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## A NEW SPECIES OF THE GENUS *CYMINDIS* LATREILLE, 1805 (COLEOPTERA: CARABIDAE: LEBIINI) FROM THE TARIM RIVER BASIN, CHINA

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**Summary.** A new species of the genus *Cymindis* Latreille, 1805 (Carabidae: Harpalinae) is described from the Tarim River basin, border to the Taklamakan Desert, Xinjiang-Uyghur Autonomous Region of China. *Cymindis (Tarsostinus) rolandi* sp. n. is similar to *C. (Tarsostinus) equestris* Gebler, 1825, but differs from the latter in the shape of the pronotum and the glabrous eyes.

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

**И. И. Кабак, Й. Шмидт. Новый вид рода *Cymindis* Latreille, 1805 (Coleoptera: Carabidae: Lebiini) из Таримского бассейна, Китай // Дальневосточный энтомолог. 2022. N 446. С. 1-6.**

**Резюме.** Из бассейна реки Тарим на окраине пустыни Такла-Макан в Синьцзян-Уйгурском автономном районе Китая описан новый вид рода *Cymindis* Latreille, 1805 (Carabidae: Harpalinae). *Cymindis (Tarsostinus) rolandi* sp. n. близок к *C. (Tarsostinus) equestris* Gebler, 1825, но легко отличается от него формой переднеспинки и неопушенными глазами.

## INTRODUCTION

The Carabidae fauna of some territories in Middle Asia remains unsatisfactory known. One of the poorly investigated areas is the Xinjiang Province in northwestern China, which is characterized by the impressive landscapes of the Tarim River basin with the famous Taklamakan Desert. Based on the experiences resulting from many field studies in this region performed by one of us (IK), many species endemic to this remote area are unknown to science up to today. The description of one new species of the Holarctic genus *Cymindis* Latreille, 1805 is presented in this paper. This species was collected by our colleague Dr. Roland Schultz (Görlitz, Germany) at the Tarim flood plain at the border of the Taklamakan Desert.

## MATERIAL AND METHODS

The study is based on the examination of two female specimens of the new species together with comprehensive *Cymindis* (*Tarsostinus*) material comprising all known species 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.

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 40D digital camera, using stacking and subsequently processed with Zerene stacker software version 1.04.

Holotype of the new species is deposited in the J. Schmidt working collection, Rostock, Germany (CJS); paratype is kept in the collection of the Zoological Institute of Russian Academy of Sciences, St-Petersburg, Russia (ZIN).

## DESCRIPTION OF NEW SPECIES

**Family Carabidae Latreille, 1802**

**Subfamily Harpalinae Bonelli, 1810**

**Tribe Lebiini Bonelli, 1810**

**Subtribe Cymindidina Laporte, 1834**

**Genus *Cymindis* Latreille, 1805**

**Subgenus *Tarsostinus* Motschulsky, 1864**

***Cymindis (Tarsostinus) rolandi* Kabak et Schmidt, sp. n.**

<http://zoobank.org/NomenclaturalActs/B010A35A-C3D8-44A6-8F60-AE2FE85A4E21>

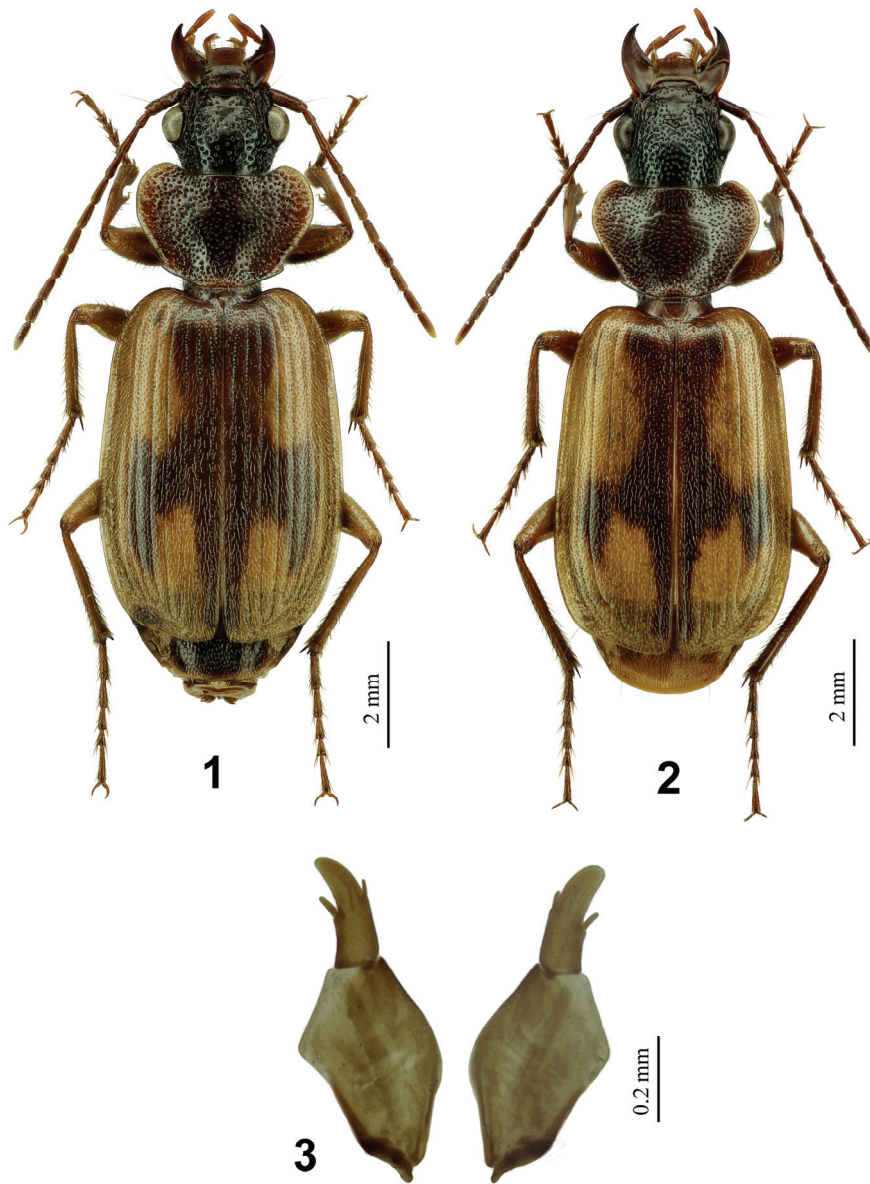
Figs 1–3

TYPE MATERIAL. Holotype – ♀, **China:** Xinjiang, Taklamakan, Ingbazar (Tarimbrücke), 41°11' N, 84°14' E, h=910 m, 29.VIII–3.IX 2004, leg. R. Schultz (CJS). Paratype: 1 ♀, collected with holotype (ZIN).

DESCRIPTION. Female. Species medium-sized compared to other species of the subgenus, body length 9.6–9.7 mm, hind wings fully developed, habitus wide and subparallel-subconvex, appendages averaged (Figs 1, 2). Colour of dorsal side: head dark brown with reddish anterior part, labrum and mandibles; pronotum reddish brown with yellowish lateral sides; elytra brownish-yellow with dark sutural stripe (on each elytron, 3–4 intervals in anterior half and 1–2 in apical third) and two symmetric longitudinal spots in posterior half of intervals 6–7 (either isolated or connected to sutural dark pattern). Legs monochromatic brownish yellow, antennae reddish. Ventral side of body yellowish-brown, head dark brown, lower surface densely punctate and pubescent.

Head rather large; eyes markedly protruding, glabrous,  $EyL/3AL = 1.14–1.20$ ; tempora long and flat, not delimited posteriorly by neck constriction. Antero-lateral margins of forehead significantly reflexed. Upper-side of head swollen at vertex, frontal foveae hardly perceptible, supraorbital furrow very long, sharply and deeply impressed. Frons and vertex densely and roughly punctate. Pubescence of dorsal surface of head medium in length, moderately dense, slightly inclined forward. Two pairs of long supraorbital setae. Antennae comparatively short,  $EL/AL = 1.05–1.08$ . Scape long, feebly constricted medially, sparsely pubescent, with long preapical seta. Genae sparsely pubescent. Labial tooth shorter than lateral lobes, broadly rounded at apex, bordered along anterior margin. Submentum quadrisetose. Apical segment of labial palpi fusiform, with a few small hairs. Penultimate labial palpomere with four long setae on anterior margin. Apical maxillar palpomere fusiform, sparsely pubescent.

Pronotum unusually wide,  $PW/HW = 1.37–1.39$ ,  $PW/PL = 1.50–1.58$ , markedly constricted toward base,  $PW/PB = 1.44–1.50$ , broadest in anterior third. Sides almost semicircular in anterior half, subrectilinear basally, shortly but sharply concave before laterobasal angles, the latter small, acute, slightly protruded laterally. Anterior margin deeply concave, without distinct border; anterior angles ample, markedly rounded and produced anteriorly. Basal margin of pronotum convex throughout, bordered laterally. Lateral sides of pronotum extraordinarily explanate, especially in anterior half, and slightly reflexed. Disc subconvex medially, median line thin, significantly shortened anteriorly and posteriorly. Apical transverse impression distinct, anterior surface markedly convex. Basal foveae shallow and vague, basal transverse impression deep, basal margin reflexed. Punctures rough and dense throughout pronotal surface, though smaller than those on head. Pubescence dense, suberect, as long as on head. Two pairs of lateral setae present, one in anterior half of pronotum, and one in laterobasal angles. Scutellum glabrous and smooth. Sides of prothorax sparsely pubescent. Metepisterna markedly longer than wide. Metacoxae, in addition to short pubescence, with two long setae.



Figs 1–3. *Cymindis (Tarsostinus) rolandi* sp. n., female. 1 – holotype, habitus, dorsal view; 2 – the same, paratype ; 3 – gonocoxites of paratype.

Elytra wide, subrectangular in shape, moderately convex, depressed on disc, broadest in posterior half,  $EL/EW = 1.38-1.40$ ,  $EL/PL = 3.00-3.01$ ,  $EW/PW = 1.38-1.43$ . Lateral margins subrectilinear for most of their length, shoulders rounded, distinctly protruded anteriorly. Apices moderately oblique, slightly incised, faintly ciliate; external apical angle of each elytron broadly rounded, sutural angle blunt. Marginal gutter moderate in width, narrowed near humeri, lateral margins slightly reflexed for most of their length. Basal border complete, markedly sinuate. Elytral striae moderately deep, densely and faintly punctate. Both parascutellary striole and setiferous pores present. Intervals flat to subconvex, evenly and rather densely punctate, punctures arranged in 3–4 irregular rows; interval 3 with 3 small discal setiferous pores, of which the anterior one attached to stria 3. Pubescence of elytra dense, oblique, as long as on head and pronotum. Umbilicate series consists of 15–16 pores. One apical pore in stria 7 on the level either of stria 3 or of interval 3.

Microsculpture indistinct on head and pronotum, hardly perceptible to distinct on elytra, consisting of isodiametric meshes.

Visible abdominal sternites with a single pair of paramedian setae, anal sternite quadrisetose (females).

Meso- and metatibiae longer than corresponding tarsi. Dorsal surface of tarsi with long hairs; inner margin of claws mostly smooth, rarely with 1–4 very small denticles in basal quarter.

Apical gonocoxite rather narrow, moderately arched in distal half (Fig. 3).

Male unknown.

COMPARATIVE DIAGNOSIS. The new species belongs to the subgenus *Tarsostinus* Motschulsky, 1864 due to the presence of denticles on inner claw margins, two pairs of supraorbital setae and complete elytral basal border. Externally the new species resembles *C. (Tarsostinus) equestris* Gebler, 1825 known from central and southern parts of Eastern Europe, Caspian Depression, Kazakh Upland, northern part of Middle Asia, Southern Siberia, Mongolia, eastern part of the Tibetan Plateau and adjacent plains (Emetz & Kryzhanovskij, 1973; Kabak, 2017). Both species share the fully developed hind wings, similar coloration, densely and roughly punctured body surface, deeply engraved supraorbital furrows, markedly explanate lateral sides of pronotum, very small to reduced denticles on inner margin of claws (however, in the eastern populations of *C. equestris* claws are pectinate), and similar shape of the apical gonocoxite. The new species differs from *C. equestris* by its characteristic habitus: vertex swollen, pronotum markedly wider with much more broadly explanate lateral margins, less convex disc and reflexed anterior surface; additionally, the eyes in the new species are glabrous (pubescent in *C. equestris*).

DISTRIBUTION. The new species is only known from the type locality: the flood plain of the Tarim River at the northern border of the Taklamakan Desert, to the south of Luntai Village, Xinjiang-Uygur Autonomous Region of China.

HABITAT. The new species was found in the end of summer in the flood plain of the Tarim river at an elevation of about 910 m a.s.l.

ETYMOLOGY. The new species is named after its collector, Dr. Roland Schultz, specialist of ants (Görlitz, Germany).

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