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A NEW SPECIES OF THE GENUS *CYMINDIS* LATREILLE, 1805 (COLEOPTERA: CARABIDAE: LEBIINI) FROM THE KUNLUN MOUNTAINS, CHINA

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Summary. *Cymindis (Iscariotes) kalabi* sp. n. is described from the Halastandarya River basin, Kunlun Mt. Range, Xinjiang-Uygur Autonomous Region of China. New species is similar to *C. (Iscariotes) semenowi* V.E. Jakovlev, 1889, *C. (Iscariotes) jakowewi* Semenov, 1889 and *C. (Iscariotes) hyaloptera* Semenov, 1891 but differing from all these taxa in the shape of head and pronotum, and structure of male genitalia.

Key words: carabid beetles, Harpalinae, Lebiini, *Cymindis*, *Iscariotes*, taxonomy, new species, Xinjiang, China.

И. И. Кабак, Д. В. Вразе. Новый вид рода *Cymindis* Latreille, 1805 (Coleoptera: Carabidae: Lebiini) с хребта Куньлунь, Китай // Дальневосточный энтомолог. 2022. N 464. С. 1-6.

Резюме. Из бассейна реки Халастандарья в горах Куньлунь, Синьцзян-Уйгурский автономный район Китая, описан новый для науки вид *Cymindis (Iscariotes) kalabi* sp. n. Этот вид близок к *C. (Iscariotes) semenowi* V.E. Jakovlev,

1889, *C. (Iscariotes) jakowewi* Semenov, 1889 и *C. (Iscariotes) hyaloptera* Semenov, 1891, но легко отличается от них формой головы и переднеспинки, а также строением гениталий самца.

INTRODUCTION

The Carabidae fauna of the northern border of the Tibetan Plateau is rather poor in zonal species compared to other mountainous regions of northwest China, especially the Tien Shan. Nevertheless, there are several endemic taxa, even undescribed ones. A new species of the Holarctic genus *Cymindis* Latreille, 1805 from this area is described in this paper.

MATERIAL AND METHODS

The study is based on the examination of six specimens of the new species together with comprehensive *Cymindis (Iscariotes)* material comprising all species from Central Asia for comparison.

The following measurements were taken: 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 (EyL) in dorsal view; length of the antennomere 3 (3AL) along its longitudinal axis. Average values are given in parentheses.

Specimens were examined and measured with a MBS-9 stereomicroscope equipped with an ocular micrometer. 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.

The holotype of the new species is deposited in the working collection of D.W. Wrase (CDW), Gusow-Platkow, Germany (part of Zoologische Staatssammlung München), paratypes – in the collection of the Zoological Institute of Russian Academy of Sciences, St-Petersburg, Russia (ZIN) and in the working collections of R. Sciaky, Milano, Italy (CRS); S. Facchini, Piacenza, Italy (CSF), and I. Belousov and I. Kabak, St-Petersburg, Russia (CBK).

DESCRIPTION OF NEW SPECIES

Subfamily Harpalinae Bonelli, 1810

Tribe Lebiini Bonelli, 1810

Genus *Cymindis* Latreille, 1805

Subgenus *Iscariotes* Reiche et Saulcy, 1855

***Cymindis (Iscariotes) kalabi* Kabak et Wrase, sp. n.**

<https://zoobank.org/NomenclaturalActs/E38E12C2-39AE-4758-9353-B4970192786D>

Figs 1–4

TYPE MATERIAL. Holotype – ♂, **China:** Xinjiang, W Kunlun Shan, 60 km S Akmeqit, 140 km SSW Yecheng, 2500 m, 26.VI 1993, leg. J. Kaláb (CDW). Paratypes: 1 ♂, 1 ♀, collected with holotype (ZIN, CRS); 1 ♂, 1 ♀, China, Xinjiang, W Kunlun Shan, 50 km S Akmeqit, 140 km SSW Yecheng, 2500 m, 26.VI 1993, leg. Jaroslav Turna (CBK, CSF); 1 ♂, China, Xinjiang, W Kunlun Shan, Akmeqit, 140 km SSW Yecheng, 2200 m, 25.VI 1993, leg. J. Kaláb (CRS).

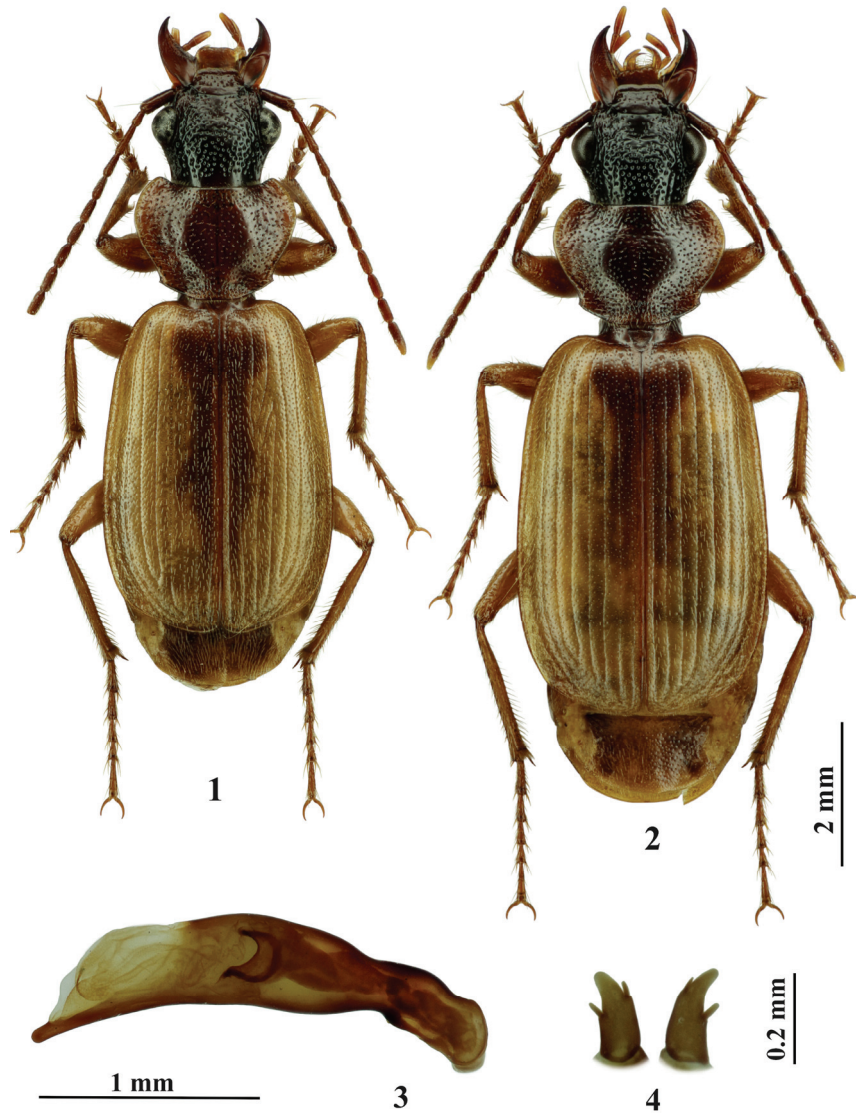
REMAK. Akmeqit village is situated at about 2680 m, 37°06'32"N, 77°00'20"E.

DESCRIPTION. Species medium-sized compared to other species of the subgenus, body length 7.2–8 (7.7) mm in males and 8–8.6 mm in females, hind wings reduced, habitus moderately wide and subconvex, appendages normal for an *Iscariotes* species (Figs 1, 2). Colour of dorsal side: head reddish to dark brown with reddish anterior part, labrum and mandibles; pronotum yellowish to reddish-brown with lighter lateral sides; elytra yellow with dark sutural stripe not reaching apical part and occupying 2.5 intervals on each elytron in anterior half and 1–1.5 intervals posteriorly, dilated medially and anteriorly to interval 4; one specimen has two symmetric longitudinal spots in posterior half of intervals 6–7. Legs monochromatic yellow, antennae yellow-reddish. Ventral side of body yellowish-brown, head reddish-brown, lower surface densely punctate and pubescent.

Head rather large: PW/HW = 1.21–1.28 (1.25); eyes markedly protruding, glabrous, $EyL/3AL = 1.11–1.16$ (1.12) in males and 1.17–1.22 in females; tempora long and flat. Antero-lateral margins of forehead slightly reflexed. Upper side of head markedly convex at vertex, frontal foveae very superficial, supraorbital furrow long, sharp and deep. Frons and vertex densely and roughly punctate. Pubescence of dorsal surface of head short, moderately dense, slightly inclined forward. Two pairs of long supraorbital setae. Antennae comparatively short, in males longer, $EL/AL = 0.99–1.06$ (1.01) vs 1.15 in females. Scapus long, without distinct median constriction, sparsely pubescent, with long preapical seta. Genae sparsely pubescent. Labial tooth shorter than lateral lobes, broadly rounded at apex, bordered near mid-length, with a pair of setae near base. Submentum quadrisetose. Apical segment of labial palpi fusiform, obliquely truncate at apex, with sparse small hairs. Penultimate labial palpomere with four long setae on anterior margin. Apical maxillar palpomere fusiform, finely pubescent.

Pronotum wide, $PW/PL = 1.38–1.47$, (1.42), markedly constricted toward base, $PW/PB = 1.40–1.46$ (1.44), broadest in anterior third. Sides markedly arched in anterior half, sinuate posteriorly, shortly and deeply concave before laterobasal angles, the latter medium sized, acute, distinctly protruding laterally. Anterior margin deeply concave, finely bordered laterally; anterior angles large, rounded and markedly produced anteriorly. Basal margin convex throughout or rectilinear medially, bordered laterally. Lateral sides of pronotum markedly explanate and slightly reflexed. Disc moderately convex medially, median line fine, shortened anteriorly and posteriorly.

Apical transverse impression distinct, anterior surface convex. Basal foveae moderately deep, vaguely delimited, basal transverse impression rather sharp, basal surface convex. Punctures medium-sized and rather dense throughout pronotal surface, smaller than those on head, pronotal disc without transverse wrinkles. Pubescence not dense, suberect, as long as on head. Two pairs of lateral setae present, one in anterior half, and one in laterobasal angles.



Figs 1–4. *Cymindis (Iscariotes) kalabi* sp. n. 1 – holotype, male, habitus, dorsal view; 2 – the same, paratype, female; 3 – aedeagus of holotype; 4 – gonocoxites of paratype.

Elytra wide, ovate, moderately convex, slightly depressed on disc, broadest in posterior half, EL/EW = 1.38–1.45 (1.40), EL/PL = 2.81–3.05 (2.96), EW/PW = 1.44–1.53 (1.48). Lateral margins widely rounded for most of their length, shoulders rounded, slightly protruded. Apices moderately oblique, slightly incised, faintly ciliate; both external and sutural apical angles of each elytron rounded. Marginal gutter rather narrow, especially near humeri, lateral margins slightly reflexed over most of their length. Basal border complete, moderately sinuate. Elytral striae rather deep, densely punctate. Both parascutellary striole and setiferous pores present. Intervals slightly convex, evenly and densely punctate, punctures arranged in 2–3 irregular rows; interval 3 with 3–4 small discal setiferous pores. Pubescence of elytra dense, oblique, as long as on head and pronotum. Umbilicate series consisting of 12–13 pores. One apical pore in stria 7 on the level of interval 3.

Scutellum glabrous and smooth. Sides of prothorax sparsely pubescent. Metepisterna markedly longer than wide. Metacoxae, in addition to short pubescence, with two long setae.

Microsculpture indistinct on head and pronotum, hardly perceptible on elytra in female, consisting of traces of isodiametric meshes.

Visible abdominal sternites with a single pair of paramedian setae, anal sternite quadrisetose in both sexes.

Meso- and metatibiae longer than corresponding tarsi. Dorsal surface of tarsi with long hairs; inner margin of claws smooth.

Median lobe of aedeagus (Fig. 3) large, slender, its ventral margin slightly sinuate, apical lamella short, straight, not modified at apex. Copulatory piece rather large, wide, C-shaped, its apices curved outward.

Apical gonocoxites (Fig. 4) with rather short and narrow distal part.

COMPARATIVE DIAGNOSIS. The new species belongs to the subgenus *Iscariotes* Reiche et Saulcy, 1855 due to the presence of not pectinated claws, fusiform apical labial palpomere in males, two pairs of supraorbital setae and complete elytral basal border.

Among *Cymindis* (*Iscariotes*) species from the eastern part of the subgeneric area, *C. kalabi* sp. n. seems to be more closely related to three species: 1) *C. jakowewi* Semenov, 1889 from Eastern Pamir; 2) *C. semenowi* V.E. Jakovlev, 1889 from Southern Siberia, Mongolia, eastern part of the Tibetan Plateau, Kunlun and Aejinshan mountains, southern slopes of Tien Shan (Taushkandarya River) and Lobnor Lake; and 3) *C. hyaloptera* Semenov, 1891 from Kunlun Mt. Range, i. e. from the same area (Emetz, 1973; Kabak, 2017). From all these taxa, the new species differs by densely and roughly punctate dorsum, markedly convex vertex, long and flat tempora, long and deep supraorbital furrow; pronotum wider, considerably constricted toward base, its lateral sides markedly explanate, anterior margin deeply concave, anterior angles larger, apical transverse impression deep, anterior surface convex; median lobe of aedeagus larger, its apical lamella shorter; copulatory piece larger, its apices curved outward. In the listed external characters, the new species resembles *C. (Tarsostinus) rolandi* Kabak et Schmidt, 2022 described from two female specimens from the Tarim Basin in Xinjiang (Kabak & Schmidt, 2022).

The new species differs from *C. rolandi* by the claws smooth on inner margins (characteristic for *Iscariotes* species), size smaller, hind wings reduced, elytra ovoid, coloration paler (elytra without cruciform pattern), pronotum narrower with less arcuate and less broadly explanate lateral margins, its anterior angles narrower. The conformation of the male genitalia in the new species (slender median lobe, small copulatory piece) is quite different from that of *C. (Tarsostinus) equestris* Gebler, 1825 which is related to *C. rolandi*.

DISTRIBUTION. The new species is known from two closely placed localities on the northern slopes of the western part of the Kunlun Mt. Range to the south of Yecheng Town, Xinjiang-Uygur Autonomous Region of China.

HABITAT. *Cymindis kalabi* sp. n. was found in the end of June at elevation of about 2200–2500 m.

ETYMOLOGY. The new species is named after its collector, the well-known carabidologist, Mr. Jaroslav Kaláb.

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