Ventral part of body with long setation as on elytra. Abdominal sternites (Fig. 2) glossy, sternites I–IV laterally and sternite V fully with microgranulation (magnification 100 \times); sternite I with broad process between posterior coxae, sternite V without border, intersegmental membranes present between sternites III/IV and IV/V. Legs (Figs 3–4) relatively long, with distinctly claviform femora; tibiae round, without keels and spines; tibial spur short; claw segments of tarsus shorter than remaining segments combined; basal segment of metatarsus longer than the following 2 segments combined. Aedeagus (Fig. 7) with long basal piece and triangular joint parameres. Ovipositor (Fig. 8) of typical lagriine form with longer fourth coxite lobe and terminal gonostyles; female

reproductive tract with a secondary bursa copulatrix and apparently without a spermatheca or spermathecal tubules; vagina with an unusual internal capsular structure connecting with the accessory gland. No distinct external sexual dimorphism, only elytra in females somewhat rounder than in males.

Body length: 3.4–3.6 mm.

Distribution. Central Nepal Himalayas.

Etymology. *Kira* is a Nepalese word for an insect or a small arthropod.

Biology

Unfortunately no information about the habitat of *Nepalolaena kira* gen.nov., sp.nov. is available. Very probably it lives in forest litter like the representatives of the other genera of Laenini. According to the labels, the specimens were collected at an altitude of 2,500 m. In the absence of ecological degradation, this altitude in Nepal is typified by mixed broad-leaved forest with *Quercus*. In spite of intensive sifting in the Nepal Himalayas by different collectors (and by the author), specimens of *Nepalolaena* have been collected only in a single locality. Thus its distributional area seems to be very restricted. The pedunculate elytra combined with the relatively long legs may point to a high mobility of the beetles within the soil substrate. The modified mouthparts might be an adaptation to ecological conditions different from those of the numerous other species of *Laena*.

Discussion

The tribe Laenini is very difficult to define, because of the existence of only few clear generic characters and the absence of any tribal apomorphies. It is necessary, but not the goal of this paper, to examine the whole tribe over its complete geographic range to determine the generic (and tribal) characters.

It is unknown to date whether the genus *Laena* with its more than 200 species is a monophyletic group or not. It seems possible that at least a few species must be excluded. Although a phylogenetic analysis of all Laenini is still lacking, it seems clear that the present species, with the characters given in the genus diagnosis, cannot be included in the genus *Laena*, even in a wider sense. In particular, the pedunculate elytra with anteriorly unwidened epipleura, the lack of any elytral striae and of any other punctation on the elytra, as well as the very small mentum, the round prominent eyes and peculiarities of the female reproductive tract, must be considered as generic and not only as specific characters.

Acknowledgements

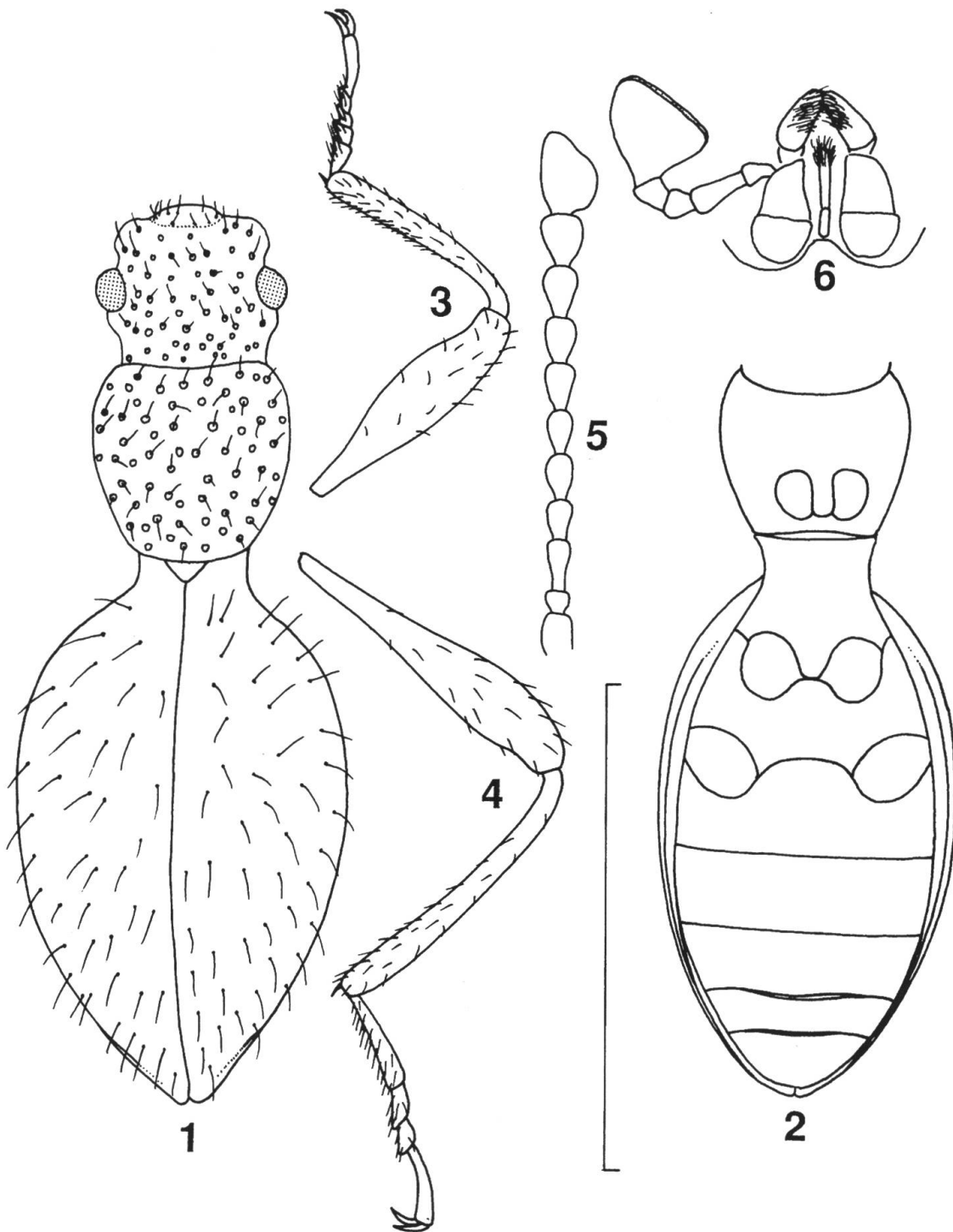
For the loan of material and hospitality during my visits to Basel I would like to thank Dr. Michel Brancucci. Dr. Eric Matthews (Adelaide) improved the manuscript with valuable comments and produced the figure of the female reproductive tract.

References

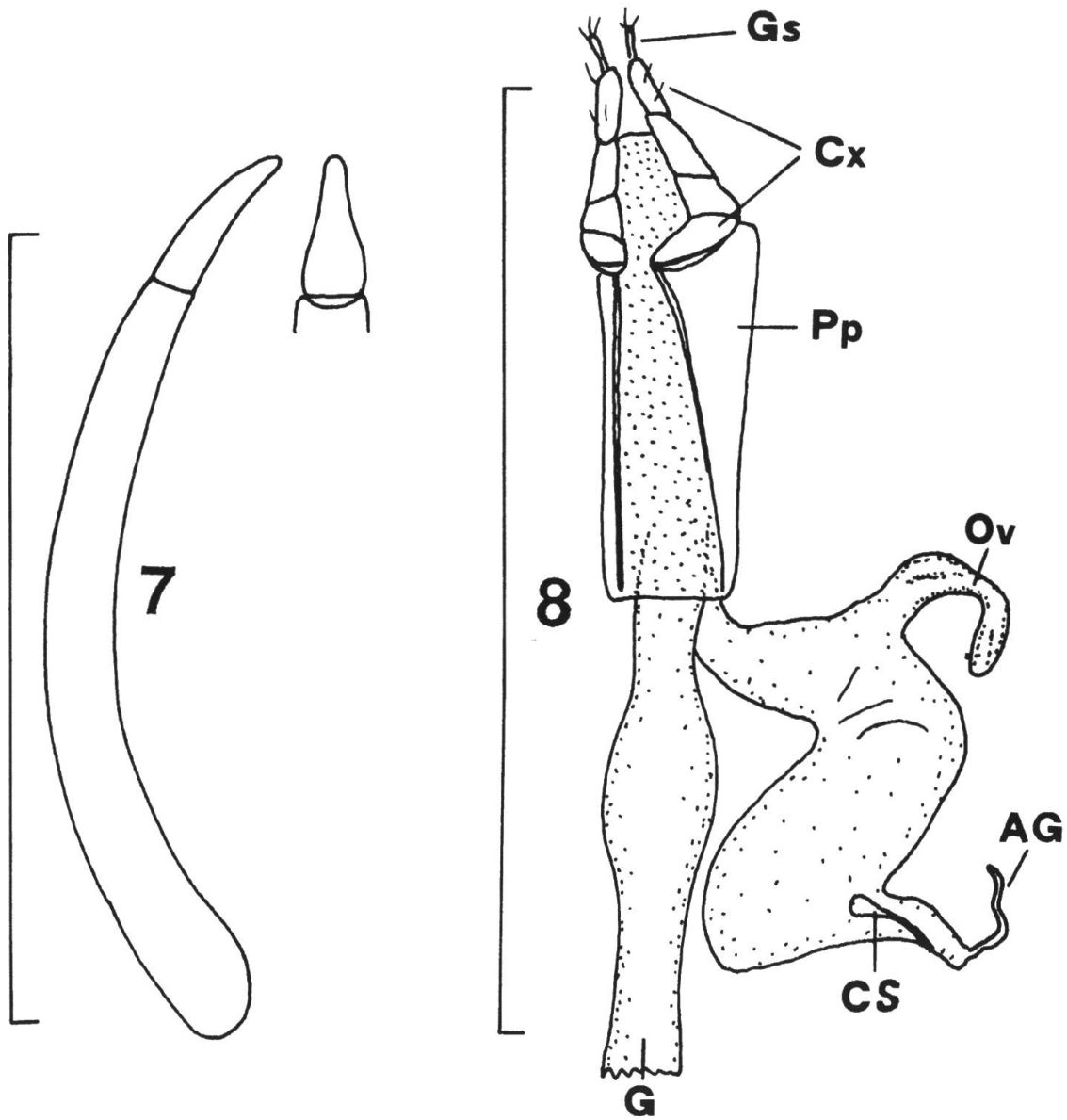
- KASZAB Z. (1977): *Tenebrionidae der Nepal-Expeditionen von Dr. J. Martens (1969–1974) (Insecta: Coleoptera)*. Senckenbergiana biol. **57**: 241–283.
- SCHAWALLER W. (1998): *Borneolaena gen.n. riedeli sp.n. from Sarawak, the first species of Laenini (Coleoptera: Tenebrionidae) from the Sunda Islands*. Stuttgarter Beitr. Naturk. (A) **575**: 1–8.

Address of author:

Dr. Wolfgang Schawaller
Staatliches Museum für Naturkunde
Rosenstein 1
D–70191 Stuttgart
GERMANY
E-mail: schawaller.smns@naturkundemuseum-bw.de



Figs 1–6: *Nepalolaena kira* gen.nov., sp.nov. – 1: Dorsal view of male with punctation and setation; – 2: Ventral view; – 3: Anterior leg; – 4: Posterior leg; – 5: Antenna; – 6: Mouthparts with exceptionally small mentum. – Scale line 2.0 mm (1–5), 1.0 mm (6).



Figs 7–8: *Nepalolaena kira* gen.nov., sp.nov. – 7: Aedeagus; – 8: Ovipositor and female reproductive tract in ventral view; AG = accessory gland, CS = capsular structure in vagina, Cx = coxite lobes, G = gut, Gs = gonostyles, Ov = oviduct, Pp = paraproct. – Scale lines 1.0 mm.