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Studies on the genus *Taphrocerus* (Coleoptera: Buprestidae: Agrilinae) part V.

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Taxonomy, new species, new country records, Coleoptera, Buprestidae, *Taphrocerus*

Abstract. The fifth part of the study on the genus *Taphrocerus* Solier, 1833 (Coleoptera: Buprestidae: Agrilinae) is presented. Eight species are newly described: *T. auratus* sp. nov. (French Guiana), *T. gottwaldi* sp. nov. (Trinidad and Tobago), *T. hornburgi* sp. nov. (Peru), *T. iguazuanus* sp. nov. (Argentina), *T. michaeli* sp. nov. (Peru), *T. problematicus* sp. nov. (Argentina), *T. sekerkai* sp. nov. (Panama) and *T. subauratus* sp. nov. (Venezuela). Records new to country are presented for *T. exiguus* Obenberger, 1934 (Surinam, Trinidad and Tobago), *T. finitimus* Obenberger, 1924 (French Guiana, Trinidad and Tobago), *T. halffteri* Cobos, 1978 (Venezuela), *T. nigritulus* Waterhouse, 1889 (Venezuela), *T. obscurellus* Obenberger, 1934 (Brazil, Surinam, Venezuela) and *T. sulcifrons* Fisher, 1922 (Venezuela) and notes for related species are contributed.

INTRODUCTION

This is the fifth part of the study on the genus *Taphrocerus* Solier, 1833 serving as a basis for a revision of this large buprestid genus and belongs to the series of studies resulting from the study of the type material and determination of extensive numbers of specimens mostly from South America. The data on distribution of most species are provisional and incomplete, or known only as „type localities" from the descriptions. The very wide distribution of many species is expected, mainly in species with „base of distribution" in the Amazonia.

MATERIALS AND METHODS

Designation of holotype specimens are provided by printed red label with black margin. Designation of paratype(s) specimen(s) is provided by white label with wide red border and red capital letters PARATYPE.

Abbreviations used in the text: ( ) = my remarks and additions, HT = holotype, AT = allotype, PT (PTs) = paratype (paratypes), ST = syntype, ST1 (ST2, ST3 …) = specimen labelled as syntype number 1 (nr 2, nr 3 …), DV = dorsal view; FV = frontal view, FVV = fronto-ventral view, LV = lateral view; (p) = printed; (h) = handwritten; (Obenberger´s MS) = Obenberger´s manuscript.

The 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, occasional exceptions are noted at relevant places.

Specimens were measured to the nearest 0.05 mm.

The following collection codens are used throughout the text:

HMCM collection of Hans Mühle, München, Germany;
JMSC collection of Jaroslav Marek, Sýkořice, Czech Republic (it will be deposited in NMPC);
MHCB collection of Michael Hornburg, Berlin, Germany;
MNCN Museo Nacional de Ciencias Naturales, Madrid, Spain;
MNHN Muséum National d´Histoire Naturelle, Paris, France;
NMPC National Museum, Praha, Czech Republic;
SGCB collection of Stephan Gottwald, Berlin, Germany.

RESULTS

DESCRIPTIONS OF NEW SPECIES

Taphrocerus problematicus sp. nov.
(Figs. 1, 1a)

Type locality. Argentina, Corrientes.

Type specimens. Holotype (♂): „Argentina NE, S of Corrientes, River Parana, 16. i. 2009 Snížek“ (JMSC). Paratype the same data as holotype (1 ♀, JMSC).

Diagnosis. Medium-sized (3.50-3.65 mm), rather broadly elongate, moderately convex above, moderately lustrous; uniformly bronze above, beneath more darker including legs and antennae; sparsely, uniformly covered by short thin white setae; pronotal prehumeral and elytral posthumeral carinae absent.

Description of holotype. Head medium-sized, as wide as anterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by fine carina, epistomal pores large, transversely elongate, separated less than their own diameter; frons convex, strongly shagreened, widely depressed medially, with a few short white setae above clypeus and along the inner sides of eyes only; vertex moderately convex, rather moderately shagreened, slightly depressed at middle, finely grooved at middle longitudinally, finely punctured, sparsely covered by very short white setae; eyes large, ovoid, very slightly projecting beyond outline of head; antennae rather short, wide.

Pronotum moderately convex, 1.68 times as wide as long, widest at basal fifth; rather narrowly and shallowly depressed along anterior margin, broadly so lateroposteriorly, with feebly elevated bump at lateroposterior angles longitudinally; anterior margin widely regularly rounded, posterior margin rather feebly biemarginate, widely emarginate in front of scutellum, sides feebly dilated at first fifth, than more strongly dilated to basal fifth, than feebly constricted to the base; surface very strongly shagreened, sparsely covered by small circular punctures, each puncture with a short white seta; scutellum rather small, widely cordiform, strongly shagreened.

Figs. 1-2a: 1- *T. problematicus* sp. nov., HT ♂, 3.50 mm, 1a- aedeagus, 0.80 mm; 2- *T. aeneocupreus* Fisher, 1925, specimen ♂ from Cuba, Habana, 3.50 mm, 2a- aedeagus, 0.95 mm.

Elytra moderately convex, slightly wider at humeri than pronotum at base, 2.29 times as long as wide, widest just before the middle; lateral margins widely shallowly emarginate behind humeri, widely rounded at middle, than very slowly arcuately tapering towards almost conjointly rounded apices; apices rather strongly serrate laterally; humeral swelling feebly developed, laterobasal depression rather shallow and large; surface strongly shagreened, punctures in longitudinal rows larger and deeper at basal third, disappearing at apical third, apical third coarsely rugose; thin short white setae in rows longitudinally, somewhat densely at apical third; posthumeral elytral carina absent.

Ventral surface rather feebly lustrous, finely shagreened, abdomen rather densely but shallowly punctured by elongate „U-turned-up-shaped“ punctures, rather densely covered by thin and long white setae; anal ventrite widely rounded apically, preapical groove following outline of margin very wide, regularly semicircular; antennal grooves wide, rather shallow; prosternal process slightly dilated between procoxae, very strongly dilated behind, apex rhomboidal, surface strongly shagreened, with very shallow and rather wide groove at middle longitudinally.

Aedeagus (Fig. 1a).

Sexual dimorphism. Observed in shape and structure of anal ventrite: widely rounded apically with regularly semicircular preapical groove following outline of margin in male, subtruncate with subtruncate preapical groove and with a quadrate emargination on apical margin in female.

Measurements. Length 3.50-3.65 mm (holotype 3.50 mm); width 1.15-1.25 mm (holotype 1.15 mm).

Variability. Except for the size observed in general shape of body: HT ♂ more slender, 3.04 times longer than wide, PT ♀ more robust, 2.92 times longer than wide (additional specimens are needed to ascertain if this character is the sexual dimorphism).

Differential diagnosis. *T. problematicus* sp. nov. belongs to taxonomically very difficult species-group distributed all over the known area of the genus distribution (including unique species of *Taphrocerus* known from an Old World - *T. capensis* Hespenheide in Bellamy & Hespenheide, 1988 described from South Africa, Natal). This complex is characterized by a sculpture of dorsal side of body (namely by relatively unsculptured pronotum), very similar male genitalia and by a characteristic sexual dimorphism (see above) and contains a lot of previously described species (e.g. *T. nugator* (Gory, 1841), *T. agriloides* Crotch, 1873, *T. kerremansi* Dugés, 1891, *T. alutaceicollis* Obenberger, 1934, *T. haitiensis* Fisher, 1949, *T. sericans* Cobos, 1967 etc.) and a few undescribed species. *T. problematicus* sp. nov. differs mainly in having the quadrate emargination on apical ventrite very obsolete but markant in male, very deep but relatively narrow in female as well as other details of morphology and male genitalia. (See also the photos of closely related *T. aeneocupreus* Fisher, 1925 bellow (Figs. 2, 2a)).

Etymology. The specific epithet is the Latin adjective *problematicus* (problematic) to stress the fact that this species belongs to very difficult species-group of this genus.

Taphrocerus iguazuanus sp. nov.

(Figs. 3, 3a)

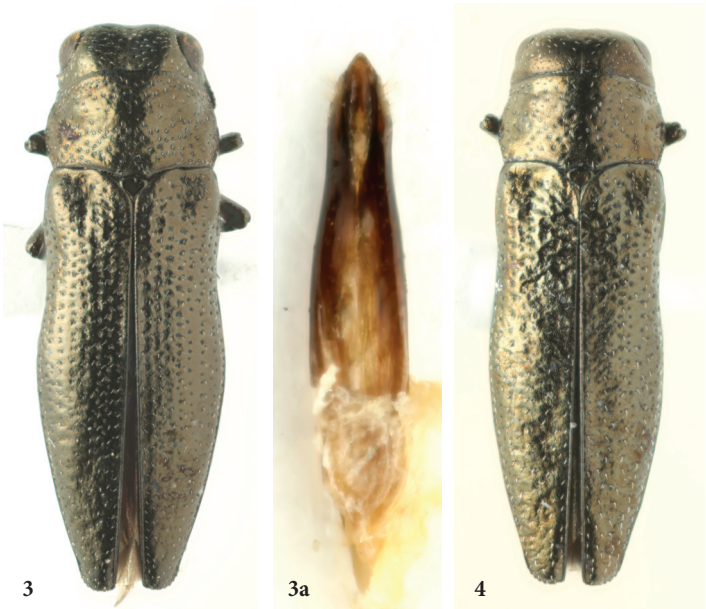
Type locality. Argentina, Puerto Iguazú.

Type specimen. Holotype (♂): „Argentina Misiones, Puerto Iguazu, xi. 1995“ (JMSC).

Diagnosis. Medium-sized, (3.75 mm), elongate, moderately convex above, lustrous; uniformly bronze with coppery reflections above, beneath black with strong coppery tinge including legs and antennae; sparsely uniformly covered by short thin white setae; pronotal prehumeral and elytral posthumeral carina absent.

Description of holotype. Head medium-sized, wide, slightly narrower than anterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by fine carina, epistomal pores large, transversely elongate, separated less than their own diameter; frons moderately convex, broadly and shallowly depressed at middle, very strongly shagreened towards vertex, finely shagreened, almost smooth above clypeus, with a few thin and long white setae along inner sides of eyes and above clypeus only; vertex moderately convex, broadly shallowly depressed at middle, rather strongly shagreened, with fine groove at middle longitudinally, sparsely and shallowly punctured, sparsely covered by short white setae; eyes large, ovoid, moderately projecting beyond outline of head; antennae rather short, wide.

Pronotum moderately convex, 1.55 times as wide as long, widest at basal third; shallowly, rather widely depressed along anterior margin, broadly and shallowly so lateroposteriorly; with very vague prominence at lateroposterior angles longitudinally; anterior margin



Figs. 3-4: 3- *T. iguazuanus* sp. nov., HT ♂, 3.75 mm, 3a- aedeagus, 1.00 mm; 4- *T. kerremansi* Dugés, 1891, 3.45 mm, specimen ♀ from Mexico, Puebla.

widely rounded, straight at middle, posterior margin very feebly biemarginate but rather strongly, narrowly emarginate in front of scutellum, sides shortly parallel anteriorly, then regularly rounded to the base; surface very strongly shagreened, rather densely but shallowly punctured in the depressions, each puncture with a short thin white seta; scutellum rather small, triangular, rather strongly rounded anteriorly, finely shagreened.

Elytra moderately convex, wider at humeri than pronotum at base, 2.40 times as long as wide, widest at the middle; lateral margins rather widely and shallowly emarginate behind humeri, than rather strongly, arcuately dilated and rounded at the middle, than very slowly rounded to slightly spathulate, separately rounded apices; apices minutely serrate laterally; humeral swelling rather well developed, laterobasal depression small but rather deep; surface finely shagreened, punctures in longitudinal rows larger and deeper at basal half along suture, apical fifth coarsely rugose without punctures; thin short white setae in rows longitudinally; posthumeral elytral carina absent.

Ventral surface rather feebly lustrous, abdomen finely shagreened, sparsely punctured by shallow „U-turned-up-shaped“ punctures, sparsely covered by very short white setae, densely laterally; anal ventrite subtruncate, with a long quadrate emargination on apical margin, preapical groove following outline of margin very wide, regularly semicircular; antennal grooves short, wide; prosternal process elongate, strongly dilated behind, apex rhomboidal, shagreened, coarsely punctured; antennal grooves wide, rather shallow.

Aedeagus (Fig. 3a).

Sexual dimorphism. Female unknown.

Measurements. Length 3.75 mm; width 1.25 mm.

Differential diagnosis. Although the female of *T. iguazuanus* sp. nov. is unknown, this species undoubtedly belongs to the same species-group as *T. problematicus* sp. nov. described above, characterized mainly by relatively unsculptured pronotum, mostly uniformly coppery colouration of dorsal side of body, similar male genitalia and more or less sexually dimorphic structure of anal ventrite. *T. iguazuanus* sp. nov. differs from previously described species of this complex (see Differential diagnosis under *T. problematicus* sp. nov. above) mainly by male genitalia - parameres markedly tapered from about the middle proximally (Fig. 3a) and from the most similar species of this complex *T. kerremansi* Dugés, 1891 (Fig. 4) (described from Mexico, Tupataro) it can be distinguished by characters given in Table A.

Table A. Diagnostic characters of *T. iguazuanus* sp. nov. and *T. kerremansi* Dugés, 1891.

	T. iguazuanus	*T. kerremansi*
Frons	widely depressed at middle (FVV)	narrowly, rather deeply depressed at middle (FVV)
Vertex	widely depressed at middle	convex
Eyes	larger, moderately projecting beyond outline of head	smaller, not projecting beyond outline of head
Elytra	markedly narrower at humeri than at the middle	the same width at humeri as at the middle
Aedeagus	parameres markedly constricted at proximal half (Fig. 3a)	parameres more or less parallel

Etymology. The specific epithet is derived from the type locality (Puerto Iguazú).

Taphrocerus gottwaldi sp. nov.
(Fig. 5)

Type locality. Tobago, Canaan.

Type specimen. Holotype (♀): „Tobago, West Indies, Canaan Licht, iv. 1992, leg. Müller / Schlarbaum“ (JMSC).

Diagnosis. Large (4.25 mm), rather broadly elongate, moderately convex above, lustrous; head coppery with strong purple tinge at the middle of frons and vertex, pronotum coppery with strong purple tinge on the disc and strong golden-green lustre along anterior margin and laterally, scutellum brown with purple tinge at the middle and green tinge laterally, elytra light brown with golden-green lustre, more intensive laterally; beneath black with golden-brown lustre, legs and antennae black with golden-green lustre; elytra with an ornamental pubescence of long white setae; pronotal prehumeral and elytral posthumeral carina absent.

Description of holotype. Head large, wide, the same width as anterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by very fine carina, epistomal pores large, circular, touching each other; frons convex, strongly shagreened, finely grooved longitudinally at middle, widely transversely depressed above clypeus becoming in broad but shallow depression in direction to the vertex, sparsely irregularly punctured by rather deep and large punctures, with sparse, short but rather wide

Figs. 5-6: 5- *T. gottwaldi* sp. nov., HT ♀, 4.25 mm; 6- *T. albomaculatus* Fisher, 1928, 3.55 mm, specimen ♀ from „Jamaica“.

white setae in the depression above scutellum; eyes large, ovoid, not projecting beyond outline of head; antennae long, antennomeres 6-11 very wide.

Pronotum moderately convex, 1.83 times as wide as long, widest at basal third; narrowly depressed along anterior margin, more deeply laterally and almost interruptly at middle, broadly and deeply so along posterior margin but interrupted at middle; with a vague bump at lateroposterior angles; anterior margin widely rounded, pronotal lobe slightly emarginate, posterior margin biemarginate, feebly emarginate in front of scutellum, sides strongly dilated at anterior two thirds, than sharply angulate and emarginately constricted to the base; surface strongly shagreened, with medium-sized circular punctures at the depressions and on the disc, with thin white setae at the depressions, more dense and long at the depressions along posterior margin; scutellum widely cordiform, strongly shagreened.

Elytra moderately flattened, distinctly wider at humeri than pronotum at base, 2.08 times as long as wide, widest at humeri and just before the middle; margins widely emarginate behind humeri, rather widely rounded at the middle, than slowly, gradually tapering towards slightly spathulate and separately rounded apices; apices minutely serrate laterally, top of apices smooth; humeral swelling rather narrow but well developed, basal depression shallow and small; surface strongly shagreened, with a rows of punctures, larger and deeper at basal half, gradually disappearing posteriorly, with somewhat broad depressed parts covering by thin but rather long white setae creating an ornamental pubescence as follows: two (1+1) very sparse transversely oval spots lateroanteriorly, two (1+1) circular spots at the beginning of second-fourth near suture, wide transverse strip just before the middle becoming in narrower longitudinal perisutural strip at third-fourth, two (1+1) large triangular spots at apical fourth; posthumeral elytral carina absent.

Ventral surface lustrous, strongly shagreened, abdomen rather sparsely punctured by medium-sized circular punctures, very sparsely white pubescent; anal ventrite broadly elongate, very widely rounded at apex, preapical groove following outline of margin wide, deeply emarginate at apex; antennal grooves long and wide; prosternal process constricted between procoxae, strongly dilated behind, widely subrhomboidal at apex, widely grooved longitudinally at middle, surface rather finely shagreened.

Sexual dimorphism. Male unknown.

Measurements. Length 4.25 mm; width 1.50 mm.

Differential diagnosis. *T. gottwaldi* sp. nov. is similar to *T. albomaculatus* Fisher, 1928 (described from Jamaica, Cinchona) (Fig. 6) by its size, general shape of body, absence of posthumeral elytral carina and by elytral ornamental pubescence. It differs strongly by colouration as well as other details of morphology (see also Table B below).

Table B. Diagnostic characters of *T. gottwaldi* sp. nov. and *T. albomaculatus* Fisher, 1928.

	T. gottwaldi	*T. albomaculatus*
General shape of body	more robust	more slender
Colouration	head and pronotum coppery with strong purple tinge and golden-green lustre, elytra light brown with golden-green lustre	uniformly black with feeble golden-green lustre
Eyes	not projecting beyond outline of head	(slightly) projecting beyond outline of head
Pronotum	wider, more than 1.80 times wider than long; sides strongly angulate in maximal pronotal width; punctures in pronotal depressions medium-sized	narrower, less than 1.65 time wider than long; sides bluntly angulate in maximal pronotal width; punctures in pronotal depressions large
Elytra	the maximal width at humeri and just before the middle; wider, less than 2.10 times as long as wide; ornamental pubescence at apical half consisting of two (1+1) transverse strips just behind the middle becoming in longitudinal perisutural strips and two (1+1) large triangular spots at apical fourth	the maximal width just before the middle; slender, more than 2.25 times as long as wide; ornamental pubescence at apical half consisting of four (2+2) spots just behind the middle and rather narrower two (1+1) strips at apical fourth

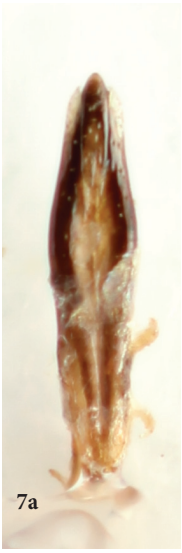
Etymology. Named after Stephan Gottwald (Berlin, Germany), specialist in the Buprestidae, donor of the holotype.

***Taphrocerus auratus* sp. nov.**

(Figs. 7, 7a)

Type locality. French Guiana, Acarouany.

Type specimens. Holotype (♂): „Guyane Francaise, Acarouany-Javouhey, J. Marek lgt. vi. 1993“ (JMSC). Paratypes (12): the same data as HT (5 ♀♀, JMSC); „Guyane Francaise, Cayenne Mt. Bourda, J. Marek lgt. v. 1992“ (1 ♀, JMSC); „Guyane Francaise, Kourou Guatemala, 19. viii. 2006 Snížek lgt.“ (1 ♀, JMSC); the same data but 15. xii. 2006 (3 ♂♂, 1 ♀, JMSC); „Guyane Francaise, Cayenne Le Larivot, 8. xii. 2006 Snížek lgt.“ (1 ♂, 1 ♀, JMSC).



Figs. 7-9: 7- *T. auratus* sp. nov., HT ♂, 2.80 mm, 7a- aedeagus, 0.55 mm; 8- *T. subauratus* sp. nov., HT ♂, 2.90 mm, 8a- aedeagus, 0.65 mm; 9- *T. semiinterruptus* Marek, 2016, HT ♀, 3.90 mm.

Diagnosis. Small (2.70-2.95 mm), rather broadly elongate, moderately convex above, very lustrous; above coppery with strong golden tinge, beneath black with golden reflections including legs, antennae black; elytra with two (1+1) interrupted strips transversely just behind the middle and two (1+1) spots at the beginning of apical fourth of rather long white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, well elevated, entire, sharp.

Description of holotype. Head medium-sized, slightly narrower than anterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by fine carina; epistomal pores large, slightly elongate transversely, separated more than their own diameter; frons widely, deeply depressed at middle longitudinally, finely shagreened, almost smooth above clypeus, asetose; vertex very finely shagreened, rather narrowly but deeply depressed at middle, with very fine groove at middle extending from anterior pronotal margin to frontal depression, sparsely, irregularly punctured by shallow circular punctures, sparsely covered by thin but rather long white setae; eyes medium-sized, oval, very feebly projecting beyond outline of head; antennae long, narrow.

Pronotum moderately convex, flattened at base, 1.90 times as wide as long, widest from basal fifth to just before the base; rather widely, shallowly depressed along anterior pronotal margin, broadly and deeply so lateroposteriorly, narrowly but deeply so along the sides,

with a vague prominence at lateroposterior angles; anterior margin very widely regularly rounded, posterior margin moderately biemarginate, narrowly and rather deeply emarginate in front of scutellum, sides shortly parallel anteriorly, than rather strongly, arcuately dilated to basal fifth, than parallel to just before the base; surface finely shagreened, punctured by large shallow circular punctures at the depressions, each puncture with thin but rather long white seta; scutellum medium-sized, cordiform, strongly shagreened.

Elytra moderately convex, flattened apically, the same width at humeri as pronotum at base, 1.98 times as long as wide, widest just before the middle; elytral margins rather narrowly but deeply emarginate behind humeri, widely, arcuately rounded at middle, than very slowly, almost straightly tapering towards separately rounded apices; apices finely serrate laterally, smooth at the top; humeral swelling moderately developed, laterobasal depression small but rather deep; surface rather strongly shagreened, punctures in longitudinal rows larger and deeper at basal half, disappearing apically, apical fourth coarsely corrugate; thin but rather long white setae in rows along the sides, along the inner margin of posthumeral carina and along suture, a few white setae behind scutellum, denser, longer and wider white setae in two (1+1) interrupted strips transversely just behind the middle and in two (1+1) spots at the beginning of apical fourth, apical fourth sparsely but markedly covered by thin, rather long white setae; posthumeral elytral carina well elevated, entire, sharp, reaching from humeri to very near of apex.

Ventral surface rather feebly lustrous, abdomen finely shagreened, punctured by large but shallow „U-turned-up-shaped“ punctures, with sparse, thin but rather long white setae laterally and apically; anal ventrite subtruncate, preapical groove following outline of margin regularly semicircular, wide; antennal grooves rather long and wide; prosternal process elongate, regularly dilated behind, apex rhomboidal, surface strongly shagreened, without punctures but widely, shallowly depressed at middle longitudinally.

Aedeagus (Fig. 7a).

Sexual dimorphism. Female externally similar to male.

Measurements. Length 2.70-2.95 mm (holotype 2.80 mm); width 1.10-1.20 mm (holotype 1.15 mm).

Variability. Observed in the elytral shape: elytra 1.94-2.05 times as long as wide (1.98 in the holotype) and some of the paratypes have somewhat darker colouration of dorsal surface.

Differential diagnosis. *T. auratus* sp. nov. is similar to *T. semiinterruptus* Marek, 2016 (Fig. 9) (described from Paraguay) by its colouration, general shape of body, similar pubescent design (pattern), by absence of pronotal prehumeral carina and by presence of sharp posthumeral elytral carina. *T. auratus* sp. nov. differs by small size, less projecting eyes beyond outline of head, pronotum the same width at base as elytra at humeri and mainly by entire posthumeral elytral carina, as well as many other details of morphology. See also Table C - Diagnostic characters of *T. auratus* sp. nov., *T. subauratus* sp. nov. and *T. semiinterruptus* bellow.

Etymology. The specific epithet is the Latin adjective *auratus* (golden) to stress the colouration of the dorsal side of this species.

Taphrocerus subauratus sp. nov.
(Figs. 8, 8a)

Type locality. Venezuela, Guri.

Type specimen. Holotype (♂): „Venezuela, Guri, Bolivar, 16. xii. 1987“ (JMSC).

Diagnosis. Small (2.90 mm), elongate, moderately convex above, lustrous; above coppery with strong golden reflections, beneath black including legs and antennae; elytra with two (1+1) very sparse but rather wide transverse strips of long white setae at the middle and two (1+1) denser but narrower strips of shorter but wider white setae at the beginning of apical fourth; prehumeral pronotal carina absent; posthumeral elytral carina present, well elevated, entire, sharp.

Description of holotype. Head medium-sized, slightly narrower than anterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by very fine carina; epistomal pores large, circular, separated less than their own diameter; frons rather feebly depressed at middle longitudinally, finely shagreened, with rows of very short thin white setae along inner sides of the eyes and longitudinally at middle only; vertex convex, very finely shagreened, very sparsely punctured by shallow circular punctures, sparsely covered by thin white setae, markedly longer anteriorly; eyes large, oval, rather strongly projecting beyond outline of head; antennae very long, narrow.

Pronotum moderately convex, 1.78 times as wide as long, widest at basal fourth; shallowly depressed along anterior margin, narrowly so laterally, very broadly so at middle, broadly and shallowly depressed lateroposteriorly, narrowly but deeply so along the sides; with a vague prominence at lateroposterior angles; anterior margin widely regularly rounded, posterior margin biemarginate, narrowly and deeply emarginate in front of scutellum, sides parallel at first fourth of their length, than strongly, arcuately dilated to basal fourth, than feebly constricted to the base; surface finely shagreened, punctured by large shallow circular punctures at the depressions and above scutellum, each puncture with thin but rather long white seta; scutellum rather large, regularly triangular with widely rounded anterior margin, strongly shagreened.

Elytra moderately convex, flattened apically, slightly wider at humeri than pronotum at base, 2.14 times as long as wide, widest just before the middle; elytral margins narrowly and feebly emarginate behind humeri, widely rounded at middle, than very slowly arcuately tapering towards conjointly rounded apices; apices finely, almost inconspicuously serrate; humeral swelling feebly developed, laterobasal depression very small and shallow; surface finely shagreened, punctures in longitudinal rows larger and deeper at basal half, disappearing apically, apical third coarsely corrugate; thin white setae in rows along the sides and along the inner margin of posthumeral elytral carina, a few white setae around scutellum, long white setae sparsely in two (1+1) strips transversely at the middle, denser and wider white setae in two (1+1) strips at the beginning of apical fourth, apical fourth sparsely but markedly covered by rather long white setae; posthumeral elytral carina well elevated, entire, sharp, reaching from humeri to near of apex.

Ventral surface feebly lustrous, abdomen finely shagreened, punctured by large but shallow and very elongate „U-turned-up-shaped“ punctures, with thin but long white setae laterally and apically; anal ventrite elongately rounded, preapical groove following outline of margin regularly semicircular, wide; antennal grooves very long and rather wide and deep; prosternal process elongate, dilated behind, apex rhomboidal, surface strongly shagreened, with very wide and rather deep groove at middle longitudinally.

Aedeagus (Fig. 8a).

Sexual dimorphism. Female unknown.

Measurements. Length 2.90 mm; width 1.00 mm.

Differential diagnosis. *T. subauratus* sp. nov. is very similar and probably closely related to *T. auratus* sp. nov. described above. It can be distinguished by more projecting eyes beyond outline of head, by pronotal shape and mainly by very feebly depressed frons (VV!) and male genitalia. See also Table C - Diagnostic characters of *T. auratus* sp. nov., *T. subauratus* sp. nov. and *T. semiinterruptus* Marek, 2016 below.

Table C. Diagnostic characters of *T. auratus* sp. nov., *T. subauratus* sp. nov. and *T. semiinterruptus* Marek, 2016.

	T. auratus	*T. subauratus*	*T. semiinterruptus*
Size	small (2.70-2.95 mm)	small (2.90 mm)	medium-sized (3.90 mm)
Frons	deeply depressed at middle (VV)	feebly depressed at middle (VV)	deeply depressed at middle (VV)
Eyes	medium-sized; very feebly projecting beyond outline of head	large; more projecting beyond outline of head	large; more projecting beyond outline of head
Pronotum	the same width at the widest part as elytra at humeri	narrower at the widest part than elytra at humeri	narrower at the widest part than elytra at humeri
Posthumeral elytral carina	entire (sharp)	entire (sharp)	interrupted (sharp x obsolete, with blunt edge x sharp)
Aedeagus	more slender, parameres more than 4.20 times longer than their maximal width (Fig. 7a)	more robust, parameres less than 3.40 times longer than their maximal width (Fig. 8a)	unknown

Etymology. The specific epithet is an adjective derived from the Latin adverb *sub* (under) and adjective *auratus* (golden) to stress the similarity with *T. auratus* sp. nov. described above.

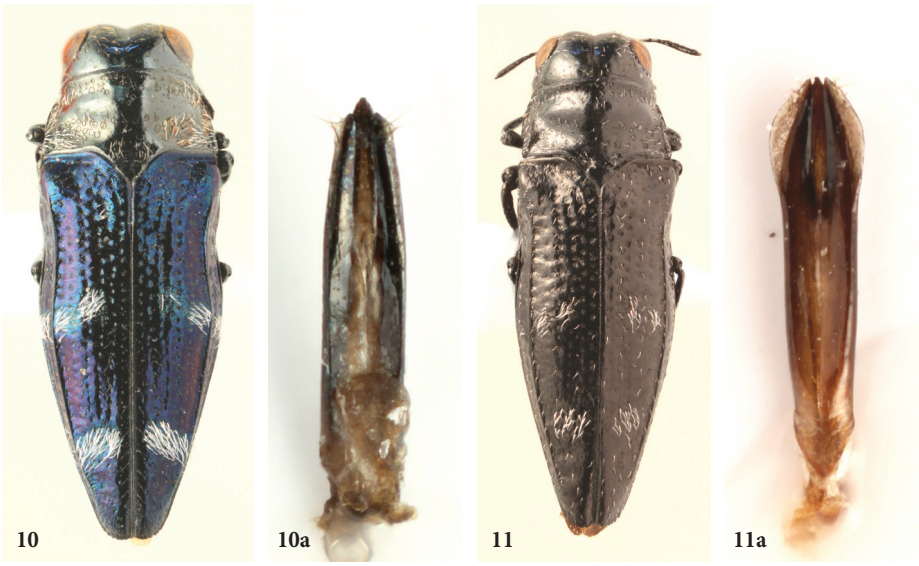
Taphrocerus sekerkai sp. nov.
(Figs. 10, 10a)

Type locality. Panama, Cerro Jefe.

Type specimens. Holotype (♂): „Panama, Panamá prov., Cerro Jefe, 770-1000 m, 09°13.700´N, 79°23.000´W, 15. v. 2015, individual collecting, L. Sekerka & K. Štajerová lgt.“ (NMPC). Paratype the same data as the holotype (1 ♀, NMPC).

Diagnosis. Medium-sized (3.50-3.60 mm), rather broadly elongate, pronotum strongly convex and strongly lustrous, elytra moderately convex and moderately lustrous; above bicolorous: head and pronotum black, elytra metallic blue with strong violet tinge laterally, beneath black including legs, antennae black with feeble bronze lustre; elytra with six (3+3) small spots of white setae at the middle transversely and two (1+1) larger transversely oval spots at apical fourth; posthumeral elytral carina present, well elevated, entire, sharp.

Description of holotype. Head rather large, wide, the same width as anterior pronotal margin; clypeus widely „V-shaped“, strongly shagreened, separated from frons by fine groove, epistomal pores large, moderately elongate transversely, separated less than their own diameter; frons moderately convex, widely transversely depressed above clypeus, rather deeply grooved at middle longitudinally, finely shagreened, with wide but rather sparse „fronto-clypeal pubescent strip“ (♂) of golden-white setae; vertex convex, very finely shagreened, sparsely punctured by medium-sized circular punctures, sparsely covered by thin long golden-white setae anteriorly, finely grooved at middle longitudinally; eyes large, oval, slightly projecting beyond outline of head; antennae rather short, wide.



Figs. 10-11a: 10- *T. sekerkai* sp. nov., HT ♂, 3.60 mm, 10a-aedeagus, 1.00 mm; 11- *T. nigritulus* Waterhouse, 1889, 3.25 mm, specimen ♂ from Venezuela, NP Henri Pitier, 11a- aedeagus, 0.95 mm.

Pronotum strongly convex, 1.93 times as wide as long, widest just before the base; rather widely shallowly depressed along anterior margin, broadly and deeply so lateroposteriorly, very shallowly so at base in the middle, with very obsolete short prehumeral carina with a blunt edge in the middle laterally; anterior margin widely regularly rounded, posterior margin biemarginate, widely emarginate in front of scutellum, sides regularly arcuately dilated to just before the base; surface very finely shagreened, punctured by large shallow circular punctures at the depressions, with thin white setae lateroanteriorly, lateroposteriorly and very sparsely in front of scutellum; scutellum rather small, triangular, finely shagreened.

Elytra moderately convex, slightly wider at humeri than pronotum at base, 2.14 times as long as wide, widest just before the middle; elytral margins narrowly but rather deeply emarginate behind humeri, widely rounded at the middle, than slowly, gradually tapering towards widely, feebly separately rounded apices; apices minutely serrate laterally; humeral swelling moderately developed, laterobasal depression small and shallow; surface finely shagreened, punctures in longitudinal rows larger and deeper at basal half, disappearing at apical fifth; six (3+3) small spots of white setae at the middle transversely and two (1+1) larger transversely oval spots at apical fourth; posthumeral elytral carina well elevated, entire, sharp, reaching from humeri to very near of apex.

Ventral surface finely shagreened, strongly lustrous, abdomen with large shallow „U-turned-up-shaped“ punctures, sparsely white pubescent laterally and apically; anal ventrite rather narrowly rounded, preapical groove following outline of margin regularly semicircular, wide; antennal grooves rather short, wide; prosternal process elongate, slightly constricted between procoxae, apex rhomboidal, surface coarsely irregularly punctured, shallowly and widely grooved between procoxae longitudinally.

Aedeagus (Fig. 10a).

Sexual dimorphism. Observed in „fronto-clypeal pubescent strip“ in male of golden-white setae, a few short white setae above clypeus in female only.

Measurements. Length 3.50-3.60 mm (holotype 3.60 mm); width 1.20-1.25 mm (holotype 1.25 mm).

Differential diagnosis. *T. sekerkai* sp. nov. is related to *T. nigritulus* Waterhouse (described from Panama, San Miguel in the Pearl Islands) (Figs. 11, 11a). *T. sekerkai* sp. nov. can be distinguished by wider body, male genitalia (see Figs. 10a, 11a) and namely by metallic blue colouration of the elytra.

Etymology. Named after one of the collectors of the type specimens Lukáš Sekerka, curator in National Museum in Prague (Czech Republic).

Taphrocerus hornburgi sp. nov.

(Figs. 12, 12a)

Type locality. Peru, Panguana.

Type specimens. Holotype (♂): „Peru, Huanuco, Rio Yuyapichis, 230m, ACP Panguana, leg. E. Diller, ix-x. 2014“ (JMSC). Paratype: „Peru, Dept. Huanuco, Panguana Malaise-trap, Rio Yuyapichis, 260m, 09°37´S, 74°56´W, x. 2010, leg. E. Diller“ (1 ♀, JMSC).

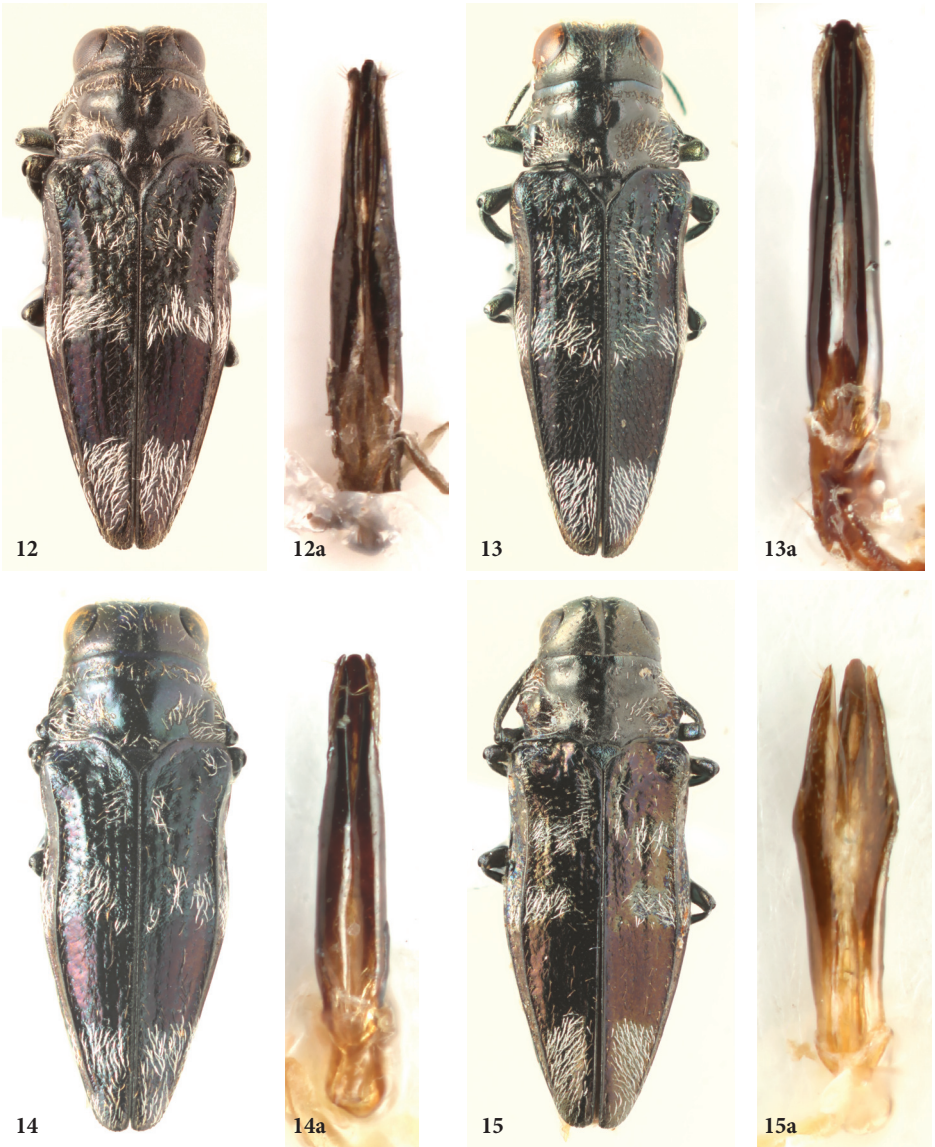
Diagnosis. Medium-sized (3.10-3.25 mm), broadly elongate, stout, moderately convex, elytra flattened, moderately lustrous; uniformly black, frons bluish-green in male, elytra with strong bluish-green lustre at humeri and at basal half along suture, with strong violaceous tinge at basal half laterally and at apical half; ventral side black, legs and antennae with slight golden lustre; elytra with an ornamental pubescence of long white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, entire, sharp, strongly elevated.

Description of holotype. Head medium-sized, wide, slightly narrower than anterior pronotal margin; clypeus very widely „V-shaped“, finely shagreened, separated from frons by fine carina, epistomal pore one only, large, circular, in the middle above clypeus; frons feebly convex, finely shagreened above clypeus becoming strongly shagreened towards frons, with two interrupted depressions: broad and wide depression above clypeus, deep and triangular depression above, with dense wide cream-white „fronto-clypeal pubescent strip“ (♂) and with row of short sparse golden setae along inner margins of eyes; vertex convex, strongly shagreened, slightly depressed at middle, sparsely and very shallowly punctured, longitudinally grooved at middle, rather densely covered by thin golden setae anteriorly; eyes large, ovoid, rather strongly projecting beyond outline of head; antennae long, narrow.

Pronotum moderately convex, 1.87 times as wide as long, widest at basal third; narrowly but rather deeply depressed along anterior margin, broadly and deeply so lateroposteriorly, narrowly and deeply so at lateroanterior angles, with wide, rather deep groove at the middle of disc longitudinally; a vague bump laterally at the middle; anterior margin widely rounded, pronotal lobe straight, posterior margin strongly biemarginate, rather widely emarginate in front of scutellum, sides strongly dilated at anterior two third, than rather strongly emarginately constricted to the base; surface strongly shagreened, with rather large circular punctures at the depressions, with sparse but rather long thin white setae at the depressions and above scutellum, somewhat longer lateroposteriorly; scutellum cordiform, strongly shagreened.

Elytra rather strongly flattened, distinctly wider at humeri than pronotum at base, 2.04 times as long as wide, widest at humeri and just before the middle; margins widely emarginate behind humeri, shortly but rather strongly rounded at the middle, than very slowly arcuately tapering towards almost conjointly rounded apices; apices minutely serrate; humeral swelling rather feebly developed, laterobasal depression broad and shallow; surface strongly shagreened, with rows of punctures longitudinally, more deep and large at basal half along suture, becoming fine and almost inconspicuous apically; an ornamental pubescence of white setae as follows: sparse thin long setae at lateroanterior angles, two (1+1) spots of sparse long setae at basal fourth near suture, rather wide transverse strip of long dense and wide setae just before the middle, dense and wide setae at apical fourth; posthumeral elytral carina strongly elevated, entire, sharp, extending from humeri to very near of apices but not reaching apex.

Ventral surface lustrous, abdomen rather strongly shagreened, sparsely white pubescent laterally and apically, very shallowly punctured by small „U-turned-up-shaped“ punctures; anal ventrite elongate, preapical groove following outline of margin semicircular, widely rounded and very wide apically; antennal grooves long and rather narrow; prosternal



Figs. 12-15a: 12- *T. hornburgi* sp. nov., HT ♂, 3.25 mm, 12a- aedeagus, 1.10 mm; 13- *T. klimschi* Obenberger, 1917, 4.00 mm, specimen ♂ from French Guiana, 13a- aedeagus, 1.40 mm; 14- *T. balthasari* Obenberger, 1934, LT ♂ of *T. lepidus* Obenberger, 1934 syn., 3.20 mm; 14a- aedeagus, 1.00 mm; 15- *T. fisheri* Obenberger, 1924, ST ♂, 4.05 mm, 15a- aedeagus, 0.95 mm.

process elongate, feebly constricted between procoxae, rather strongly dilated behind, apex subrhomboidal, strongly shagreened, very shallowly, almost inconspicuously depressed longitudinally at the middle.

Aedeagus (Fig. 12a).

Sexual dimorphism. Observed: presence of very wide cream-white „frontoclypeal pubescent strip“ in male, absent in female; bluish-green lustre of frons in male, purple in female; anal ventrite rather elongately rounded with regularly semicircular preapical groove in male, markedly subtruncate including preapical groove in female.

Measurements. Length 3.10-3.25 mm (holotype 3.25 mm); width 1.10-1.15 mm (holotype 1.15 mm).

Differential diagnosis. *T. hornburgi* sp. nov. belongs to a complex of similar species by their size, flattened elytra, black colouration with more or less strong blue or violaceous tinge, base of pronotum markedly narrower than elytra at humeri, with entire and well elevated posthumeral elytral carina and by characteristic elytral pubescent pattern. The most similar species of this complex can be distinguished from *T. hornburgi* sp. nov. by male genitalia (see Figs. 12a, 13a, 14a 15a) and:

T. klimschi Obenberger, 1917 (described from Brazil „Rio Grande“ and known from French Guiana also) (Figs. 13, 13a) by more slender body in male and more intensive blue tinge of dorsal side;

T. balthasari Obenberger, 1934 (described from Bolivia „Sta Cruz“ and known from Brasil „Amazonas“ also (under *T. lepidus* Obenberger, 1934 syn.)) (Figs. 14, 14a) by more intensive blue colour with violaceous tinge of dorsal side of body, less dense setae in elytral ornamental pubescence and by very feebly depressed frons and vertex longitudinally;

T. fisheri Obenberger, 1924 (described from „Brasilia“) (Figs. 15, 15a), which is probably junior subjective synonym of *T. deplanatus* Théry, 1923 (described from Brazil „Jatahy“) (HT not studied yet, only PT stored in MNHN and more additional specimens are needed too) by smaller and not so prominent eyes beyond outline of head and by narrower and markedly protruding vertex between the eyes (DV).

Etymology. Named in honor of Michael Hornburg (Berlin, Germany), specialist in the taxonomy of *Buprestidae*, especially in Neotropical Tracheini, donor of the holotype.

***Taphrocerus michaeli* sp. nov.**
(Fig. 16)

Type locality. Peru, Panguana.

Type specimens. Holotype (♀): „Peru, Panguana - Station ZMS, Malaise - trap, Jun. - Sept. 2010 leg. E. Diller“ (JMSC). Paratypes: „Peru Huánuco, Yuyapichis, Panguana, 9°57´5-74°56´W, 260 m, 18. ix. - 2. x. 2005, Malaisefalle, leg. Diller, Burmeister, Kothe“ (1 ♀, HMCM); Peru (Huanuco), Distrito de Yuyapichis, ACP Panguana, 130 m, 12.x.2016, S. Gottwald leg., (2 ♀♀, JMSC).

Diagnosis. Large (4.20-4.30 mm), broadly elongate, stout, pronotum rather strongly convex and very lustrous, elytra flattened, moderately lustrous; head light purple with strong golden lustre, frons coppery with strong golden-green tinge laterally, clypeus coppery, pronotum purple with strong golden lustre and violet tinge along the base, scutellum black, elytra metallic dark blue with strong violet tinge laterally and at apical fourth, beneath black, strongly lustrous, all tibiae with strong brown tinge, antennae with feeble greenish

lustre; an ornamental elytral pubescence of white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, strongly elevated, entire, sharp.

Description of holotype. Head medium-sized, narrower than anterior pronotal margin; clypeus very widely „V-shaped“, rather strongly shagreened, separated from frons by fine groove, epistomal pores very small, almost inconspicuous, circular, separated less than their own diameter (very closely); frons feebly convex, broadly depressed anteriorly and triangularly so posteriorly, strongly shagreened, densely white pubescent at the broad depression and coarsely punctured at the depression triangular, with row of dense but very short white setae along inner margins of the eyes; vertex convex, strongly protruding between eyes (FVV), strongly shagreened, coarsely punctured anteriorly becoming fine posteriorly, very finely grooved at the middle longitudinally, rather sparsely covered by thin but long white setae; eyes large, ovoid, slightly projecting beyond outline of head; antennae long and rather wide.

Pronotum rather strongly convex, 1.75 times as wide as long, widest at basal third; narrowly transversely depressed along anterior margin, broadly and deeply so lateroposteriorly, narrowly and deeply so anterolaterally, disc with rather narrow and shallow groove longitudinally, with strongly elevated longitudinal bump laterally at the middle; anterior margin very widely rounded, pronotal lobe markedly emarginate at the middle, posterior margin strongly biemarginate, widely emarginate in front of scutellum, sides shortly parallel anteriorly, than strongly arcuately dilated to basal third, than feebly emarginate and slightly constricted to the base; surface rather finely shagreened, medium-sized circular punctures with thin but long white setae at the depressions, laterally and at the middle of the disc longitudinally; scutellum large, triangular, finely shagreened.

Elytra flattened, strongly wider at humeri than pronotum at base, 1.99 times as long as wide, widest at humeri and just before the middle; elytral margins rather slightly, widely emarginate behind humeri, widely rounded at the middle, than slowly, gradually tapering towards almost conjointly rounded apices; apices minutely serrate; humeral swelling rather well developed, laterobasal depression shallow but rather large; surface finely shagreened, punctures in longitudinal rows larger and deeper at basal half becoming fine and shallow apically; an ornamental pubescence as follows: a few long thin white setae lateroanteriorly, sparse perisutural strip of long thin white setae behind scutellum becoming in transverse strip at the beginning of second-fourth, semicircular wide transverse strip of dense wide white setae just behind the middle, wide dense and rather long white setae at apical fourth; posthumeral elytral carina strongly elevated, entire, sharp, extending from humeri to very near of apex.

Ventral surface strongly lustrous, strongly shagreened, abdomen sparsely punctured by shallow „U-turned-up-shaped“ punctures, sparsely white pubescent, more dense laterally; anal ventrite widely rounded with a quadrate emargination on apical margin, preapical groove following outline of margin wide, subtruncate apically; antennal grooves long and wide; prosternal process parallel between procoxae, strongly dilated behind, apex subrhomboidal, surface finely shagreened, coarsely corrugate, shallowly widely depressed at the middle longitudinally, sparsely white pubescent.

Sexual dimorphism. Male unknown.

Figs. 16-17: 16-*T. michaeli* sp. nov., HT ♀, 4.30 mm; 17- *T. seidli* Marek, 2015, PT ♀, 4.90 mm.

Measurements. Length 4.20-4.30 (holotype 4.30 mm); width 1.60-1.65 (holotype 1.65 mm).

Variability. Except for the size, the variability observed in more intensive violet tinge along the base of pronotum and at humeri in the female paratype.

Differential diagnosis. *T. michaeli* sp. nov. belongs to a species group characterized by large size, convex pronotum and markedly flattened elytra, strongly elevated sharp entire posthumeral elytral carina, metallic golden-purple colouration of head and pronotum, metallic brown or blue colouration with strong violet tinge of elytra and by very similar pubescent pattern on the elytra (definition of the species group in prep.). The species group contains a few species (mostly undescribed) with centre of distribution in the Amazonia. From the most similar *T. seidli* Marek, 2015 (described from French Guiana) (Fig. 17) it can be distinguished by markedly wider elytra (1.99 times longer than wide in *T. michaeli* sp. nov., 2.20 in *T. seidli*), by the pubescence at apical fourth of elytra (at apical third in *T. seidli*) as well as many others details of morphology.

Etymology. It´s pleasure for me to name this new species after Michael Hornburg (Berlin, Germany), specialist in the taxonomy of *Buprestidae*, especially in Neotropical Tracheini, donor of the holotype specimen.

DISTRIBUTIONAL RECORDS
with notes for related species

Taphrocerus exiguus Obenberger, 1934
(Figs. 18, 18a)

Taphrocerus exiguus Obenberger, 1934: 58.
Taphrocerus erbeni Obenberger, 1941: 94 syn.
Taphrocerus subpolitus Cobos, 1967: 188 syn.

Specimens examined. SURINAM: „Paramaribo - Kwatta, ix. 2001, leg. A. Teunissen“ (2 ♀♀, JMSC, MHCB); „Corone, Totness, 28. ix. 2001, leg. A. Teunissen“ (1 ♂, JMSC) . TRINIDAD and TOBAGO: „Trinidad W. I., Chaguaramas, 22. xi. 2005 M. T., leg. C. J. Zwakhals“ (3 ♂♂, 1 ♀, JMSC, MHCB). For additional examined specimens see Marek (2014, 2015).

Distribution. French Guiana (type locality „Cayenne“), Brazil, Colombia, Costa Rica, Ecuador, Honduras, Mexico, Nicaragua, Panama, Venezuela (Marek 2014), new to Surinam and Trinidad and Tobago.

Taphrocerus finitimus Obenberger, 1924
(Figs. 19, 19a)

Taphrocerus finitimus Obenberger, 1924: 79.

Specimens examined. COSTA RICA: „Costa Rica“ (2STs, 1 ♂, 1 ♀, NMPC); „Costa Rica, Rio Sarchi, 1km S Sarchi, 7. iv. 1971 Hochmann“ (1 ♂, JMSC). FRENCH GUIANA: „Fourgassier MSA, J. Marek lgt. ii. 1993“ (1 ♀, JMSC). TRINIDAD and TOBAGO: „Trinidad W. I., Chaguaramas, 22. xi. 2005 M. T., leg. C. J. Zwakhals“ (1 ♀, JMSC).

Distribution. Costa Rica (type locality without precise data), Nicaragua (Maes et all 1993), Belize, Honduras, Mexico (Westcott et Hespenheide 2006), Peru (Hespenheide et Chaboo 2015), new to French Guiana and Trinidad and Tobago.

Taphrocerus peruvianus Obenberger, 1941
(Figs. 20, 20a)

Taphrocerus peruvianus Obenberger, 1941: 95.

Specimen examined. PERU: „Peruvia mer.“ (ST ♂, NMPC).

Distribution. So far known from Peru only (Obenberger 1941).

Remarks. *T. finitimus*, *T. exiguus* and *T. peruvianus* belong to an extremely difficult species-group (definition of the species-group and the key in prep.) which contains about ten described species and a few undescribed species known to me at present. The species are characterised mainly by very similar habitus, colouration and details of morphology but with strongly different male genitalia mostly (see Figs. 18a, 19a, 20a) and are distributed widely from the Amazonia as far north as Mexico. The females are often undeterminable due to their external similarity and variability. *T. peruvianus* is not listed in the last actual checklist of Peruvian Buprestidae by Hespenheide and Chaboo (2015).

Figs. 18-20a: 18- *T. exiguus* Obenberger, 1934, LT ♂, 3.30 mm, 18a- aedeagus, 1.05 mm; 19- *T. finitimus* Obenberger, 1924, ST1 ♂, 3.25 mm, 19a- aedeagus, 1.00 mm; 20- *T. peruvianus* Obenberger, 1941, ST ♂, 2.90 mm, 20a- aedeagus, 0.80 mm.

Taphrocerus halffteri Cobos, 1978
(Fig. 21)

Taphrocerus halffteri Cobos, 1978: 57.

Specimens examined. MEXICO: „Palma Sola, Veracruz, Méjico, G. Halffter, J. Mateu, P. Reyes coll., 20-vii-1972“ (HT ♂, MNCN). VENEZUELA: „Venezuela, Bolivar, Guri, 16. xii. 1987“ (1 ♀, JMSC).

Remarks. The female of *T. halffteri* from Venezuela fully corresponds to the holotype male of *T. halffteri* stored in MNCN (described from Mexico, Veracruz). *T. halffteri* belongs to

the difficult species-group of the genus and from related species *T. difficilis* Obenberger, 1924 (Fig. 22) (distributed widely along the Pacific side of Mexico and Central America as far south as Costa Rica (Bellamy 2008, Hespenheide 2014)) it can be distinguished by the characters given in Table D.

Distribution. Mexico (Cobos 1978, Westcott et Hespenheide 2006), new to Venezuela.

Table D. Diagnostic characters of *T. halffteri* Cobos, 1978 and *T. difficilis* Obenberger, 1924.

	T. halffteri	*T. difficilis*
Colouration	uniformly clearly golden coppery	mostly uniformly golden coppery above, elytra sometimes a little dark
Shape of body	slender	somewhat more robust
Size	large, more than 4 mm	medium-sized, less than 4 mm
Pronotal punctation	small circular punctures	medium-sized circular punctures
Aedeagus	almost gradually expanded proximally	tapered slightly from about the middle proximally

Figs. 21-22: 21- *T. halffteri* Cobos, 1978, specimen ♀ from Venezuela, 4.10 mm; 22- *T. difficilis* Obenberger, 1924, ST ♀, 3.50 mm.

Taphrocerus nigritulus Waterhouse, 1889
(Figs. 11, 11a)

Taphrocerus nigritulus Waterhouse, 1889: 128.

Specimens examined. VENEZUELA: „Venezuela Yaracuy n/ő Nirgua cca 700m, 10°14,87 N 68°31,09 W leg. Brachat 23. i. 2009NP Henri Pitier“ (1 ♀, JMSC); „Venezuela, Edo. Aragua, NP Henri Pittier/N, 10°21´ N, 67°35´W, +- 1100m, 9. x. 2005, leg. M. Hornburg“ (2 ♂♂, JMSC, MHCB).

Remarks. The most similar and probably closely related *T. collarti* Cobos, 1959 (describe from French Guiana) (Figs. 27, 27a) differs from *T. nigritulus* by somewhat wider body but slightly slender male genitalia, wider frons and vertex and less prominent eyes beyond outline of head.

Distribution. Costa Rica, Panama, new to Venezuela.

Figs. 11, 11a, 23, 23a: 11- *T. nigritulus* Waterhouse, 1889, specimen ♂ from Venezuela, NP Henri Pitier, 3.25 mm, 11a- aedeagus, 0.95 mm; 23- *T. collarti* Cobos, 1959, specimen ♂ from French Guiana, 3.60 mm, 23a- aedeagus, 1.07 mm.

Taphrocerus obscurellus Obenberger, 1934
(Figs. 24, 24a)

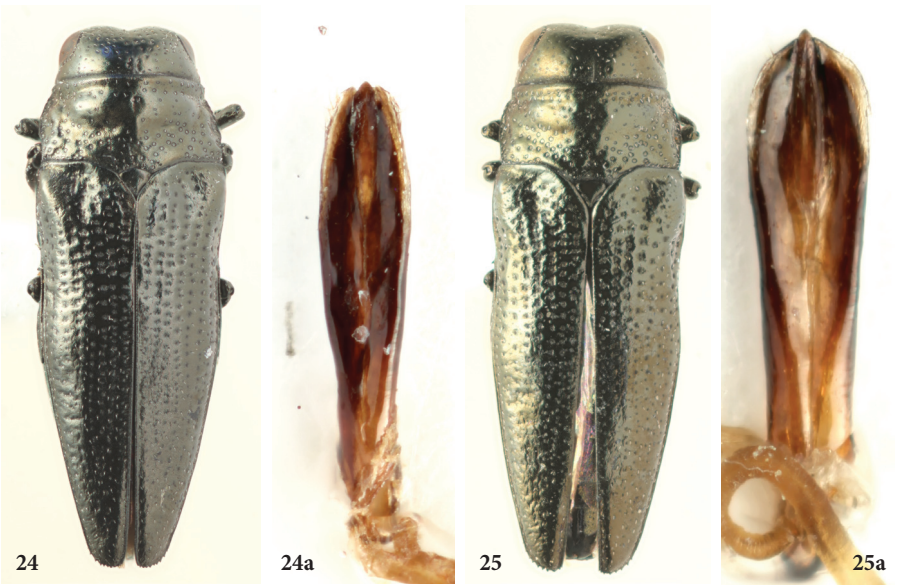
Taphrocerus obscurellus Obenberger, 1934: 61.

Specimens examined. BRAZIL: „Natal - Piangi Oramen - P. Maret“ (1 ♀, JMSC). FRENCH GUIANA: LT of *T. obscurellus* (LT designation see Marek 2014): „Cayenne“ (LT ♂, NMPC); „Cayenne Mt. Bourda, v. 1992 J. Marek lgt.“ (1 ♂, 1 ♀, JMSC); „Cayenne, W of Le Larivot 10. viii. 2006, Snížek lgt (18 ♂♂, 10 ♀♀, JMSC)“; „Kourou, Guatemala 19. viii. 2006 Snížek lgt.(1 ♂, JMSC); the same data but 15. xii. 2006 (119 ♂♂, 82 ♀♀,

JMSC); „Mana env. 11. xii. 2006 M. Snížek lgt.“ (1 ♀, JMSC); „Cayenne, Le Larivot 8. xii. 2006 Snížek lgt.“ (44 ♂♂, 25 ♀♀, JMSC). SURINAM: „Paramaribo: Kwatta, ix. 2001, leg. A. Teunissen“ (1 ♂, 2 ♀♀, JMSC, MHCB). VENEZUELA: „Apure“ (1 ♂, NMPC).

Remarks. *T. obscurellus* is very similar and probably closely related to *T. bruchi*, Obenberger, 1924 (Figs. 25, 25a) (described from Argentina, Corrientes), from which it can be distinguished by the characters given in Table E bellow. *T. obscurellus* is very variable in correlation between the body shape and body size (the widest part of body is in pronotum in large specimens (look of „conical“), in pronotum, humeri and half of elytra in smaller specimens (look of „parallel“), in half of elytra in small specimens (look of „oval“), not so in general shape of pronotum and male genitalia. *T. natalensis* Cobos, 1967 (described from HT, AT and 13 PTs from Brasil, Natal) is probably synonym of *T. obscurellus*. I studied some of paratypes stored in MNCN and MNHN only, not holotype yet. These paratypes correspond with the lectotype of *T. obscurellus*.

Distribution. French Guiana (type locality „Cayenne“), new to Brazil, Surinam and Venezuela.



Figs. 24-25a: 24- *T. obscurellus* Obenberger, 1934, LT ♂, 4.00 mm, 24a- aedeagus, 1.35 mm; 25- *T. bruchi* Obenberger, 1924, LT ♂, 4.10 mm, 25a- aedeagus, 1.50 mm.

Table E. Diagnostic characters of *T. obscurellus* Obenberger, 1934 and *T. bruchi*, Obenberger, 1924

	T. obscurellus	*T. bruchi*
Colouration	uniformly „deeply“ black, pronotum very rarely with very feeble bronze-green reflections	uniformly black with rather strong bronze-green lustre
General shape of pronotum	trapezoidal (anterior margin markedly narrower than posterior one)	rectangular (anterior margin slightly narrower than posterior one only)
Aedeagus	more slender, parameres almost regularly arcuate, widest in proximal third-quarter (Fig. 24a)	more robust, parameres almost straightly expanded proximally, widest in proximal quarter (Fig. 25a)
Distribution	Amazonia (see Specimens examined above)	North Argentina, South Paraguay (see Marek 2014)

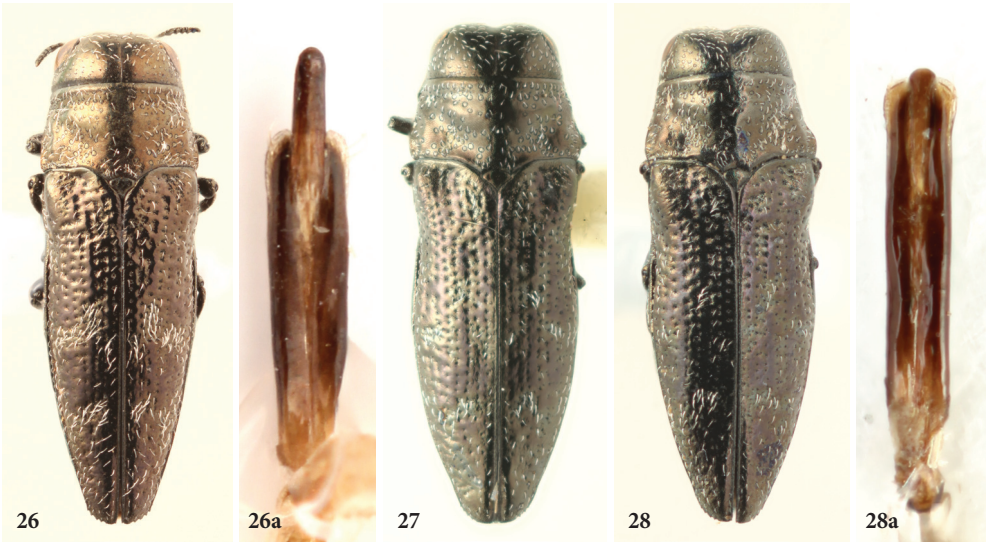
***Taphrocerus sulcifrons* Fisher, 1922**
(Figs. 26, 26a)

Taphrocerus sulcifrons Fisher, 1922: 67.

Specimens examined. NICARAGUA: „Bartola, am Rio San Juan, 2005 06. x. leg. W. Suppantschitsch“ (1 ♂, 2 ♀♀, JMSC, MHCB). PANAMA: „10 km N El Llano, 20. vi. 2002, 200-400 m, Serrania de San Blas, Čížek+Hauck leg.“ (1 ♀, NMPC); „Colón pr., Parque Nat. Soberania, Canal area: Gamboa, Cerro Pelado, 8. ix. 2007, L. Sekerka leg.“ (1 ♀, NMPC). VENEZUELA: „Edo. Guarico, NP Guatopo (Wasserkraft werk), 15km SO Sta. Teresa, B: 10°12´ N, L: 66°32´ W, 400 m, 29. vii. 2001 leg. M. Hornburg“ (1 ♂, JMSC); „Miranda, P.N. Guatopo, 12 km E Sta. Teresa del Tuy, 300 m, 10°12´ N, 66°33´´ W, 29. vii. 2001, S. Gottwald leg.“ (4 ♂♂, 1 ♀, JMCS, SGCB).

Remarks. The most widely distributed species of *Taphrocerus* in Central America (Hespenheide 1990). *T. sulcifrons* belongs to species-group characterized mainly by similar shape of body (primarily by base of pronotum wider than elytra at humeri), elytral pubescent pattern and male genitalia (see related *T. howardi* Obenberger, 1934 (Fig. 27) (described from U.S.A., Florida) and *T. colombiae* Obenberger, 1934 (Figs. 28, 28a) (described from „Colombia“ without precise data) bellow). The specimens of *T. sulcifrons* from Venezuela have markedly more intensive bronze tinge than Central American specimens.

Distribution. From U.S.A. (Arizona, Texas) (Westcott 1990) as far south as Panama (Hespenheide 1990), new to Venezuela.



Figs. 26-28a: 26- *T. sulcifrons* Fisher, 1922, specimen ♂ from Venezuela, 3.10 mm, 26a- aedeagus, 0.85 mm; 27- *T. howardi* Obenberger, 1934, specimen ♀ from Florida, 2.95 mm; 28- *T. colombiae* Obenberger, 1934, ST ♂, 2.95 mm, 28a- aedeagus, 0.75 mm.

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