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Two new species of *Selenotichnus* KATAEV 1999 from Yunnan, China (Coleoptera, Carabidae, Harpalini)

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A b s t r a c t : Two new species of *Selenotichnus* KATAEV 1999 are described from China: *S. klapkai* nov.sp. from central Yunnan (loc. typ.: 10 km S Dali, 2000 m) and *S. parvulus* nov.sp. from northern Yunnan (loc. typ.: Lijiang Naxi Aut. Co., 2 km NW Yongsheng, 54 km WSW Lijiang, 2120 m, 26°41.9'N 100°44.2'E).

K e y w o r d s : Coleoptera, Carabidae, Harpalini, *Selenotichnus*, new species, China, Yunnan.

Introduction

The genus *Selenotichnus* KATAEV 1999 was erected within the Selenophori genus-group of the subtribe Harpalina on the basis of the following distinctive characters (KATAEV 1999): body impunctate and glabrous, mandibles stout, not elongate, mentum and submentum fused laterally, mentum with prominent median tooth, clypeo-ocular prolongations very fine and short, occasionally absent and 3rd elytral interval with several small setigerous pores along 2nd stria. The genus was proposed for one species, *S. olegi* KATAEV 1999, from Wuliang Shan, central Yunnan, China (type locality: environs of Jingdong, 1800-2430 m). Recently (KATAEV & LIANG 2005) it was recorded from the north-western part of Yunnan province (Gongshan, Weixi, Dêqên and Zhongdian counties). In the present paper, we describe two new species of this genus collected recently also in Yunnan. All three known species are very similar to each other in habitus but clearly recognized by their male genitalia.

Material and methods

The following abbreviations are used for the depositories of the examined material:

ZISPZoological Institute, Russian Academy of Sciences, St. Petersburg, Russia;

cKLColl. V. Klapka, Česká Lípa, Czech Republic;

cSMColl. A. Smetana, Ottawa, Canada;

cWRColl. D.W. Wrase, Berlin, Germany.

Measurements were taken as follows: body length from anterior margin of clypeus to elytral apex; width of head as maximum linear distance across head, including compound

eyes (WHmax), and as minimum linear distance across neck constriction just behind eyes (WHmin); length of pronotum along its median line; length of elytra from basal bead in scutellar region to apex of sutural angle; width of pronotum (WP) and elytra in their broadest point.

Results

Selenotichnus klapkai nov.sp. (Figs 1-3)

Type material: Holotype: ♂: China, Yunnan, 10 km S Dali, 2000 m (meadow in small marble quarry), 26.V.2004, V. Klapka leg. (cWR). Paratype ♀: same data as holotype (cKL).

Description: Body length 5.6-5.7 mm, width 2.4-2.5 mm.

Morphological character states as in *S. olegi*, but restricted and differing as follows.

Colour: Body black, slightly shining on dorsum, without a green tinge; outer margins of labrum and lateral beads of pronotum paler, dark ferruginous; palpi, antennae and tibiae brownish yellow, tibiae infuscate apically; femora dark, almost black.

Head: Medium sized (WHmax/WP = 0.64 in male and 0.63 in female; WHmin/WP = 0.50 in male and 0.52 in female), with moderately convex eyes. Clypeo-ocular prolongations very short, superficial. Labrum slightly concave at apex. Microsculpture visible on clypeus, above and behind eyes; meshes very fine, more or less isodiametric, a little more distinct in male than in female. Penultimate labial palpomere with four or five setae on anterior margin and one ventroapical seta.

Pronotum: Weakly and rather evenly convex, comparatively wide, 1.46-1.50 times as wide as long, widest just before middle, with evenly rounded sides. Base slightly wider than apex. Basal angles very obtuse, rather widely rounded at apices in holotype, somewhat distinct in paratype. Apical and basal beads complete, but border along apical margin slightly obliterate medially. Basal foveae small and shallow. Lateral depressions absent. Area between basal fovea and lateral margin somewhat flat. Base finely and densely punctate (puncturation in paratype slightly sparser than in holotype). Microsculpture visible almost throughout, distinct along margins, obliterate (particularly strongly in male) in central portion, consisting of more or less isodiametric meshes along base and of transverse meshes in other portions.

Elytra: Oval, in male 1.38 times as long as wide, 2.45 times as long and 1.21 times as wide as pronotum; in female these indices respectively 1.39, 2.49, and 1.20. Humeral angles blunt at apices, each with a small denticle visible from behind. Sutural angle sharp in male, narrowly rounded at apex in female. Each 3rd interval with four to five small discal pores at 2nd stria (pores at apex usually located at 3rd stria). Microsculpture very distinct throughout, consisting of transverse meshes.

Legs: Fifth tarsomere with two, sometimes three pairs of latero-ventral setae.

Hemisternite and stylus: Similar to that of *S. olegi*.

Aedeagus: Median lobe (Figs 1-2) robust, with a large basal bulb, arcuate, with apical portion clearly directed ventrad. Terminal lamella slightly wider than long, with sides roundly converging to narrowly rounded apex (Fig. 3). Internal sac with a large tooth weakly curved and bearing a wide base, and with two large spiny patches dorsally.

Comparison: *S. klapkai* nov.sp. is very similar in external characters to *S. olegi*

distinguished mainly by the more distinct dorsal microsculpture and the male genitalia with two large spiny patches in the internal sac. In addition, the terminal lamella of the median lobe of the new species is wider and stouter, and the pronotal disc between basal foveae and lateral margins is flatter.

D i s t r i b u t i o n : This new species is known only from the southern environment of Dali, the city in central Yunnan, located within the geographical range of *S. olegi*.

E t y m o l o g y : The latinized masculine form of the surname of the discoverer of the new species, Václav Klapka, to whom we dedicate it for his generosity.

***Selenotichnus parvulus* nov.sp. (Figs 4-6)**

T y p e m a t e r i a l : Holotype ♂: China, N Yunnan, Lijiang Naxi Aut. Co., 2 km NW Yongsheng, 54 km WSW Lijiang, 2120 m, 26°41.9'N 100°44.2'E, limestone hill, under stones / plants, 14.VIII.2003, D.W. Wrase leg. (cWR). Paratypes 6♂♂, 12♀♀: same data as holotype (cWR, ZISP); 2♂♂★2♀♀: same locality data as holotype but A. Smetana leg.

D e s c r i p t i o n : Body length 4.3-5.4 mm, width 1.8-2.3 mm.

Morphological character states as in *S. olegi* and *S. klapkai* nov.sp., but restricted and differing as follows.

Colour: Body black, shiny, usually with a green tinge on dorsum. Appendages brownish yellow, often femora more or less strongly infusate.

Head: Medium sized (WHmax/WP = 0.65-0.69 in male and 0.66-0.70 in female; WHmin/WP = 0.50-0.57 in male and 0.52-0.55 in female), with moderately convex eyes. Clypeo-ocular prolongations short, not reaching eyes, superficial or somewhat deep, occasionally strongly reduced. Labrum weakly concave at apex. Microsculpture visible on clypeus, around supraorbital suture and behind eyes; meshes very fine, more or less isodiametric. Penultimate labial palpomere with three or four (more rarely five) setae on anterior margin and one ventroapical seta.

Pronotum: Moderately and rather evenly convex, 1.36-1.51 times as wide as long, widest in middle or just before it. Sides roundly or almost straightly converging in basal half. Base approximately as wide as or a little wider than apex. Basal angles obtuse, rather distinct or narrowly rounded at apices. Apical and basal beads complete, sometimes apical bead narrowly interrupted medially. Basal foveae small, oval and shallow. Lateral depressions absent. Area between basal fovea and lateral margin convex. Base finely and densely punctate, occasionally puncturation scarce and restricted to region of basal foveae. Microsculpture visible along margins, consisting of mixture of fine isodiametric and weakly transverse meshes, in male obliterate, in female more distinct and more widely distributed.

Elytra: Oblong oval, in male 1.30-1.47 times as long as wide, 2.42-2.65 times as long and 1.22-1.27 times as wide as pronotum; in female these indices respectively 1.34-1.46, 2.41-2.55, and 1.22-1.28. Humeral angles blunt at apices, each usually with a small denticle visible from behind. Sutural angle sharp in male, blunt or narrowly rounded at apex in female. Striae weakly impressed throughout. Each 3rd interval with three to five (usually four) small discal pores at 2nd stria (pores at apex sometimes located at 3rd stria or in middle of interval). Microsculpture in male much finer than that in female, on disc rather strongly obliterate; meshes weakly transverse.

Hemisternite and stylus: Similar to that of *S. olegi* and *S. klapkai* nov.sp.

Aedeagus: Median lobe (Figs 4-5) comparatively slender, with relatively small basal bulb, weakly arcuate, with almost straight apical portion (lateral aspect). Terminal lamella short, wider than long, with sides roundly converging to narrowly rounded apex (Fig. 6). Internal sac with a comparatively small medial tooth weakly widened basally and without any distinct spiny patches.

Comparisons: In general habitus, this new species is similar to *S. olegi* and *S. klapkai* nov.sp., but the body is, on average, smaller, relatively narrower and with relatively longer elytra. In addition, the elytral microsculpture in male is finer, slightly obliterate. *S. parvulus* nov.sp. clearly differs from both species in the male genitalia: median lobe of aedeagus is relatively smaller, more slender and somewhat less strongly curved, with relatively smaller basal bulb and almost straight apical portion (lateral aspect); its terminal lamella is shorter; internal sac is with a much smaller medial tooth weakly widened basally and without any distinct spiny patches.

Distribution: *S. parvulus* nov.sp. is known only from the type locality (2 km NW of Yongsheng) in the southern spurs of Mianmian Shan, northern Yunnan. This locality is situated somewhat outside the geographical ranges of both *S. olegi* and *S. klapkai* nov.sp., distributed in central and north-western parts of Yunnan Province.

Etyymology: The species epithet refers to the small body of the new species.

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Zusammenfassung

Es werden aus der Gattung *Selenotichnus* KATAEV 1999 zwei neue Arten aus China beschrieben: *S. klapkai* nov.sp. aus Zentral-Yunnan (loc. typ.: Dali, 2000 m) und *S. parvulus* nov.sp. aus Nord-Yunnan (loc. typ.: Lijiang Naxi Aut. Co., 2 km NW Yongsheng, 54 km WSW Lijiang, 2120 m, 26°41.9'N 100°44.2'E).

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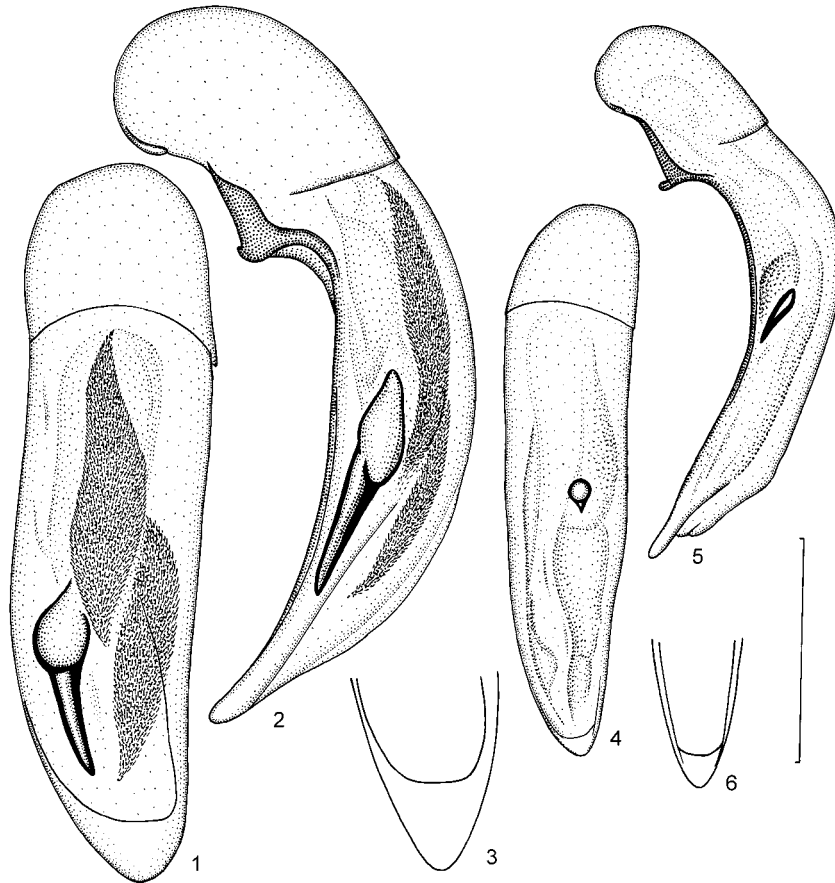
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Figs 1-6: *Selenotichnus*, median lobe of aedeagus (3, 6 – terminal lamella). **Figs 1-3:** *S. klapkai* nov.sp.; **Figs 4-6:** *S. parvulus* nov.sp. (1, 3, 4, 6 – dorsal aspect; 2, 5 – lateral aspect). Scale bar = 0.5 mm.

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