

A new species of the genus *Cymindis* Latreille, 1805 from Nepal (Coleoptera: Carabidae: Lebiini)

Новый вид рода *Cymindis* Latreille, 1805 из Непала (Coleoptera: Carabidae: Lebiini)

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KEY WORDS: *Cymindis*, taxonomy, new species, Himalaya, Nepal.

КЛЮЧЕВЫЕ СЛОВА: *Cymindis*, таксономия, новый вид, Гималаи, Непал.

ABSTRACT. A new species of the genus *Cymindis* Latreille, 1805 is described from the vicinities of the Lake Phoksundo, western Nepal: *C. (s. str.) dolpoensis* **sp.n.**, related to *C. (s. str.) nitens* Andrewes, 1935, but differs from it in lacking of hind wings, almost monochromous coloration without lightened spots on elytra, not dilated apically ultimate labial palpomere in male, less protruded humeri, reduced pubescence of dorsum and different shape of male genitalia.

РЕЗЮМЕ. Описан новый вид рода *Cymindis* Latreille, 1805 из окрестностей оз. Пхоксундо, Непал: *C. (s. str.) dolpoensis* **sp.n.** Вид близок к *C. (s. str.) nitens* Andrewes, 1935, но отличается редукцией задних крыльев, почти одноцветной окраской верха без рисунка на надкрыльях, нерасширенным последним члеником губных щупиков самца, слабо выступающими плечами, слабо развитым опушением покровов и строением гениталий самца.

Introduction

Since the 1970s, exploration of the Himalayan arthropod fauna, including ground beetles, was markedly intensified [e.g., Martens 1987; 2015; Weipert 2018]. However, many tribes and genera of the carabid family occurring in this region are taxonomical and biogeographical poorly studied up to today. One example in this respect is the genus *Cymindis* Latreille, 1805. Fifteen species are described from different localities in the Greater Himalaya, Tibetan Himalaya and Transhimalaya (Gangdise Shan, South Tibet) [Kabak 2017]. However, species' delimitation and distributional pat-

terns of most Himalayan *Cymindis* are vague known. Until today completely unstudied is the *Cymindis* fauna of the central parts of the Greater and Tibetan Himalayas in Nepal. In this paper we present the description of a first species from Nepal. This new species was first time collected by the ornithologist, arthropod researcher and biogeographer Jochen Martens near the famous lake Phoksumdo during his expedition to the Greater Himalaya in the upper Dolpo region in western Nepal in 1970, and found again by our friend Santos Tamang at the same place in 2007.

Material and Methods

The study is based on the examination of five specimens of the new species together with comprehensive *Cymindis* material from Himalaya and Tibet comprising all known species for comparison.

Specimens were examined and measured with MBS–9 and Leica M205-C stereomicroscopes equipped with ocular micrometers. The male genitalia were extracted and prepared using a conventional technique. The habitus and genitalia photographs were taken with a Canon EOS 60D digital camera, using stacking and subsequently processed with Zerene stacker software version 1.04.

Measurements were taken as follows: body length (BL) from the anterior margin of the labrum to the elytral apex; head width (HW) across the eyes; pronotal length (PL) along its median line; elytral length (EL) from the apex of the scutellum to the apex of the elytra; width of the pronotum (PW) and elytra (EW) at their broadest point; width of the pronotal base (PB) between

hind angles; length of the antenna (AL) from the base of scapus to the tip of last antennomere; length of the eye (YL) in dorsal view; length of the antennomere 3 (3AL) along its longitudinal axis.

The holotype and one paratype of the new species is deposited in the Staatliches Museum für Naturkunde, Stuttgart, Germany, Arnaud Faille (SMNS), two paratypes — in the working collection J. Schmidt (CJS), Rostock, Germany, one paratype — in the collection of the Zoological Institute of Russian Academy of Sciences (ZIN), St-Petersburg, Russia.

Taxonomy

Cymindis Latreille, 1805

Cymindis (s. str.) *dolpoensis* Kabak et Schmidt, **sp.n.**
Figs 1–2.

MATERIAL. Holotype ♂, “Nepal, Dolpo, Ringmo, Phoksumdo-See, V/VI.1970, 3600–3800 m, Nepal-Expeditionen Jochen Martens” [lake Phoksumdo or Phoksundo: ca. 3612 m, N29°12'30", E82°57'30"] (SMNS). Paratypes: 2(2) ♂♂, collected with holotype (cJS, ZIN); 2 ♀♀, “Nepal, Dolpo, 8.X.2007, Ringmo, Phoksumdo, 3500 m, leg. S. Tamang” (cJS, SMNS).

DESCRIPTION. Small-sized species, body length 6.8–7.3 (7.1) mm, hind wings reduced, habitus rather narrow, subparallel-subconvex, appendages averaged (Fig. 1). Dorsum reddish-brown with somewhat paler clypeus, mouthparts, margins and basal part of pronotum, suture, lateral margins and base of elytra. Legs and antennae monochromatic brownish-yellow. Ventral side of body rufous medially, brown laterally. Lower surface sparsely punctate, pubescence feebly developed.

Head medium-sized, PW/HW = 1.22–1.26 (1.24); eyes long, moderately protruding, glabrous, YL/3AL = 1.29–1.33 (1.3) in males, 1.20–1.23 in females; tempora shorter than eyes, slightly convex, with several hairs. Anterolateral margins of forehead moderately curved, slightly reflexed. Upper-side of head convex, frontal foveae moderately deep, supraorbital furrow impressed, medium in length. Frons and vertex glabrous, sparsely and gently punctate, transversely wrinkled medially. Two pairs of long supraorbital setae. Antennae comparatively short, in males longer, EL/AL = 1.11–1.13 (1.12) vs. 1.18–1.19 in females. Scape average in length, subcylindric, with several small hairs and a long preapical seta. Genae with a few hairs. Labial tooth shorter than lateral lobes, rounded at apex, bordered near mid-length, with a pair of small setae near base; submentum quadrisetose. Ultimate segment of labial palpi in male stout, not dilated toward apex, with a few small hairs. Penultimate labial palpomere with long setae on anterior margin. Apical maxillary palpomere fusiform, sparsely pubescent.

Pronotum moderately wide, PW/PL = 1.20–1.28 (1.23), broadest in anterior third. Sides rounded in anterior half, subrectilinear or bisinuate in basal half, incision before laterobasal angles long, not deep, the latter obtusangular, rounded or blunt at apex, feebly protruded laterally. Anterior margin subrectilinear medially, anterior angles widely rounded, moderately produced anteriorly, their margins ciliate. Basal margin of pronotum moderately wide, PW/PB = 1.36–1.42 (1.40), subconvex and slightly lobed medially, obliquely curved laterally, its border interrupted near basal foveae. Lateral sides of pronotum moderately explanate, margins distinctly

reflexed. Disc convex medially, median line deeply impressed, slightly shortened anteriorly and posteriorly. Apical transverse impression moderately deep. Basal foveae small and sharp, separated from lateral flattening. Basal transverse impression deep, vaguely outlined, interrupted medially. Punctures rather rough and dense along anterior, posterior and lateral margins, becoming fainter, sparser and irregular on disc. Surface of pronotum glabrous, distinctly transversely wrinkled. Two pairs of lateral setae, one in anterior half of pronotum, and one in laterobasal angles.

Elytra moderately long, oval, convex, flattened on disc, broadest near posterior third, EL/EW = 1.40–1.41 (1.40), EL/PL = 2.73–2.85 (2.80), EW/PW = 1.59–1.67 (1.62). Lateral margins subrectilinear medially, shoulders rounded, protruded anteriorly, ciliate. Apices oblique, straight in middle part, glabrous or very faintly ciliate near sutural angle; both exterior and sutural apical angles of each elytron broadly rounded. Marginal gutter moderate in width, narrowed near humeri, lateral margins reflexed throughout. Basal border complete, moderately sinuate. Elytral striae deep, very faintly punctate. Both parascutellary striole and parascutellary setiferous pores present. Intervals evenly convex, irregularly punctate, punctures arranged mostly in 1 row; interval 3 with 3–4 small discal setiferous pores, attached to stria 3. Elytral surface glabrous. Umbilicate series consisting of 12–14 pores. One apical pore in stria 7 on the level either of stria 3 or of interval 3.

Scutellum glabrous and smooth. Sides of prothorax glabrous. Metacoxae bisetose.

Microsculpture (males and females) on dorsum indistinct, only on scutellum traces of isodiametric meshes hardly perceptible.

Visible abdominal sternites with a single pair of paramedian setae, anal ventrite bisetose in males, variable in the two available females: in one specimen bisetose, in the other quadrisetose.

Dorsal surface of tarsi with long and sparse hairs; inner margin of claws denticulate.

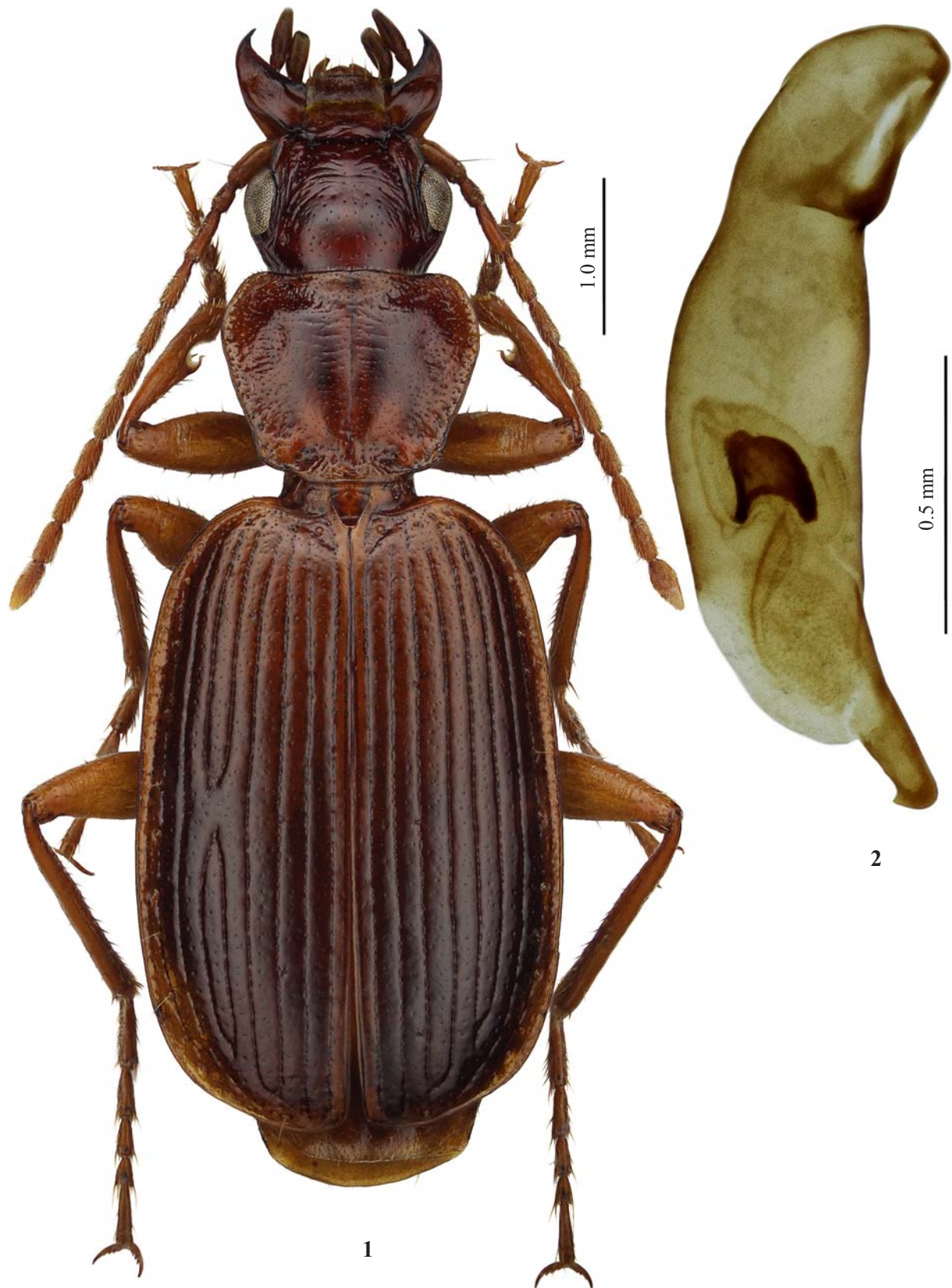
Median lobe of aedeagus rather thin, slightly curved, apical lamella long and wide, with apical hook on dorsal margin; copulatory piece wide, its anterior incision moderately deep (Fig. 2).

COMPARATIVE NOTES. Among all *Cymindis* species known from Himalaya, the new species seems to be most closely related to *C.* (s. str.) *nitens* Andrewes, 1935 described from Sringar in Kashmir [Andrewes, 1935]. Both species share the similar size and proportions of body and gestalt of male genitalia: median lobe of aedeagus rather narrow, slightly curved, its apical lamella wide, hooked apically. The new species easily differs from *C. nitens* by lacking of hind wings, almost monochromous body coloration without lightened spots on elytra, not dilated apically ultimate labial palpomere in male, less protruded humeri, reduced pubescence of dorsum. Additionally, the medial lobe of aedeagus in *C. dolpoensis* **sp.n.** is thinner, less curved, its apical lamella distinctly longer, copulatory piece wider, its anterior margin less deeply incised.

DISTRIBUTION. The new species is only known from the type locality: mountains slopes surrounding the Phoksumdo Lake, Dolpo District, Karnali Province, Nepal, Greater Himalaya.

BIONOMICS. Poorly noted. *Cymindis dolpoensis* **sp.n.** was found at elevations between 3500 and 3800 m a.s.l.

ETYMOLOGY. The new species is named after its type locality, the Dolpo region in the western Nepal Himalaya.



Figs 1–2. *Cymindis* (s. str.) *dolpoensis* sp.n.: 1 — habitus of ♂, paratype; 2 — aedeagal median lobe of the holotype, lateral view.
 Рис. 1–2. *Cymindis* (s. str.) *dolpoensis* sp.n.: 1 — общий вид, ♂, паратип; 2 — медиальная доля эдеагуса голотипа, сбоку.

Acknowledgments. We are very grateful to Wolfgang Schawaller (SMNS), for the loan of carabid material from the Himalaya for study, Ben Brugge (Zoölogisch Museum Amsterdam, the Netherlands) who loaned us the type specimen of *Cymindis nitens*, and to Genrik Davidian (St-Petersburg, Russia) for his help in preparing the photographs.

Competing interests. The authors declare no competing interests.

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