

***Taphrocerus svatopluki* sp. nov. (Coleoptera: Buprestidae: Agrilinae), a new species from Bolivia**

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Abstract. The new species is described and illustrated: *Taphrocerus svatopluki* sp. nov. (Bolivia). The new species is compared to the most related taxa.

INTRODUCTION

Although the present paper is one of my studies on the genus *Taphrocerus* Solier, 1833, I deal with only one new species here. Svatopluk (Svát'a) Bílý, a well-known Buprestidae taxonomy expert, left in early April. He was not only a scientist and a respected authority, but also an extraordinary man by his open and friendly character. In this paper I give a description of the second species from the genus *Taphrocerus*, named in his honour (see also *T. bilyi* in Marek 2016). The paper also expresses my thanks for his support, advice, patience, friendship and everything I have received from him. Many thanks!

MATERIALS AND METHODS

The designation of the holotype specimen is provided by printed red label with black margin. Data from locality labells are cited „verbatim“.

Abbreviations used in the text: () = my remarks and additions; HT = holotype, LT = lectotype; FV = frontal view.

A Canon D-550 digital camera with the Canon MP-65 mm f/2.8 1-5x macro lens was used to capture the colour images, multiple photographs taken were combined with the Helicon Focus image software.

Specimens were measured to the nearest 0.05 mm. The length of the body was measured as a distance between anterior margin of the head and the apex of the elytra, the width of body was measured across the widest part (usually at humeri). The elytral length was measured as the maximal perpendicular distance between the anterior margin (base) and the tip of elytra. The length of the aedeagus was measured as distance between its base and apex of the parameres, the width across the widest part.

The following collection codens are used throughout the text:

JMSC collection of Jaroslav Marek, Sýkořice, Czech Republic (it will be deposited in NMPC);

NMPC National Museum, Praha, Czech Republic.

TAXONOMY

Taphrocerus svatopluki sp. nov.

(Figs. 1, 1a, 1b)

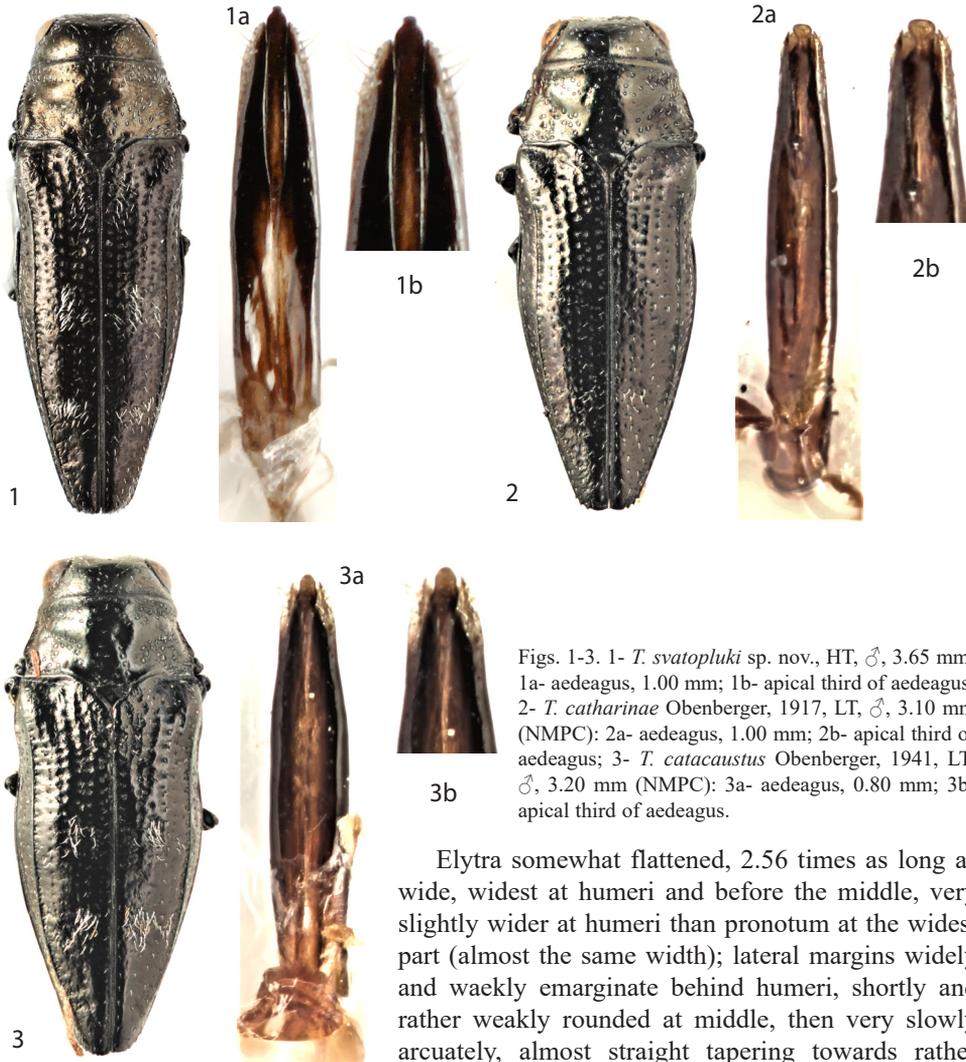
Type locality. Bolivia, Santa Cruz, San Matías env.

Type specimens. Holotype (♂): „BOLIVIA, Santa Cruz, San Matías env., xi-2015“, (JMSC).

Diagnosis. Medium-sized (3.65 mm), rather broadly elongate, oval, stout, about 3.0 times longer than wide, widest at humeri and before the middle of elytra, moderately convex above, elytra somewhat flattened, rather strongly lustrous above; rather markedly bicoloured above: head and pronotum „dirty“ golden-coppery, elytra black with brownish-violet tinge; beneath black with very feeble golden-purplish lustre including legs; elytra with an ornamental pubescence of white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, entire, sharp, strongly elevated, extending from humeri to very near of apex.

Description of holotype. Head large, wide, weakly narrower than posterior pronotal margin; clypeus very widely „V-shaped“, very strongly shagreened, separated from frons by a fine carina, epistomal pores large, slightly elongate transversely, separated less than their own diameter; frons moderately convex, with narrow, rather deep depression at anterior half, the depression merging into shallow sulcus towards vertex with a fine groove at middle longitudinally, rather sparsely pubescent by medium-sized, white setae at anterior depression („fronto-clypeal pubescent stripe“ - ♂) and sparsely pubescent by white setae at posterior third, the second-third asetose and impunctate, posterior third sparsely punctate by simple punctures; vertex very strongly convex (FV), rather finely shagreened, weakly depressed at middle, with a very fine groove at middle longitudinally, sparsely ocellate-punctate by small punctures, each puncture with a white seta, the setae are distinctly longer anteriorly; eyes medium-sized, oval, weakly projecting beyond outline of head, poorly visible from above; antennomeres 5-11 missing in both left and right antennae.

Pronotum moderately convex, 1.74 times as wide as long, widest before the base; rather widely and shallowly transversely depressed along anterior margin, the depression is almost interrupted at middle, broadly and rather shallowly depressed lateroposteriorly, with small, shallow but well distinct, round depression at the middle of disc anteriorly; with well elevated longitudinal hump lateroposteriorly; anterior margin widely rounded, almost straight laterally, angled at the middle, posterior margin strongly biemarginate, almost straight in front of scutellum, the same width as base of elytra, sides shortly subparallel anteriorly, then rather weakly, almost straight dilated posteriorly to the end of second-third, then slightly, bluntly angulate and then very weakly straight dilated to just before the base and then shortly constricted to the base; surface strongly shagreened, ocellate-punctate by small punctures at the lateroposterior depressions, in front of scutellum, on the disc anteriorly and at the anterior transverse depression, each puncture with thin, white seta, the setae are distinctly shorter at anterior transverse depression; scutellum regularly triangular, straight anteriorly, strongly shagreened, moderately lustrous.



Figs. 1-3. 1- *T. svatopluki* sp. nov., HT, ♂, 3.65 mm: 1a- aedeagus, 1.00 mm; 1b- apical third of aedeagus; 2- *T. catharinae* Obenberger, 1917, LT, ♂, 3.10 mm (NMPC): 2a- aedeagus, 1.00 mm; 2b- apical third of aedeagus; 3- *T. catacaustus* Obenberger, 1941, LT, ♂, 3.20 mm (NMPC): 3a- aedeagus, 0.80 mm; 3b- apical third of aedeagus.

Elytra somewhat flattened, 2.56 times as long as wide, widest at humeri and before the middle, very slightly wider at humeri than pronotum at the widest part (almost the same width); lateral margins widely and weakly emarginate behind humeri, shortly and rather weakly rounded at middle, then very slowly arcuately, almost straight tapering towards rather widely and conjointly rounded apices; apices serrate by shallow, but sharp teeth; humeral swelling rather well developed, laterobasal depression medium-sized and rather deep, well distinct; surface rather strongly shagreened at basal fourth becoming more finely shagreened posteriorly, punctures in rows longitudinally deeper and larger at basal half becoming fine and almost inconspicuous posteriorly, disappearing at apical fifth; an ornamental pubescence (pattern) of long relatively, white setae as follows: a few setae anterolaterally, sparse, wide, perisutural stripe at basal fourth along the suture, transverse, relatively wide stripe at the middle, consisting of six (3+3) more or less well separated longitudinal stripes, two (1+1), rather large, elongate transversely spots at the beginning of apical fourth; entire apical fifth with sparse and somewhat shorter, white setae;

posthumeral elytral carina strongly elevated, entire, sharp, extending from humeri to very near of apices.

Ventral surface moderately lustrous, strongly shagreened, abdomen rather sparsely white pubescent by thin setae, punctate by „U-turned up-shaped“ punctures on all visible sternites, the punctures becoming finer apically; anal ventrite rather narrowly rounded, with small but rather deep emargination on apical margin, preapical groove following outline of margin narrowly rounded, wide; antennal grooves long, deep, wide; prosternal process elongate, moderately constricted between procoxae, very strongly dilated behind, apex rhomboidal, strongly shagreened, with a few thin, white setae only, punctate by a few large, simple punctures.

Sexual dimorphism. Female unknown.

Measurements. Length 3.65 mm; width 1.20 mm.

Differential diagnosis. *T. svatopluki* sp. nov. belongs to *T. angustus* species-group (definition and revision of the species-group in prep.) and it is most similar to *T. catharinae* Obenberger, 1917 (Figs. 2, 2a, 2b) and to *T. catacaustus* Obenberger, 1941 (Figs. 3, 3a, 3b). To distinguish these three species, see Table A below.

Table A. Diagnostic characters of *T. svatopluki* sp. nov., *T. catharinae* Obenberger, 1917 and *T. catacaustus* Obenberger, 1941.

♂♂	<i>T. svatopluki</i>	<i>T. catharinae</i>	<i>T. catacaustus</i>
General shape of body	slender, about 3.0 times longer than wide, elytra more than 2.5 times longer than wide	stouter, 2.7-2.8 times longer than wide, elytra less than 2.1 times longer than wide	stouter, about 2.7 times longer than wide, elytra less than 2.1 times longer than wide
Colouration	rather markedly bicoloured above: head and pronotum „dirty“ golden-coppery, elytra black with brownish-violet tinge	uniformly black or very indistinctly bicoloured (head + pronotum x elytra)	uniformly black or very indistinctly bicoloured (head + pronotum x elytra)
Pronotal sides	weakly, bluntly angulate at the widest part	more distinctly and sharply angulate at the widest part	more distinctly and sharply angulate at the widest part
Elytral ornamental pubescence (pattern)	more distinct and denser, present markedly at basal fourth, at the middle and at the beginning of apical fourth	very sparse and more or less indistinct, mostly present as obsolete spots (1+1) at the beginning of apical fourth	more distinct and denser, present markedly at basal fourth, at the middle and at the beginning of apical fourth
Aedeagus	parameres rather feebly constricted proximally at apical half (wider relatively at apical half) (Fig. 1a); apex of phallus (median lobe) rounded and the top narrowly protruding proximally (Fig. 1b)	parameres distinctly constricted proximally at apical half (narrower relatively at apical half) (Fig. 2a); the top of phallus (median lobe) roundly dilated (Fig. 2b)	parameres rather feebly constricted proximally at apical half (wider relatively at apical half) (Fig. 3a); apex of phallus (median lobe) simply rounded (Fig. 3b)

Etymology. Named in honour and memory of Svatopluk (Svát'a) Bílý (*1945-†2022, Prague, Czech Republic), well known specialist in the taxonomy of Buprestidae, my friend and teacher; patronymic.

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REFERENCES

MAREK J. 2016: Studies on the genus *Taphrocerus* (Coleoptera: Buprestidae: Agrilinae) part III. *Studies and Reports, Taxonomical Series* 12(1): 139-163.

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