

**Studies on the genus *Taphrocerus* Solier, 1833  
(Coleoptera: Buprestidae: Agrilinae) part XI.  
*Taphrocerus amazonicus* species-group**

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**Taxonomy, new species, species-group, key, new records, Coleoptera, Buprestidae, *Taphrocerus*, Neotropical Region**

**Abstract.** The *Taphrocerus amazonicus* species-group is established and defined. Three species are newly described as follows: *Taphrocerus manausensis* sp. nov., *T. mouckai* sp. nov. and *T. rondonicus* sp. nov. (all from Brazil). All species of the species-group are keyed and illustrated. A record new to country is presented for *T. hornburgi* Marek, 2017 (Brazil) and a record new to state is presented for *T. klimbschi* Obenberger, 1917 (Brazilian state Amazonas).

## INTRODUCTION

The *Taphrocerus amazonicus* species-group (definition see below) comprises fourteen (thirteen respective, see remarks and note under \* below) species distributed in the Amazonia. Three of these are described herein as new.

The present paper is further in the series of studies on the genus *Taphrocerus* resulting from the study of the type material and examination of extensive number of specimens from various institutions and private collections all over the world.

## MATERIALS AND METHODS

Designation of holotype specimens are provided by printed red label with black margin. Data from locality labels are cited „verbatim“.

Abbreviations used in the text: ( ) = my remarks and additions; HT = holotype, PT = paratype, ST = syntype; DV = dorsal view; FV = frontal view, FDV = fronto-dorsal view, LV = lateral 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 Helicon Focus image software, occasional exceptions are noted at relevant places.

Specimens were measured to the nearest 0.05 mm. The length of body was measured as distance between anterior margin of the head and the apex of elytra, the width of body was measured across the widest part (usually at humeri). The pronotal length was measured in the middle, the width across the widest part (usually the beginning of basal third). The elytral length was measured as the maximal perpendicular distance between anterior margin (base) and the tip of elytra. The length of 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:  
BMNH The Natural History Museum, London, United Kingdom;  
HNHM Hungarian Natural History Museum, Budapest, Hungary;  
JMSC collection of Jaroslav Marek, Sýkořice, Czech Republic (it will be deposited in NMPC);  
MUSM Museu de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru;  
NMPC National Museum, Praha, Czech Republic.

## DEFINITION OF THE SPECIES-GROUP

### *Taphrocerus amazonicus* species-group

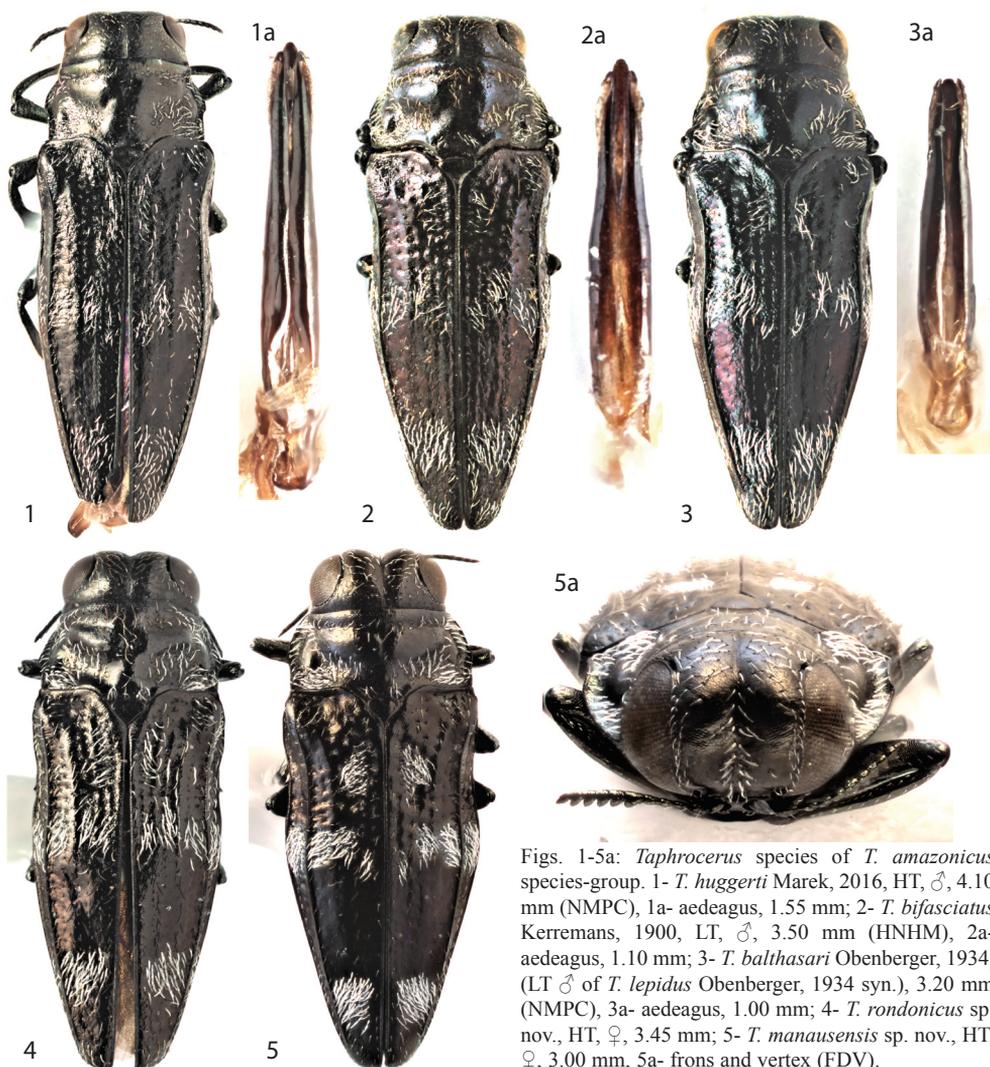
Habitus (Figs. 1-13) Aedeagi (Figs. 1a-13a)

May be characterised by follows: medium-sized to large (2.95-4.90 mm), broadly elongate, broadly oval or broadly cuneiform body shape, 2.67-2.94 times longer than wide, widest at humeri or at humeri and about the middle of elytra, moderately convex above, elytra distinctly flattened; above black with more or less intensive metallic blue, green, purple or violet tinge or elytra strongly metallic blue or green, pronotum sometimes golden-orange; without prehumeral pronotal carina, with more or less well elevated bump or prominence at lateroposterior pronotal angles only; with well elevated, sharp, entire posthumeral elytral carina; elytra with an ornamental pubescence (pattern) of dense and long, white setae as follows: a few setae anterolaterally, wide transverse stripe in the end of basal fourth (the stripe is sometimes more or less rudimental in some of species, less distinct or present as a few setae near suture only), wide transverse stripe at middle (becoming in a short and narrow perisutural stripe usually); apical fifth densely pubescent (except for *T. rondonicus* sp. nov. and *T. manausensis* sp. nov. - apical eighth asetose or very sparsely, almost inconspicuously, irregularly pubescent).

Head medium-sized to large, wide, from slightly to strongly narrower than posterior pronotal margin; male with „fronto-clypeal pubescent stripe“ of dense, somewhat widened, white, cream-white or yellowish setae; epistomal pores present; vertex punctate by simple (!) punctures, with well distinct groove at middle longitudinally; eyes large, well visible from above, moderately or strongly projecting beyond outline of head.

Pronotum 1.78-1.95 times as wide as long (except for *T. hespenheidei* Marek, 2020 - 2.09 times as wide as long and *T. manausensis* sp. nov. - 2.07 times as wide as long), widest at the beginning of basal third; pronotal lobe slightly but distinctly emarginate (except for *T. bifasciatus* Kerremans, 1900, *T. balthasari* Obenberger, 1934 and *T. manausensis* sp. nov. - without any emargination); sides emarginately constricted behind the widest part; disc with distinct sulcus longitudinally at middle; ocellate-punctate by small or medium-sized punctures at pronotal depressions; pronotal base very slightly narrower than base of elytra.

Elytra flattened, 1.94-2.21 times as long as wide, widest at humeri or at humeri and about the elytral midlength, markedly wider at humeri than pronotum at the widest part (except for *T. bifasciatus* and *T. balthasari* - slightly wider only); apices very minutely (almost



Figs. 1-5a: *Taphrocerus* species of *T. amazonicus* species-group. 1- *T. huggerti* Marek, 2016, HT, ♂, 4.10 mm (NMPC), 1a- aedeagus, 1.55 mm; 2- *T. bifasciatus* Kerremans, 1900, LT, ♂, 3.50 mm (HNHM), 2a- aedeagus, 1.10 mm; 3- *T. balthasari* Obenberger, 1934, (LT ♂ of *T. lepidus* Obenberger, 1934 syn.), 3.20 mm (NMPC), 3a- aedeagus, 1.00 mm; 4- *T. rondonicus* sp. nov., HT, ♀, 3.45 mm; 5- *T. manausensis* sp. nov., HT, ♀, 3.00 mm, 5a- frons and vertex (FDV).

inconspicuously) serrate; ventral side with more or less well distinct quadrate or semicircular emargination on apical margin of the last ventrite; apex of prosternal process rhomboidal, with sulcus or groove at middle longitudinally.

**Sexual dimorphism.** Observed in: the colouration of frons and anterior half of vertex bluish- or coppery-green in male, black with strong blue or coppery tinge in female; frons with deep, wide depression at anterior half in male, rather very obsolete depression in female; presence of the „fronto-clypeal pubescent stripe“ of dense, somewhat widened, white, cream-white, yellowish or golden setae at the anterior depression in male, missing or distinctly more

sparser pubescence, consisting of thin and white setae always in female; antennomeres 6-11 more widened in male; the quadrate or semicircular emargination on apical margin of the last ventrite distinctly more deeper in female.

**Species included.**

*T. amazonicus* Kerremans, 1896  
*T. bifasciatus* Kerremans, 1900  
*T. klimtschi* Obenberger, 1917  
*T. deplanatus* Théry, 1923  
*T. fisheri* Obenberger, 1924\*  
*T. balthasari* Obenberger, 1934  
    = *T. lepidus* Obenberger, 1934 syn. (Marek 2016)  
*T. huggerti* Marek, 2016  
*T. hornburgi* Marek, 2017  
*T. michaeli* Marek, 2017  
*T. hespenheidei* Marek, 2020  
*T. hyacinthus* Marek, 2020  
*T. manausensis* sp. nov.  
*T. mouckai* sp. nov.  
*T. rondonicus* sp. nov.

\**T. fisheri* is probably synonym of *T. deplanatus*, but I didn't have the opportunity to study the holotype of *T. deplanatus* in detail and to compare it with the type (ST) of *T. fisheri* directly (see also remarks in Marek 2017: 155).

**Distribution.** All known species of *T. amazonicus* species-group occur in the Amazonia.

**Known host plants.** The species of the *T. amazonicus* species-group have not been reared but adults of the following species are associated with the palms, that are host plants probably: *T. hespenheidei* (collected on leaves of Arecaceae sp.), *T. hyacinthus* (collected on leaves of *Chamaedorea* and/or *Prestoea*), *T. hornburgi* (collected on leaves of Arecaceae sp.), *T. michaeli* (collected on leaves of Arecaceae sp. (see Fig. 16 below).

**Remarks.** Species of *T. amazonicus* species-group are similar to:

*T. stephani* Marek, 2020 (Figs. 14, 14a) (it differs mainly by the widest part of pronotum being just before the base, and strongly by male genitalia);

*T. strandi* Obenberger, 1934 (Figs. 15, 15a) (it differs mainly by extension of elytral ornamental pubescence (pattern), stouter body and strongly by male genitalia (apex of phallus (median lobe)).

## DESCRIPTIONS OF NEW SPECIES

### *Taphrocerus rondonicus* sp. nov.

(Fig. 4)

**Type locality.** Brazil, Rondonia, Fazenda Rancho Grande, 62 km S Ariquemes, 650 m. S 10,32 W 62,48.

**Type specimens.** Holotype (♀): „BRAZIL: RONDONIA, Fazenda Rancho Grande, 62 km S Ariquemes, 650 m. S 10,32 W 62,48, 12-22 November 1991, E. M. Fisher collector“ (JMSC).

**Diagnosis.** Medium-sized (3.45 mm), broadly elongate, oval, stout, about 2.75 times longer than wide, widest at humeri, moderately convex above, elytra flattened, rather strongly lustrous above; dorsal surface black, elytra with slight brown-violet tinge; beneath black including legs, antennae black with strong bluish-green tinge; 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, but not reaching apices.

**Description of holotype.** Head rather large, wide, markedly narrower than posterior pronotal margin; clypeus widely „V-shaped“, very strongly shagreened, separated from frons by a fine carina, epistomal pores very small, touching each other, at the middle above clypeus; frons feebly convex, rather finely shagreened, with wide but rather shallow depression at anterior half and shallow, triangular depression at posterior one, the depressions are conjoined by short sulcus, relative densely pubescent by longer, white setae at anterior depression and with a few very short, white setae at the triangular depression; vertex rather strongly convex, rather strongly shagreened, distinctly depressed at middle anteriorly, sparsely punctate by extremely fine, almost inconspicuous, simple punctures, with a fine groove at middle longitudinally, rather sparsely covered by thin, long relatively, „dirty“ yellow setae; eyes large, ovoid, rather strongly projecting beyond outline of head, well visible from above; antennae rather long, narrow, antennomeres 6-11 widened.

Pronotum rather strongly convex, 1.80 times as wide as long, widest at the beginning of basal third; transversely depressed along anterior margin, the depression is narrow and deep laterally becoming wide and shallow to the middle and shortly but distinctly interrupted at middle, broadly and rather deeply depressed lateroposteriorly, with very obsolete, almost indistinct, short sulcus longitudinally at the middle of disc anteriorly; with a very vague bump lateroposteriorly; anterior margin widely rounded, very slightly emarginate at middle, posterior margin strongly biemarginate, widely emarginate in front of scutellum, very slightly narrower than base of elytra, sides very shortly subparallel anteriorly, then strongly, almost straight dilated posteriorly to the beginning of basal third, then strongly angulate and then strongly emarginate and shortly subparallel to the base; surface strongly shagreened on the disc becoming very finely so laterally, ocellate-punctate by medium-sized punctures at the depressions and in front of scutellum, each puncture with thin, long relatively, white seta, except for yellowish setae anteriorly on the disc at middle; scutellum cordiform, very widely rounded anteriorly, rather finely shagreened, moderately lustrous.

Elytra flattened, 1.99 times as long as wide, widest at humeri, slightly wider at humeri than pronotum at the widest part; lateral margins widely emarginate behind humeri, shortly and rather weakly rounded at middle, then slowly, arcuately tapering towards rather widely and feebly separately rounded apices; apices very indistinctly serrate by shallow, blunt teeth; humeral swelling moderately developed, laterobasal depression small but rather deep, well distinct; surface strongly shagreened at basal half becoming more finely, almost inconspicuously shagreened posteriorly, punctures in rows longitudinally more deeper and larger at basal half along suture becoming fine and almost inconspicuous posteriorly, disappearing at apical fourth which is somewhat corrugate; an ornamental pubescence (pattern) of long relatively, white setae as follows: a few setae anterolaterally, sparse, wide, perisutural stripe at basal fourth, wide, transverse stripe before the middle, two (1+1) large, dense spots at anterior half of apical fourth, a few setae at apices; posthumeral elytral carina strongly elevated, entire, sharp, extending from humeri to very near of apices.

Ventral surface very lustrous, strongly shagreened, abdomen rather densely white pubescent by thin, long setae, punctate by medium-sized, „U-turned up-shaped“ punctures on first visible sternite; anal ventrite rather narrowly rounded, with small but rather deep emargination on apical margin, last sternite slightly emarginate at apex, preapical groove following outline of margin wide, truncate at apex; antennal grooves long, deep and rather narrow; prosternal process shortly elongate, very strongly constricted between procoxae, very strongly dilated behind, apex rhomboidal, strongly shagreened, with deep and very wide groove at middle longitudinally, with a few very short, almost inconspicuous, white setae, impunctate.

**Sexual dimorphism.** Male unknown.

**Measurements.** Length 3.45 mm; width 1.25 mm.

**Differential diagnosis.** *T. rondonicus* sp. nov. belongs to *T. amazonicus* species-group; for the definition of the species-group see above and for the key to species see below.

**Etymology.** The specific epithet is derived from Brazilian state Rondonia where the holotype was collected; adjective.

***Taphrocerus manausensis* sp. nov.**

(Fig. 5)

**Type locality.** Brazil, Amazonas, Manaus.

**Type specimens.** Holotype (♀): „Brazil, Amazonas, Manaus, viii. 1992, J. Marek lgt.“ (JMCS).

**Diagnosis.** Medium-sized (3.00 mm), broadly elongate, cuneiform, stout, about 2.7 times longer than wide, widest at humeri and before the middle of elytra, moderately convex above, elytra flattened, rather strongly lustrous above; very slightly bicolorous above: head and pronotum black, elytra black with very slight purple-violet tinge; beneath black

including legs, antennae black with very feeble golden lustre; 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 rather large, wide, distinctly narrower than posterior pronotal margin; clypeus widely „V-shaped“, very strongly shagreened, separated from frons by well elevated carina, epistomal pore one only, very large (two smaller pores probably conjoined), elongate transversely, at the middle above clypeus; frons rather strongly convex, strongly shagreened, widely and deeply depressed at middle longitudinally from clypeus to vertex, impunctate, with a row of extremely short, thin, white setae along the inner sides of the eyes and with row of markedly longer, thin, white setae at middle of the depression longitudinally; vertex moderately convex, strongly shagreened, slightly depressed at middle anteriorly, with a fine groove at middle longitudinally, sparsely and finely punctate by simple punctures, sparsely pubescent by short, thin, white setae anteriorly and laterally; eyes very large, broadly ovoid, rather strongly projecting beyond outline of head, well visible from above; antennae rather short, narrow, antennomeres 6-11 widened.

Pronotum rather strongly convex, 2.07 times as wide as long, widest in the end of second-third; transversely depressed along anterior margin, the depression is more narrower and shallower (!) laterally and more wider and deeper (!) at middle, broadly and deeply depressed lateroposteriorly, with very short longitudinal sulcus at the middle of disc anteriorly, rather deeply and narrowly depressed along the sides anteriorly; with rather well elevated longitudinal bump lateroposteriorly; anterior margin very widely, regularly rounded, posterior margin strongly biemarginate, widely emarginate in front of scutellum, very slightly narrower than base of elytra, sides shortly subparallel anteriorly, then strongly arcuately dilated to the beginning of basal third, then angulate, then slightly emarginate and then subparallel to the base; surface strongly shagreened, ocellate-punctate by small punctures at the depressions and in front of scutellum laterally, each puncture with rather long, white seta, the setae are denser along the sides and at lateroposterior angles; scutellum cordiform, widely rounded anteriorly, strongly shagreened, rather strongly lustrous.

Elytra moderately convex, 2.13 times as long as wide, widest at humeri and before the middle, slightly wider at humeri than pronotum at the widest part; lateral margins widely emarginate behind humeri, shortly and rather strongly rounded at middle, then almost straight tapering towards rather widely and almost conjointly rounded apices; apices serrate by sharp but very shallow teeth; humeral swelling well developed, laterobasal depression small but rather deep, well distinct; surface strongly shagreened, punctures in rows longitudinally more deeper and larger at basal half becoming fine posteriorly and almost inconspicuous at apical fourth; an ornamental pubescence (pattern) of rather dense, long relatively, somewhat widened at base, white setae as follows: two (1+1) longitudinally oval spots in the end of basal fourth near suture, rather wide, straight transverse stripe at the middle, consisting of eight (4+4) longitudinal stripes, anterior half of apical fourth entirely, densely pubescent, posterior half of apical fourth with a few, very short setae only; posthumeral elytral carina strongly elevated, entire, sharp, extending from humeri to very near of apices.

Ventral surface strongly shagreened, abdomen moderately lustrous, sparsely and almost regularly pubescent by thin, very short, white setae and with markedly more longer and denser white setae in the short stripe along the top of last sternite, sparsely ocellate-punctate by small, circular punctures opened posteriorly, the punctures becoming distinctly more finer and smaller apically; anal ventrite rather narrowly rounded, with rather deep and wide quadrate emargination on apical margin, preapical groove following outline of margin truncate apically, narrow; antennal grooves long, deep, widened on prosternum; prosternal process elongate, sides moderately dilated behind, apex rhomboidal, strongly shagreened, with deep, oval, long and wide sulcus at middle longitudinally, asetose, with a few large, simple punctures along the sides.

**Sexual dimorphism.** Male unknown.

**Measurements.** Length 3.00 mm; width 1.10 mm.

**Differential diagnosis.** *T. manausensis* sp. nov. belongs to *T. amazonicus* species-group; for the definition of the species-group see above and for the key to species see below; *T. manausensis* sp. nov. differs from all known species of *T. amazonicus* species-group by deep, wide, not interrupted, longitudinal depression on vertex and frons (see Fig. 5a).

**Etymology.** The specific epithet is derived from the type locality (Manaus, Brazil); adjective.

***Taphrocerus mouckai* sp. nov.**

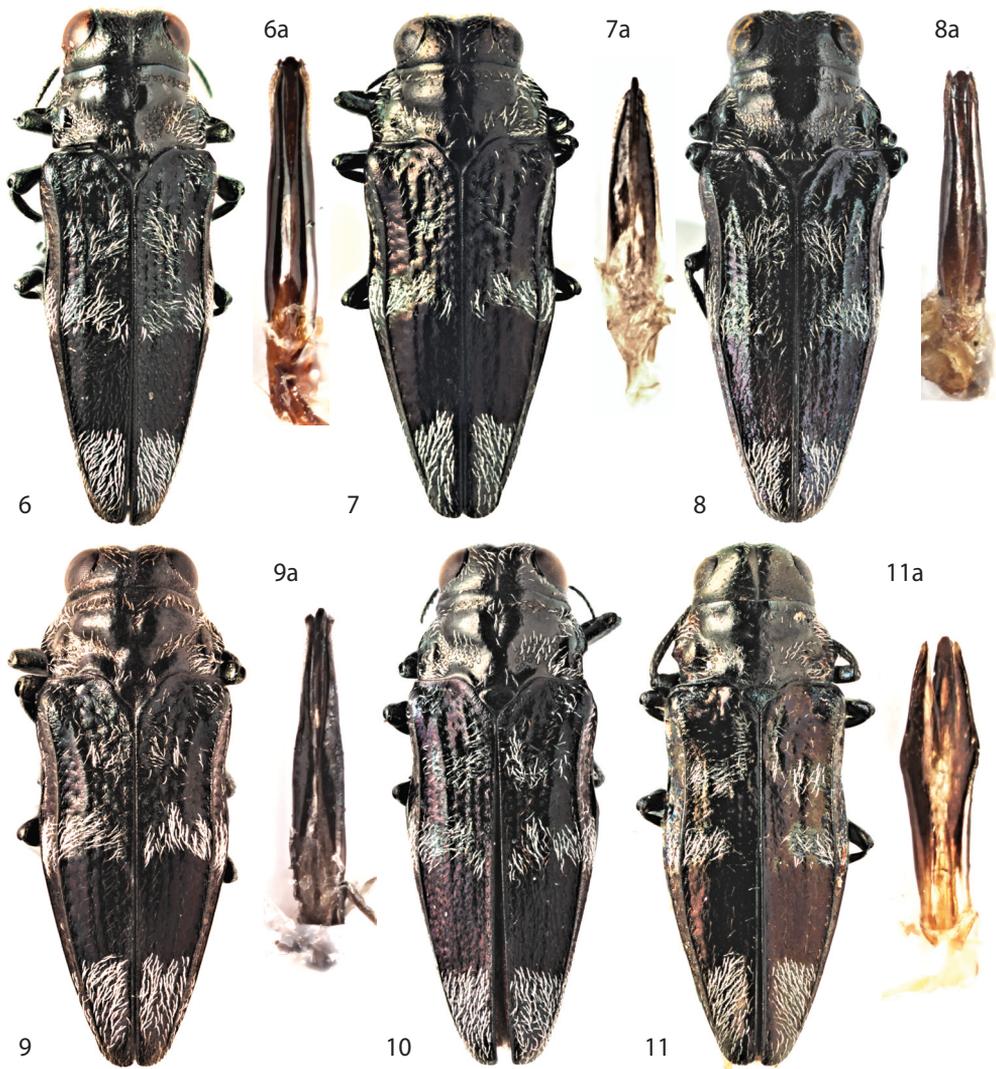
(Fig. 10)

**Type locality.** Brazil, Rondonia, Fazenda Rancho Grande, 62 km S Ariquemes, 650 m. S 10,32 W 62,48.

**Type specimens.** Holotype (♀): „BRAZIL: RONDONIA, Fazenda Rancho Grande, 62 km S Ariquemes, 650 m. S 10,32 W 62,48, 12-22 November 1991, E. M. Fisher collector“ (JMSC).

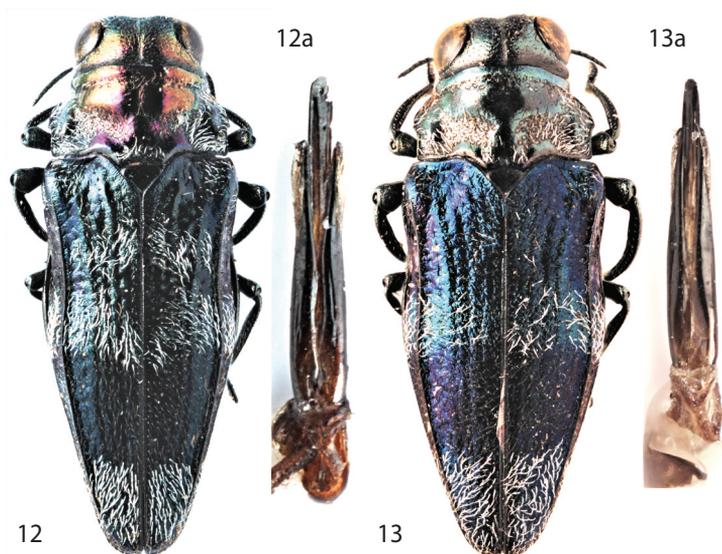
**Diagnosis.** Medium-sized (3.75 mm), broadly elongate, oval, about 2.75 times longer than wide, widest at humeri and before the middle of elytra, moderately convex above, elytra flattened, moderately lustrous above; dorsal surface black, frons with slight blue lustre, pronotum with narrow stripe of strong blue-green tinge along the sides, elytra with strong violet tinge and with strong blue tinge at humeri; beneath black including legs and antennae; elytra with an ornamental pubescence of white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, entire, sharp, strongly elevated.

**Description of holotype.** Head rather large, wide, distinctly narrower than posterior pronotal margin; clypeus widely „V-shaped“, strongly shagreened, separated from frons by well elevated carina, epistomal pore one only, large, elongate transversely, in the middle above clypeus; frons rather strongly convex, strongly shagreened, with wide, deep depression above clypeus and widely triangular, deep depression towards vertex, the depressions are conjointed by narrow but deep sulcus at middle longitudinally, which is well distinct in the

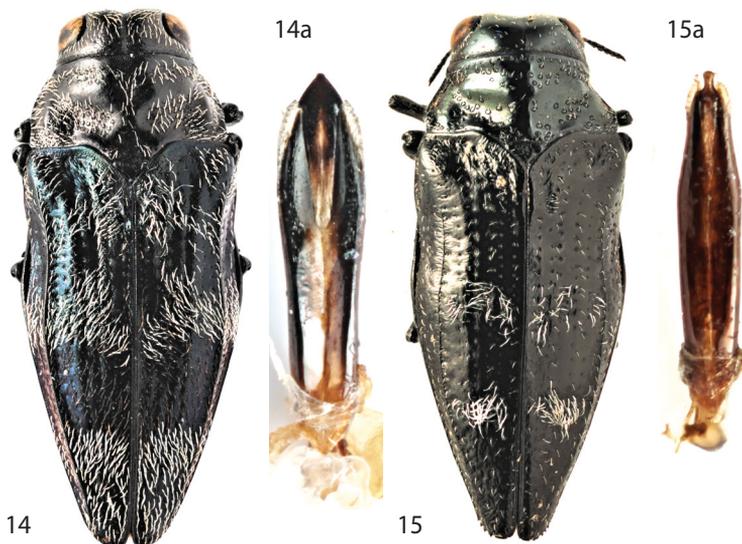


Figs. 6-11a: *Taphrocerus* species of *T. amazonicus* species-group. 6- *T. klimtschi* Obenberger, 1917, specimen ♂ from French Guiana, 3.80 mm (JMSC), 6a- aedeagus, 1.40 mm; 7- *T. hespenheidei* Marek, 2020, HT, ♂, 2.95 mm (JMSC), 7a- aedeagus, 0.80 mm; 8- *T. amazonicus* Kerremans, 1896, LT, ♂, 3.50 mm (BMNH), 8a- aedeagus, 1.15 mm; 9- *T. hornburgi* Marek, 2017, HT, ♂, 3.25 mm (MUSM), 9a- aedeagus, 1.10 mm; 10- *T. mouckai* sp. nov., HT, ♀, 3.75 mm; 11- *T. fisheri* Obenberger, 1924, ST, ♂, 4.05 mm (NMPC), 11a- aedeagus, 0.95 mm (note: = probably syn. of *T. deplanatus* Théry, 1923).

triangular depression as far as vertex, rather densely pubescent by white setae at anterior depression (! female, but pubescence almost as „fronto-clypeal pubescent stripe“ in male !), coarsely punctate by simple punctures at both depressions; vertex strongly convex, strongly shagreened, with a fine groove at middle longitudinally, very finely punctate by simple



Figs. 12-13a: *Taphrocerus* species of *T. amazonicus* species-group. 12- *T. michaeli* Marek, 2017, specimen ♂ from Peru, Panguana, 4.05 mm (JMSC), 12a- aedeagus, 1.20 mm; 13- *T. hyacinthus* Marek, 2020, HT, ♂, 3.95 mm (JMSC), 13a- aedeagus, 1.25 mm.



Figs. 14-15a: 14- *T. stephani* Marek, 2020, HT, ♂, 4.05 mm (JMSC), 14a- aedeagus (PT), 1.05 mm; 15- *T. strandi* Obenberger, 1934, PLT, ♀, 4.00 mm (NMPC), 15a- aedeagus of LT, 1.15 mm.



Fig. 16: The locality of *T. michaeli* (Peru, Huánuco, Distrito de Yuyapichis, ACP Panguana, 230 m). Photo S. Gottwald with note: „The collection site of *Taphrocerus stephani*, which I took on the day of sampling (12.10.2016). Specimens of *T. stephani* (in association with some *T. michaeli*) were flying and sitting on the leaves of several palm trees growing on a meadow. The palms were of different size and age, with the smaller plants easier to collect on“.

punctures, pubescent by cream-white setae, somewhat widened at base; eyes large, ovoid, moderately projecting beyond outline of head, well visible from above; antennae long, narrow, antennomeres 6-11 distinctly widened.

Pronotum rather strongly convex at anterior half, 1.77 times as wide as long, widest at the beginning of basal third; narrowly and rather deeply transversely depressed along anterior margin, broadly and rather deeply so lateroposteriorly, narrowly and deeply so along the sides, disc with rather shallow, circular depression at middle anteriorly and with short but deep sulcus at the depression longitudinally; with rather well elevated longitudinal bump lateroposteriorly; anterior margin widely rounded, widely and rather deeply emarginate at the middle, posterior margin strongly biemarginate, widely emarginate in front of scutellum, very slightly narrower than base of elytra, sides shortly subparallel anteriorly, then strongly, arcuately dilated posteriorly to the beginning of basal third, then angulate, strongly emarginately constricted and then subparallel to the base; surface strongly shagreened, ocellate-punctate by rather small punctures at the depressions and in front of scutellum, each puncture with rather long, thin, white seta; scutellum cordiform, rather strongly rounded anteriorly, strongly shagreened, moderately lustrous.

Elytra rather strongly flattened, 2.04 times as long as wide, widest at humeri and before the middle, distinctly wider at humeri than pronotum at the widest part; lateral margins rather shortly and weakly emarginate behind humeri, shortly and rather strongly rounded at middle, then very slowly arcuately tapering towards rather narrowly and very feebly separately rounded apices; apices almost smooth; humeral swelling well developed, laterobasal depression small and shallow; surface strongly shagreened at basal half and along the suture, punctures in rows longitudinally more deeper and larger at basal half becoming fine and almost inconspicuous posteriorly; an ornamental pubescence (pattern) of white setae as follows: sparse, thin setae at lateroanterior angles, wide and rather sparse perisutural stripe at basal fourth, becoming in transverse stripe at the beginning of second-fourth, wide and slightly irregular („zig-zag“) transverse stripe at the middle, dense and wide setae at apical fourth; posthumeral elytral carina strongly elevated, entire, sharp, extending from humeri to near of apices.

Ventral surface strongly shagreened, very lustrous, abdomen pubescent by thin, long, white setae, more denser laterally and apically, punctate by circular punctures opened posteriorly, the punctures are large on first visible sternite and becoming more fine apically; anal ventrite rather narrowly rounded, with rather shallow, small, semicircular emargination on apical margin, preapical groove following outline of margin wide, truncate at apex; antennal grooves long, rather narrow and deep; prosternal process shortly elongate, very strongly constricted between procoxae, very strongly dilated behind, apex rhomboidal, strongly shagreened, with deep and rather wide sulcus at middle longitudinally, with extremely short, white setae, rather coarsely punctate.

**Sexual dimorphism.** Male unknown.

**Measurements.** Length 3.75 mm; width 1.35 mm.

**Differential diagnosis.** *T. mouckai* sp. nov. belongs to *T. amazonicus* species-group; for the definition of the species-group see above, and for the key to species see below.

**Etymology.** Named in honour of my friend Michal Moučka (Kutná Hora, Czech Republic), my schoolfellow from secondary school in 1980-1984, an amateur palaeontologist, which found the femur of an iguanodon (*Burianosaurus augustai*) in Kutná Hora in 2003 as the first „undisputed“ dinosaur skeletal remains in Czech Republic; patronymic.

KEY TO SPECIES OF THE *T. amazonicus* species-group (♂♂\*\*)

- 1 Vertex strongly protruding anteriorly (DV, LV); 4.00-4.50 mm; habitus as in Fig. 11, aedeagus as in Fig. 11a; Brazil: Goiás ..... *T. deplanatus* Théry, 1923, *T. fisheri* Obenberger, 1924\* .....
- Vertex moderately convex or depressed at middle, not protruding anteriorly (DV, LV) ..... 2
- 2 Frons convex or very feebly, almost inconspicuously depressed at middle (DV) ..... 3
- Frons distinctly depressed at middle (DV) ..... 5

- 3 Eyes medium-sized, less projecting beyond outline of head, less visible from above; pronotum distinctly narrower at the widest part than elytra at humeri; more slender species, more than 2.9 times longer than wide, elytra about 2.20 times as long as wide; pronotal lobe slightly but distinctly emarginate; pronotal sides markedly emarginate behind the widest part; black with very feeble purplish lustre; 4.10 mm; habitus as in Fig. 1, aedeagus as in Fig. 1a; Peru: Madre de Dios ..... *T. huggerti* Marek, 2016
- Eyes large, more projecting beyond outline of head, well visible from above; pronotum slightly narrower at the widest part than elytra at humeri only; more stouter species, less than 2.9 times longer than wide, elytra about 2.05 times as long as wide; pronotal lobe widely regularly rounded; pronotal sides very slightly emarginate behind the widest part; black with very strong metallic-blue, violet or purple lustre or tinge ..... 4
- 4 Vertex more convex (FV); eyes narrowly oval; „fronto-clypeal pubescent stripe“ dense, wide, consisting of cream-white, wide setae; frons with short but distinct carina towards vertex at middle longitudinally; last sternite distinctly pubescent apically; 3.00-3.50 mm; habitus as in Fig. 2, aedeagus as in Fig. 2a; Brazil: Amazonas ..... *T. bifasciatus* Kerremans, 1900
- Vertex less convex (FV); eyes broadly oval; „fronto-clypeal pubescent stripe“ sparse, consisting of white, thin setae; frons with short but distinct sulcus towards vertex at middle longitudinally; last sternite very sparsely pubescent, almost asetose; 3.20-3.80 mm; habitus as in Fig. 3, aedeagus as in Fig. 3a; Brazil: Amazonas, Bolivia: Santa Cruz ..... *T. balthasari* Obenberger, 1934
- 5 Black species with more or less intensive blue, green or violet tinge or lustre ..... 6
- Species with strongly metallic-blue or metallic-green elytra ..... 12
- 6 The apical eighth of elytra asetose or very sparsely, almost inconspicuously, irregularly pubescent ..... 7
- Entire apical fourth of elytra densely pubescent ..... 8
- 7 Larger species, oval body shape; frons with two depressions - wide, shallow depression at anterior half and triangular depression at posterior one, the depressions are conjoined by short sulcus, densely pubescent by longer, white setae at anterior depression and with a few very short, white setae at the triangular depression; 3.45 mm; habitus as in Fig. 4; Brazil: Rondonia ..... *T. rondonicus* sp. nov.
- Smaller species, cuneiform body shape; frons widely, deeply depressed at middle longitudinally from clypeus to vertex, with a row of extremely short, white setae along the inner sides of the eyes and with row of markedly longer, white setae at middle of the depression longitudinally; 3.00 mm; habitus as in Fig. 5; Brazil: Amazonas ..... *T. manausensis* sp. nov.
- 8 Slender species, more than 2.90 times longer than wide; 3.80-4.20 mm; habitus as in Fig. 6, aedeagus as in Fig. 6a; Brazil: Rio Grande do Norte, Amazonas\*\*\*\*; French Guiana ..... *T. klimbschi* Obenberger, 1917
- Stouter species, less than 2.75 times longer than wide ..... 9
- 9 Pronotum wider, about 2.1 times wider than long; elytra straight tapering at apical half; apices separately rounded; 2.95 mm; habitus as in Fig. 7, aedeagus as in Fig. 7a; Peru: Loreto ..... *T. hespenheidei* Marek, 2020
- Pronotum narrower, about 1.9 times wider than long; elytra very slowly but distinctly arcuately tapering at apical half; apices conjointly rounded ..... 10
- 10 Frons separated from vertex by fine carina interrupted at middle\*\*\*; 3.50 mm; habitus as in Fig. 8, aedeagus as in Fig. 8a; Brazil: Amazonas ..... *T. amazonicus* Kerremans, 1896
- Frons not separated from vertex by carina ..... 11
- 11 Smaller species, more attenuate posteriorly (cuneiform body shape); frons (! in female !) almost asetose, with one depression only (deep, triangular, in posterior half); prosternal process very weakly, almost inconspicuously depressed at middle longitudinally; 3.00-3.25 mm; habitus as in Fig. 9, aedeagus as in Fig. 9a; Brazil: Amazonas\*\*\*\*; Peru: Huánuco and Loreto\*\*\*\* ..... *T. hornburgi* Marek, 2017
- Larger species, less attenuate posteriorly (oval body shape); frons (! in female !) with two depressions - wide, deep depression in anterior half and vague triangular depression at posterior one, the depressions are conjoined by narrow but deep sulcus at middle longitudinally, which is well distinct (deep) in the vague triangular depression as far as vertex; prosternal process with well distinct sulcus at middle longitudinally; 3.75 mm; habitus as in Fig. 10, Brazil: Rondonia ..... *T. mouckai* sp. nov.
- 12 Strongly bicolorous species: head and pronotum golden-purple, elytra metallic blue; somewhat slender species, about 2.8 times longer than wide; 4.05-4.40 mm; habitus as in Fig. 12, aedeagus as in Fig. 12a; Peru: Huánuco ..... *T. michaeli* Marek, 2017
- Slightly bicolorous or multicoloured species: head and pronotum black with light blue-green tinge, elytra metallic blue, sometimes with purplish areas; somewhat stouter species, about 2.7 times longer than wide; 3.30-3.95 mm; habitus as in Fig. 13, aedeagus as in Fig. 13a; Peru: Huánuco, Madre de Dios and Ucayali; Venezuela: Amazonas ..... *T. hyacinthus* Marek, 2020

\**T. fisheri* is probably synonym of *T. deplanatus*, but I didn't have the opportunity to study the holotype of *T. deplanatus* in detail and to compare it with the type (ST) of *T. fisheri* directly (see also remarks in Marek 2017: 155)  
\*\*except for *T. rondonicus* sp. nov., *T. manausensis* sp. nov. and *T. mouckai* sp. nov., that are known from unique female specimens only

\*\*\*Kerremans gave this character in his description for *T. bifasciatus* in 1900, but *T. bifasciatus* has not any carina between the frons and vertex (note: Obenberger took over this mistake in his keys in 1924 and 1934)

\*\*\*\***records new to country and state (department):** *T. klimski*: „BRAZIL: Am., Reserva Ducke, 26km NE Manaus, Barbosa, M.G.V. / Plot B, Malaise 2, October 1995 / BMNH {E}, 2003-84“ (1 ♂, BMNH, **new to Brazilian state Amazonas**); *T. hornburgi*: „BRAZIL: Manaus, AM., INPA/Smithsonian fst., 2°25'S 59°50'W, R.K.Didham. ii. 1994 /Canopy Fog, Fst Edge transect, 26 metres, 2/29 / BMNH {E}, 2003-84“ (1 ♂, BMNH, **new to Brazil**); „PERU: Loreto Prov., Amazon Safari Camp, Rio Mamón NNW Iquitos, ca. 3°42'S 73°14'W / 25. vi. 1978, H. A. Hespeneheide / PALM / T 1049“ (4 ♂♂, 1 ♀, CHAH, JMCS, **new to Peruvian Department Loreto**).

ACKNOWLEDGEMENTS. I would like to thank the curators in National Museum in Prague, namely Jiří Hájek, Vítězslav Kubáň and Lukáš Sekerka for possibility of examining material in their care and for possibility to make photos of the specimens mentioned in this paper. My thanks also go to the curators in Natural History Museum in London (England), namely to Maxwell V. L. Barclay and Michael Geiser and to the curators in Hungarian Natural History Museum in Budapest (Hungary), namely Ottó Merkl, for loan and possibility of examining material in their care and to Stephan Gottwald (Berlin, Germany) and Michael Hornburg (Berlin, Germany) for possibility of examination (and donation partially) material of *Taphrocerus* coming from their collections and to Stephan for providing me with the photo of *T. michaeli* locality. Special thanks are due to Henry Hespeneheide (Los Angeles, U.S.A.), who provided me with his very rich and important material of *Taphrocerus* coming from his collection and donated kindly the holotypes of newly described species from his material in „collection *Taphrocerus* Obenberger/Marek“ stored in NMPC.

## REFERENCES

- KERREMANS C. 1900: Description de trois Buprestides nouveaux du Musée National Hongrois. *Természetráji Füzetek* 23: 378-380.
- MAREK J. 2016: Studies on the genus *Taphrocerus* (Coleoptera: Buprestidae: Agrilinae) part III. *Studies and Reports, Taxonomical Series* 12(1): 139-163.
- MAREK J. 2017: Studies on the genus *Taphrocerus* (Coleoptera: Buprestidae: Agrilinae) part V. *Studies and Reports, Taxonomical Series* 13(1): 139-165.
- OBEENBERGER J. 1924: Révision monographique du genre *Taphrocerus* Solier. (Col. Buprestidae). *Acta Entomologica Musaei Nationalis Pragae* 2: 45-83.
- OBEENBERGER J. 1934: Monographie du genre *Taphrocerus* Sol. (Col. Bupr.). *Acta Entomologica Musaei Nationalis Pragae* 12: 5-62.

Received: 15.10.2020

Accepted: 30.11.2020

Printed: 31.3.2021