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

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Taxonomy, new species, new synonymy, lectotype designations, new records, Coleoptera, Buprestidae, *Taphrocerus*, Neotropical Region

Abstract. Twelwe species are newly described and illustrated as follows: *Taphrocerus bamboo* sp. nov. (Peru), *T. conformis* sp. nov. (Brazil), *T. cuprescens* sp. nov. (Brazil), *T. henryi* sp. nov. (Brazil), *T. hespenheidei* sp. nov. (Peru), *T. hyacinthus* sp. nov. (Peru, Venezuela), *T. imitator* sp. nov. (Bolivia), *T. likaveci* sp. nov. (Brazil), *T. obsoletus* sp. nov. (Argentina, Brazil), *T. stephani* sp. nov. (Brazil, French Guiana, Peru), *T. subviolaceus* sp. nov. (Argentina) and *T. yanamono* sp. nov. (Peru). The new species are compared to the most related taxa. The following nomenclatural changes are proposed: *T. alboplagiatus* Kerremans, 1896 (= *T. quadriplagiatus* Obenberger, 1924 syn. nov.); *T. cupriceps* Kerremans, 1900 (= *T. oliveirai* Cobos, 1978 syn. nov.). Lectotypes of *T. alboplagiatus*, *T. cupriceps*, *T. cyanipennis* Obenberger, 1934, *T. depilis* Kerremans, 1896, *T. nigritulus* Waterhouse, 1889, *T. orizabae* Obenberger, 1934, *T. pictus* Kerremans, 1896, *T. quadriplagiatus* and *T. squamulatus* Kerremans, 1896 are designated. Records new to country are presented for *T. depilis* (Colombia, Ecuador, Suriname, Venezuela), *T. nigritulus* (Brazil) and *T. orizabae* (Guatemala).

INTRODUCTION

The present paper is further in the serie of studies on the genus *Taphrocerus* Solier, 1833 resulting from the study of type material and examination of extensive number of specimens from various institutions and private collections all over the world. The studies serve as a basis for a revision of this large and taxonomically very difficult buprestid genus. The genus contains more than 230 valid species and a number of undescribed species known to me at present.

MATERIALS AND METHODS

Lectotype designations are provided in order to preserve the stability of nomenclature by fixing the status of the specimen as the sole name-bearing type of a particular nominal taxon (in agreement with article 74.7 ICZN (1999). There are mixed two or more different species in type-series of previously described species mostly and lectotype designation is necessary. For this reason I consistently give exact numbers of known syntypes or the notice that the exact number of syntypes is unknown. Designation of all lectotypes (and all available paralectotypes) are provided by printed white label with wide red border containing all relevant data as: type status (red capital letters), taxon name in the original combination, author name, year of publication, an inscription J. Marek design., year of designation.

Abbreviations for lectotype designations: the slash mark \ is used to indicate data from separate labels; my notations are in parentheses [ ], with the abbreviation [h] = handwritten, [p] = printed, [Kerremans´ MS] = Kerremans´ manuscript, [Obenberger´s MS] = Obenberger´s manuscript.

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. Data from locality labells are cited „verbatim".

Further abbreviations used in the text: ( ) = my remarks and additions; (h) = handwritten, (p) = printed; HT = holotype, PT (PTs) = paratype (paratypes), ST = syntype, ST 1 (ST 2, ST 3 …) - 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.

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 betwee 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;
CHAH collection of Henry A. Hespenheide, Los Angeles, U.S.A.;
EJCB collection of Eduard Jendek, Bratislava, Slovakia;
HMCM collection of Hans Mühle, München, Germany;
JMSC collection of Jaroslav Marek, Sýkořice, Czech Republic (it will be deposited in NMPC);
MNCN Museo Nacional de Ciencias Naturales, Madrid, Spain;
MHCB collection of Michael Hornburg, Berlin, Germany;
MNHN Muséum national d´Histoire naturelle, Paris, France;
MUSM Museu de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru;
NMPC National Museum, Praha, Czech Republic;
SGCB collection of Stephan Gottwald, Berlin, Germany;
TCMC collection of Ted C. MacRae, Chesterfield, U.S.A;
ZSMC Zoologische Staatssammlung, München, Germany.

RESULTS

DESCRIPTIONS OF NEW SPECIES

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

Type locality. Argentina, Corrientes, 24 km W Ituzaingó.

Type specimens. Holotype (♂): „ARGENTINA, Corr., 24 km. W Ituzaingó, I-29-1989, C W & L B. O´Brien & G. Wibmer / T 1045 by Hespenheide, J. Marek labelled“ (JMSC). Paratypes (30): the same data as holotype (7 specimens sex not examined, CHAH; 7 ♂♂, 3 ♀♀, JMSC; 1 ♂, 1 ♀, 1 specimen sex not examined, TCMC); „ARGENTINA, Corr., 24 km. W Ituzaingó, I-23-1989, C & L. O´Brien & G. Wibmer / T 1045 by Hespenheide, J. Marek labelled“ (3 specimens sex not examined, CHAH; 3 specimens sex not examined, JMSC); the same data but „12 km. W Ituzaingó“ (2 specimens sex not examined, CHAH); Brasil: São Paulo St., Cipó, 23° 49´ S 46° 47´ W / 2. ii. 1969, V. N. Alin / T 118“ (1 ♂, JMSC); Brasil: São Paulo, São Paulo St., 25. ii. 1977, V. N. Alin“ (1 ♂, JMSC).

Diagnosis. Small to medium-sized (2.95-3.85 mm), elongate, slender, about 3.25 times longer than wide, widest at middle of elytra; head and pronotum moderately lustrous, elytra rather strongly lustrous, moderately convex above; above bright coppery, head and pronotum sometimes with golden or greenish tinge, elytra with more or less strong purple tinge, sometimes with narrow, bluish perisutural stripe at basal half, beneath black with slight purple tinge including legs and antennae, abdomen with rather strong golden lustre; sparsely, uniformly pubescent by short, thin, white setae, in regular rows longitudinally on elytra; prehumeral pronotal and posthumeral elytral carinae absent.

Description of holotype. Head rather large, wide, slightly narower than posterior pronotal margin; clypeus almost „T-shaped“, strongly shagreened, separated from frons by a fine carina, epistomal pores large, elongate transversely, separated less than their own diameter; frons moderately convex, strongly shagreened, very slightly depressed at middle, with a fine groove at middle longitudinally reaching from the clypeus to vertex (to anterior pronotal margin), with a few fine punctures at anterior half, more densely punctate by simple punctures at posterior half, each puncture with very short, white seta; vertex moderately convex, very strongly shagreened, sparsely punctate by fine, simple punctures, each puncture with very short, thin, white seta; eyes medium-sized, ovoid, moderately projecting beyond outline of head, rather well visible from above; antennae short, antennomeres 6-11 distinctly widened*.

Pronotum moderately convex, unsculptured relatively, 1.82 times as wide as long, widest at the beginning of basal third; widely and shallowly transversely depressed along anterior margin, very shallowly and widely depressed along posterior margin, very shallowly so on the disc longitudinally, somewhat more distinct and deeper depressed along the sides; with very vague longitudinal prominence along the sides lateroposteriorly; anterior margin widely rounded, pronotal lobe somewhat protruding and slightly emarginate at middle, posterior margin feebly biemarginate, very slightly narrower than base of elytra, rather strongly emarginate in front of scutellum, sides very shortly subparallel anteriorly, then arcuately dilated to the beginning of basal third, then shortly but distinctly emarginate and then straight constricted to the base;

(!) pronotal lateral carina present at basal two-thirds only, absent completely at anterior third (!); surface very strongly shagreened, sparsely punctate by very small, ocellate punctures at the depressions, each puncture with short, thin, white seta; scutellum small, cordiform, rather strongly rounded anteriorly, strongly shagreened, moderately lustrous.

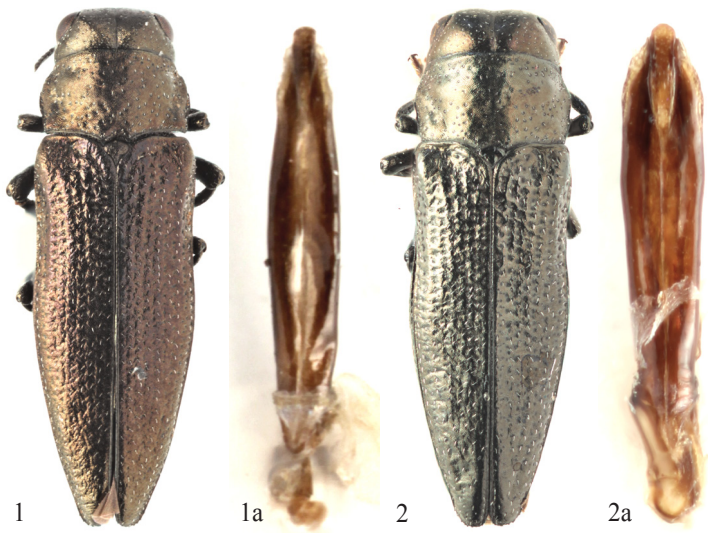
Elytra moderately convex, 2.49 times as long as wide, widest at the middle, slightly wider at humeri than pronotum at the widest part; lateral margins very feebly and widely, almost inconspicuously emarginate behind humeri, rather widely, regularly rounded at middle, then slowly, widely arcuately tapering towards narrowly and separately rounded apices; apices minutely serrate by sharp teeth; humeral swelling feebly developed, laterobasal depression small but rather deep, well distinct; surface strongly shagreened, punctures in rows longitudinally fine, almost the same size at basal half, becoming somewhat finer at third-fourth, disappearing at apical fourth, which is somewhat corrugate; pubescent by short, thin, white setae in sparse, regular rows longitudinally; posthumeral elytral carina absent.

Ventral surface very strongly shagreened, moderately lustrous, abdomen rather strongly lustrous, punctate by very small, ocellate punctures opened posteriorly, sparsely pubescent by very short, thin, white setae laterally and apically; anal ventrite rather widely rounded, distinctly cuted at apex, with shallow emargination on apical margin, preapical groove following outline of margin very widely rounded, wide; (!) antennal grooves present on head, rather shallow depressions on prosternum along the sides only (!); prosternal process shortly elongate, wide, strongly shagreened, sides feebly dilated behind, apex rhomboidal, with a few short, white setae and fine, simple punctures only.

Aedeagus (Fig. 1a).

*Antennomeres 3-11 missing in the right antenna

Sexual dimorphism. Observed in: the frons is somewhat more convex in male (DV) and the vertex is more widely protruding up (FVV) in female; the antennomeres 6-11 are distinctly



Figs. 1-2a: 1- *T. obsoletus* sp. nov., HT, ♂, 3.75 mm, 1a- aedeagus, 0.95 mm; 2- *T. alutaceicollis* Obenberger, 1934, LT, ♂, 3.70 mm (NMPC), 2a- aedeagus, 0.95 mm.

widened in male, weakly widened in female; the emargination on apical margin of anal ventrite is distinctly wider in female.

Measurements. Length 2.95-3.85 mm (holotype 3.75 mm); width 0.95-1.15 mm (holotype 1.15 mm).

Variability. Except for the size observed in: colouration of head and pronotum (from bright coppery, sometimes with golden or greenish tinge to uniformly aeneous or almost black); the intensity of purple tinge of elytra, sometimes with narrow, bluish semisutural stripe at basal half; rather strongly variable in colouration of abdomen (from black to bright coppery with strong golden tinge); the epistomal pores vary from elongate transversely and separated less than their own diameter to circular and separated more than their own diameter; the top of anal ventrite varies from straight cuted to slightly emarginate.

Differential diagnosis. *T. obsoletus* sp. nov. is unique among *Taphrocerus* species without pronotal prehumeral and elytral posthumeral carinae by combination of many essential characters of morphology (not ocellate-punctate vertex, unsculptured pronotum relatively, (!) pronotal lateral carina present at basal two-thirds only, absent completely at anterior third (!), very small pronotal ocellate punctures, small scutellum, fine elytral punctation, (!) antennal grooves present on head, rather shallow depression on prosternum along the sides only (!), characteristic sexual dimorphism (the shape and structure of anal ventrite) etc.). Nevertheless it is somewhat similar to *T. alutaceicollis* Obenberger, 1934 (Figs. 2, 2a) (described from French Guiana and known as far as south as Brazilian state Bahia (Marek 2019a). For distinguishing these two species see Table A below.

Table A. Diagnostic characters of *T. obsoletus* sp. nov. and *T. alutaceicollis* Obenberger, 1934.

	T. obsoletus	*T. alutaceicollis*
Head (♂)	narrower relatively, about 0.85 times as wide as posterior pronotal margin	wider relatively, about 0.95 times as wide as posterior pronotal margin
Clypeus	almost „T-shaped“	widely „V-shaped“
Eyes	more strongly projecting beyond outline of head, rather well visible from above	less strongly projecting beyond outline of head, poorly visible from above
Frons	with a fine groove at middle longitudinally	with sulcus at anterior half and slight depression towards vertex
Pronotal lateral carina	present at basal two-thirds only, absent completely at anterior third	present along entire length of the side, reaching anterior pronotal margin
Elytral punctation	punctures in rows longitudinally more finer at basal half; almost the same size from the base to the elytral midlength	punctures in rows longitudinally more coarser at basal half; becoming finer from the base to the elytral midlength
Antennal grooves	present on head, rather shallow depressions on prosternum along the sides only	present on head and prosternum laterally
Aedeagus	parameres almost regularly, arcuately rounded from base to apex, widest at middle (Fig. 1a)	parameres slightly dilated proximally, widest at apical third (Fig. 2a)

Etymology. The specific epithet is the Latin adjective *obsoletus* (obsolete, worn-out); named to stress several unusual morphological characters of this species.

Taphrocerus subviolaceus sp. nov.
(Fig. 3)

Type locality. Argentina, 15 km NE Corrientes, 2 km N Sta. Ana.

Type specimens. Holotype (♀): „ARGENTINA, Corr., 2 km. N. Sta. Ana, (15 km. NE. Corrientes), I-19-1989 / T 1042 by Hespenheide, J. Marek labelled" (JMSC). Paratype the same data as holotype (1 ♀, CHAH; note: ovipositor missing).

Diagnosis. Medium-sized (3.60-3.95 mm), elongate, oval, about 3.0 times longer than wide, widest at humeri and at the middle of elytra; moderately lustrous above, rather strongly convex above, elytra somewhat flattened at apical half; above coppery-purple, elytra with strong violet tinge; beneath black with very slight purple lustre including legs and antennae; sparsely, regularly covered by short, thin, white setae; prehumeral pronotal and posthumeral elytral carinae absent.

Description of holotype. Head large, feebly narrower than posterior pronotal margin; clypeus very widely „V-shaped", strongly shagreened, separated from frons by well elevated carina, epistomal pores medium-sized, circular, separated more than their own diameter; frons very weakly convex, almost flat, strongly shagreened, slightly depressed at middle longitudinally, the depression merging into more deeper but fine sulcus towards vertex, sparsely, finely punctate by simple punctures, with a few short, thin, white setae above clypeus only; vertex strongly convex, strongly shagreened, slightly depressed at middle anteriorly, with a fine groove at middle longitudinally, sparsely punctate by very small, ocellate punctures at middle and by fine, simple punctures laterally, sparsely pubescent by short, thin, white setae anteriorly, laterally and along the fine groove at middle; eyes medium-sized, ovoid, very slightly projecting beyond outline of head, moderately visible from above; antennae long and narrow.

Pronotum moderately convex, 1.77 times as wide as long, widest just before the base; transversely depressed along anterior margin, deeply and narrowly laterally, largely and rather shallowly depressed lateroposteriorly, rather deeply so along the sides at middle, with rather large but shallow transversely oval depression on the disc anteriorly and in front of scutellum; with very obsolete prominence lateroposteriorly; anterior margin straight, posterior margin moderately biemarginate, widely emarginate in front of scutellum, the same width as base of elytra, sides subparallel at anterior fifth, then widely arcuately, almost straight dilated to just before the base and then shortly constricted to the base; surface strongly shagreened, regularly ocellate-punctate by small punctures at the depressions, each puncture with a short, thin, white seta; scutellum rather small, widely cordiform, widely rounded anteriorly, strongly shagreened, moderately lustrous.

Elytra moderately convex, 2.23 times as long as wide, widest at humeri and at the middle, very feebly wider (almost the same width) at humeri than pronotum at the widest

Figs. 3-4: 3- *T. subviolaceus* sp. nov., HT, ♀, 3.95 mm; 4- *T. iguazuanus* Marek, 2017, specimen ♀ from Argentina, Misiones, 3.75 mm (JMSC).

part; lateral margins very shallowly and widely emarginate behind humeri, widely, regularly rounded at middle, then very widely arcuately tapering towards rather broadly and separately rounded apices; apices finely serrate by sharp teeth laterally; humeral swelling moderately developed, laterobasal depression small but rather deep, well marked; surface very feebly shagreened, punctures in rows longitudinally larger and deeper at basal third becoming more finer posteriorly, disappearing at apical fourth, which is rather coarsely corrugate, the intervals between the rows of punctures at basal two-thirds somewhat elevated and smooth; sparsely, regularly pubescent by short, thin, white setae; posthumeral elytral carina absent.

Ventral surface strongly shagreened, abdomen rather strongly lustrous, rather densely, regularly ocellate-punctate by very small punctures opened posteriorly, each puncture with a short, thin, white seta; anal ventrite damaged at apex*; antennal grooves long and narrow; prosternal process elongate, strongly shagreened, very slightly constricted between procoxae, very slightly dilated behind, apex rhomboidal, surface asetose, rather coarsely punctate.

*the anal ventrite regularly and rather narrowly rounded with very small and shallow semicircular emargination on apical margin in the female paratype

Sexual dimorphism. Male unknown.

Measurements. Length 3.60-3.95 mm (holotype 3.95 mm); width 1.20-1.30 mm (holotype 1.30 mm).

Variability. Except for the size observed in the intensity of violet tinge of elytra (very slight in the paratype), the pronotal sides are more arcuately rounded and the smooth intervals between the rows of punctures at basal two-thirds of elytra almost missing in the paratype.

Differential diagnosis. *T. subviolaceus* sp. nov. is distinctive by larger size and colouration among number of *Taphrocerus* species without prehumeral pronotal and posthumeral elytral carinae and sparsely, regularly covered by short, thin, white setae that occur in Southern Matta Atlantica and Chaco. Nevertheless it is somewhat similar to *T. iguazuanus* Marek, 2017 (Fig. 4) (described from Argentina, Puerto Iguazú) externally. For distinguishing these two species see Table B below.

Table B. Diagnostic characters of *T. subviolaceus* sp. nov. and *T. iguazuanus* Marek, 2017.

	T. subviolaceus (♀)	*T. iguazuanus* (♀)
Body shape	more robust, about 3.0 times longer than wide; elytra about 2.2 times longer than wide	more slender, about 3.2 times longer than wide; elytra about 2.4 times longer than wide
Colouration	coppery-purple, elytra with violet tinge	bronze with purple-coppery lustre
Eyes	almost not projecting beyond outline of head	distinctly projecting beyond outline of head
Pronotum	anterior transverse and lateroposterior depressions shallow but well distinct	unsculptured relatively, anterior transverse and lateroposterior depressions inconspicuous
Anterior pronotal margin	straight	arcuately rounded
Scutellum	widely cordiform	regularly cordiform
Elytral sculpture	the intervals between the rows of punctures at basal two-thirds somewhat elevated and smooth	the intervals between the rows of punctures at basal two-thirds not elevated and shagreened
Elytral apices	not spathulate	weakly but distinctly spathulate
Anal ventrite	with very small and shallow semicircular emargination on apical margin	with wide and deep quadrate emargination on apical margin
Prosternal process	very slightly constricted between procoxae, very slightly dilated behind, surface of apex rather coarsely punctate	strongly constricted between procoxae, strongly dilated behind, apex with wide and shallow but well distinct sulcus longitudinally at middle

Etymology. The specific epithet is derived from the Latin adverb *sub-* (under) and adjective *violaceus* (violet) to stress the colouration of this species („dirty“ violet); adjective.

Taphrocerus conformis sp. nov.

(Figs. 5, 5a)

Type locality. Brazil, Sao Paulo.

Type specimens. Holotype (♂): „Brasil: Est. São Paulo, São Paulo, 20. x. 1971, V. N. Alin / T 128 by Hespenheide, J. Marek labelled“ (JMSC). Paratypes (3): „Brasil: Est. São Paulo, São Paulo, 22. x. 1972, V. N. Alin / T 1019 by Hespenheide, J. Marek labelled“ (1 ♂, CHAH); the same data except for date „17. xi. 1971“ (1 ♂, JMSC); the same data except for date „5. xi. 1971“ and label „Taphrocerus T 1019 det Hespenheide“ (1 ♀, TCMC).

Diagnosis. Medium-sized (3.45-3.75 mm), elongate, slender, subcylindrical, about 3.2 times longer than wide, widest just before the middle of elytra, rather strongly lustrous above; above uniformly bright coppery with more or less intensive golden lustre and strong purple tinge, beneath black, very lustrous, legs and antennae with slight coppery tinge; sparsely covered by thin, white setae, short on head and pronotum and distinctly longer on elytra; prehumeral pronotal and posthumeral elytral carinae absent.

Description of holotype. Head medium-sized, slightly narrower than posterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by well elevated carina, epistomal pores large, slightly elongate transversely, separated by their own diameter; frons rather strongly convex, strongly shagreened, moderately and narrowly depressed at middle longitudinally, impunctate, with a few thin, white setae above clypeus,

along the inner sides of the eyes and at the depression anteriorly only; vertex rather strongly convex, slightly depressed at middle anteriorly, with a fine groove at middle longitudinally, sparsely punctate by fine, simple punctures, very sparsely pubescent by short, thin, white setae anteriorly only; eyes medium-sized, oval, not projecting beyond outline of head, rather poorly visible from above; antennae rather short, narrow.

Pronotum moderately convex, 1.72 times as wide as long, widest at the beginning of basal third; narrowly and shallowly transversely depressed along anterior margin, largely and rather shallowly so lateroposteriorly, very narrowly so along the sides at basal half, with very shallow depression on the disc at middle and in front of scutellum; with rather well elevated longitudinal bump lateroposteriorly; anterior margin widely, regularly rounded, posterior margin rather strongly biemarginate, strongly emarginate in front of scutellum, distinctly narrower than base of elytra, sides shortly subparallel anteriorly, then undulate dilated to the begining of basal third, angulate and then slightly emarginately constricted to the base; surface strongly shagreened, ocellate-punctate by small punctures at the depressions, each puncture with a short, thin, white seta; scutellum small, cordiform, strongly rounded anteriorly, strongly shagreened.

Elytra moderately convex, somewhat flattened at apical third, 2.43 times as long as wide, widest just before the middle, rather distinctly wider at humeri than pronotum at the widest part; lateral margins slightly and rather widely emarginate behind humeri, narrowly rounded at middle, then very slowly arcuately tapering towards rather widely and slightly separately rounded apices; apices minutely serrate by sharp teeth; humeral swelling well developed, laterobasal depression medium-sized and rather deep, well marked; surface strongly shagreened, punctures in rows longitudinally larger and deeper at basal half becoming more finer posteriorly, apical third somewhat corrugate; sparsely pubescent by short, thin, white setae, somewhat more distinct at apical half; posthumeral elytral carina absent.

Ventral surface strongly shagreened, abdomen very lustrous, densely punctate by very small, „U-turned up-shaped“ punctures, rather densely pubescent by thin, white setae; anal ventrite rather elongately rounded, with a shallow, quadrate emargination on apical margin, preapical groove following outline of margin regularly semicircular, wide; antennal grooves long and narrow; prosternal process rather shortly elongate, wide, rather finely shagreened, asetose, sides regularly dilated behind, apex rhomboidal, with deep, longitudinally oval depression at middle.

Aedeagus (Fig. 5a).

Sexual dimorphism. The quadrate emargination on apical margin of anal ventrite is distinctly deeper in the female.

Measurements. Length 3.45-3.75 mm (holotype 3.45 mm); width 1.00-1.15 mm (holotype 1.00 mm).

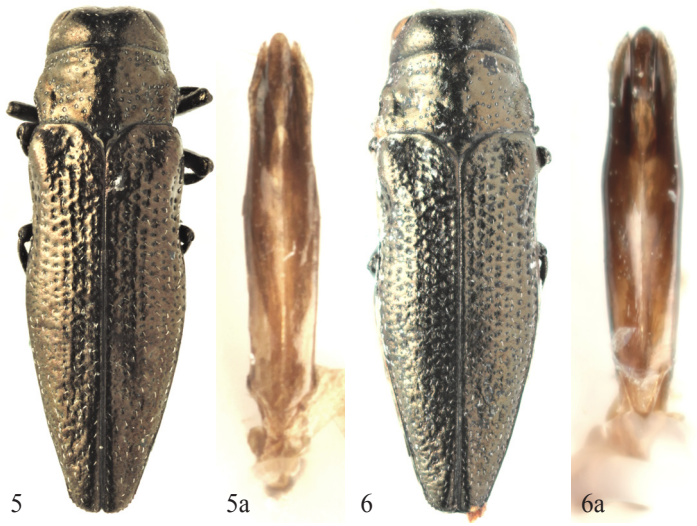
Variability. Except for the size observed in the intensity of purple tinge of dorsal side, more lustrous abdomen with slight golden lustre in some of the paratypes and by very shallow, almost inconspicuous, longitudinally oval depression at middle of prosternal process in one of the paratypes (deep in other type-specimens).

Differential diagnosis. *T. conformis* sp. nov. belongs to very difficult species-group taxonomically around *T. nugator* (Gory, 1841) which is characterized namely by sculpture of dorsal side of body (unsculptured pronotum relatively), very similar male genitalia and by a characteristic sexual dimorphism (the shape and structure of anal ventrite) (see also Marek 2017: 142). *T. conformis* sp. nov. can be distinguished from the most similar species of this species-group *T. alutaceicollis* Obenberger, 1934 (Figs. 2, 2a) (described from French Guiana) and *T. problematicus* Marek, 2017 (Figs. 6, 6a) (described from Argentina) by the characters given in Table C below.

Table C. Diagnostic characters of *T. conformis* sp. nov., *T. problematicus* Marek, 2017 and *T. alutaceicollis* Obenberger, 1934.

	T. conformis	*T. problematicus*	*T. alutaceicollis*
General shape of body	slender, about 3.2 times longer than wide	stouter, about 3.0 times longer than wide	slender, about 3.2 times longer than wide
Frons	with distint sulcus towards vertex	with sulcus at anterior half and slight depression towards vertex	with sulcus at anterior half and slight depression towards vertex
Vertex	finely shagreened	finely shagreened	strongly shagreened
Pronotal sculpture	somewhat more sculptured, pronotal depressions deeper; a vague longitudinal bump present at lateroposterior angles	somewhat more sculptured, pronotal depressions deeper; a vague longitudinal bump present at lateroposterior angles	unsculptured relatively, pronotal depressions shallower; without any bump or prominence at lateroposterior angles
Pronotal maximal width	at the beginning of basal third	at basal fifth	at the middle
Pronotal ocellate punctures	smaller punctures at anterior transverse depression than at lateroposterior ones	the same size at anterior transverse depression as at lateroposterior ones	the same size at anterior transverse depression as at lateroposterior ones
Pronotal base	distinctly narrower than elytra at humeri	slightly narrower than elytra at humeri	slightly narrower than elytra at humeri
Aedeagus	slender (about 5.3 times longer than wide), apex of phallus (median lobe) narrowly rounded (Fig. 5a)	stouter (about 4.7 times longer than wide), apex of phallus (median lobe) narrowly rounded (Fig. 6a)	stouter (about 4.6 times longer than wide), apex of phallus (median lobe) widely rounded (Fig. 2a)

Etymology. The specific epithet is derived from the Latin *con-* (with) and *-formis* (having the form of); named in reference to the external similarity with other species of *T. nugator* species-group; adjective.



Figs. 5-6a: 5- *T. conformis* sp. nov., HT, ♂, 3.45 mm, 5a- aedeagus, 0.80 mm; 6- *T. problematicus* Marek, 2017, HT, ♂, 3.50 mm (JMSC), 6a- aedeagus, 0.80 mm.

***Taphrocerus henryi* sp. nov.**
(Figs. 7, 7a)

Type locality. Brazil, Sao Paulo State, Cipó, 23°49′ S 46°47′ W.

Type specimens. Holotype (♂): „Brasil: São Paulo St., Cipó, 23°49′ S 46°47′ W / 22. ii. 1977, V. N. Alin / T 1004 by Hespenheide, J. Marek labelled“ (JMSC). Paratypes (3): the same data as holotype except for date „9. v. 1977” (1 ♂, CHAH); „Brasil: São Paulo, São Paulo St., 27. x. 1965, V. N. Alin / T 1004 by Hespenheide, J. Marek labelled“ (1 ♀, JMSC); „Brasil: São Paulo, São Paulo St., 22. x. 1966, V. N. Alin / Taphrocerus T 1004 det Hespenheide“ (1 ♀, TCMC).

Diagnosis. Medium-sized to large (3.85-4.60 mm), elongate, oval, 2.8-3.0 times longer than wide, widest at humeri and just before the middle of elytra, moderately convex above, elytra somewhat flattened apically, rather strongly lustrous; dorsal surface slightly bicolorous: head and pronotum bright coppery with strong golden lustre and brownish tinge on the pronotal disc, elytra and scutellum brownish-black with strong violet tinge and golden lustre laterally; beneath black with strong purple tinge and slight golden lustre including legs and antennae; elytra with an ornamental pubescence of rather long, thin, white setae; prehumeral pronotal carina absent; posthumeral elytral carina absent but an obsolete fold (with blunt edge) present at apical four-fifth laterally.

Description of holotype. Head rather large, wide, narrower than posterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by rather well elevated carina, epistomal pores medium-sized, circular, separated by their own diameter; frons moderately convex, strongly shagreened, largely and deeply depressed at middle, the depression merging into well distinct sulcus towards vertex, with rather coarse, simple punctures anterolaterally and with a few short, thin, white setae above clypeus only; vertex

convex, slightly depressed at middle anteriorly, with fine groove at middle longitudinally; rather finely shagreened and sparsely ocellate-punctate by very small punctures, each puncture with a short, thin, white seta; eyes medium-sized, oval, slightly projecting beyond outline of head; antennae long and narrow.

Pronotum moderately convex, 1.95 times as wide as long, widest at the beginning of basal third; narrowly transversely depressed along anterior margin, almost interruptly at middle, largely and rather shallowly depressed lateroposteriorly, with two small but well distinct depressions in front of scutellum laterally and with very vague longitudinal depressions on the disc; with a vague bump lateroposteriorly; anterior margin very widely, regularly rounded, posterior margin strongly biemarginate, very slightly narrower than elytra at base, widely emarginate in front of scutellum, sides shortly subparallel anteriorly, then straight dilated to the beginning of basal third, then distinctly angulate and then very feebly constricted to the base; surface rather strongly shagreened, somewhat more finely so on the disc laterally, rather sparsely punctate by small, ocellate punctures at the depressions, each puncture with a short, thin, white seta; scutellum rather small, regularly cordiform, widely rounded anteriorly, strongly shagreened, moderately lustrous.

Elytra moderately convex, somewhat flattened apically, 2.21 times as long as wide, widest just before the middle, weakly wider at humeri than pronotum at the widest part; lateral margins slightly and rather narrowly emarginate behind humeri, rather narrowly rounded at middle, then very widely arcuately tapering towards feebly separately and rather narrowly rounded apices; apices strongly serrate by sharp teeth; humeral swelling moderately developed, laterobasal depression medium-sized and rather deep; surface strongly shagreened at basal fourth only becoming finely shagreened posteriorly, punctures in rows longitudinally larger and deeper at basal third becoming fine apically, disappearing at apical fourth, which is coarsely corrugate laterally; with an ornamental pubescence of thin, long, white setae as follows: wide irregular („zic-zag“) stripe just before the middle transversely, consisting of six (3+3) stripes longitudinally, two (1+1) large, transversely oval spots at the beginning of apical fourth; with sparse and very short white setae laterally from humeri to the apices and at apical fifth; posthumeral elytral carina absent but an obsolete fold (with blunt edge) present at apical four-fifth laterally.

Ventral surface moderately lustrous, abdomen rather strongly shagreened, sparsely pubescent by extremely short, almost inconspicuous white setae, rather densely punctate by small „U-turned up-shaped“ punctures; anal ventrite rather narrowly rounded, with a wide emargination on apical margin, preapical groove following outline of margin regularly semicircular, wide; antennal grooves narrow and long; prosternal process shortly elongate, wide, rather strongly shagreened, sides feebly constricted between procoxae, apex rhomboidal, punctate by rather large punctures, asetose.

Aedeagus (Fig. 7a).

Sexual dimorphism. Male is somewhat slender than female (2.91-3.02 times as long as wide in the males, 2.77-2.82 times so in the females).

Measurements. Length 3.85-4.60 mm (holotype 4.20 mm); width 1.40-1.60 mm (holotype 1.45 mm).

Variability. Except for the size observed in: one female-paratype has eyes ovoid and not projecting beyond outline of head, more coarsely punctate frons at posterior half and very sparse, obsolete perisutural stripe of white setae behind scutellum; the second female-paratype has distinctly larger scutellum relatively; the male-paratype is markedly slender (3.02 times as long as wide) and pubescent spots (1+1) at the beginning of elytral apical fourth are markedly smaller and circular.

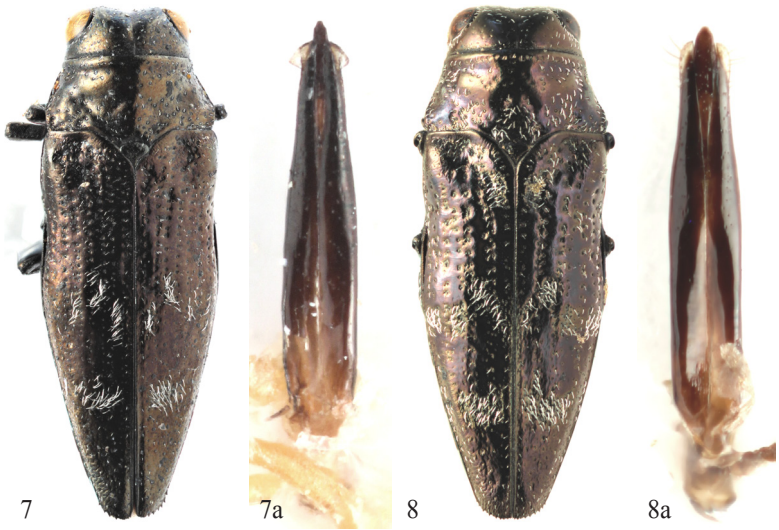
Differential diagnosis. *T. henryi* sp. nov. is very similar and probably closely related to *T. paranaensis* Obenberger, 1924 (Figs. 8, 8a) (described from Brazil, Paraná and known to me along Atlantic coast from Brazilian state Pernambuco as far south as Argentina, Buenos Aires and south-west as Paraguay, Asuncion). For distinguishing these two species see Table D below.

Table D. Diagnostic characters of *T. henryi* sp. nov. and *T. paranaensis* Obenberger, 1924.

	T. henryi	*T. paranaensis*
Frons (DV)	distinctly more depressed at middle	very slightly depressed at middle
Pronotal maximal width	at the beginning of basal third; pronotum narrower than elytra at humeri	at the beginning of basal fourth; pronotum the same width as elytra at humeri
Pronotal sides	distinctly angulate at the widest part	arcuate at the widest part
Pronotal surface	distinctly more strongly shagreened, without any smooth aereas	very weakly shagreened, with large, smooth aereas on the disc
Pronotal pubescence	less distinct, consisting of markedly shorter and narrower white setae	more distinct, consisting of markedly longer and somewhat widened white setae
Scutellum	larger relatively, pronotal base less than 5.5 times wider than width of scutellum; distinctly, strongly shagreened	smaller relatively, pronotal base more than 6.2 times wider than width of scutellum; very weakly, finely shagreened
Elytral ornamental pubescence (pattern)	perisutural stripe behind scutellum missing (or very obsolete, almost inconspicuous); the stripe just before the middle transversely interrupted, consisting of six (3+3) stripes longitudinally („zic-zag“)	perisutural stripe behind scutellum well distinct, short but wide; the stripe at the middle transversely „zic-zag“ but not interrupted
Aedeagus	parameres shortly subparallel at base, then slowly, almost regularly constricted proximally; apex of parameres with semimembranous parts strongly dilated laterally, asetose; phallus (median lobe) slender (Fig. 7a)	parameres subparallel at basal half, then slightly emarginately constricted proximally; apex of parameres with semimembranous parts not dilated laterally, with a few long setae; phallus (median lobe) wider (Fig. 8a)
Known distribution	so far known from Brazilian state Sao Paulo only (see Type specimens above)	distributed widely along Atlantic coast from Brazilian state Pernambuco (Marek 2018a) as far south-west as Paraguay, Asuncion (Marek 2018a) and south as Argentina, Buenos Aires (Obenberger 1947 under *T. tigrensis* (Marek 2016)

Etymology. It´s a big pleasure for me to name this new species in honour of Henry

Hespenheide (Los Angeles, U.S.A.), well known specialist in the taxonomy of Buprestidae; patronymic.



Figs. 7-8a: 7- *T. henryi* sp. nov., HT, ♂, 4.20 mm, 7a- aedeagus, 1.10 mm; 8- *T. paranaensis* Obenberger, 1924, LT, ♂, 4.00 mm (NMPC), 8a- aedeagus, 1.15 mm.

***Taphrocerus likaveci* sp. nov.**
(Figs. 9, 9a)

Type locality. Brazil, Bahia, Itaparica.

Type specimens. Holotype (♂): „Brazil, Bahia, Itaparica, 18. vii. 1982, P. Maret lgt.“ (JMSC).

Diagnosis. Medium-sized (3.45 mm), rather broadly elongate, cuneiform, about 2.7 times longer than wide, widest at humeri and before the middle of elytra, moderately convex above, very lustrous; dorsal surface very slightly bicoloured: head and pronotum black with golden tinge, scutellum and elytra black with very feeble violet tinge and golden reflections; beneath black with slight coppery tinge including legs and antennae; above very sparsely pubescent by extremely short, almost inconspicuous, thin, white setae and with two (1+1) obsolete, circular spots at the beginning of elytral apical fourth; prehumeral pronotal and posthumeral elytral carinae absent.

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 pores medium-sized, circular, separated more than their own diameter; frons moderately convex, finely shagreened, widely depressed at middle anteriorly, the depression merging into wide sulcus towards vertex, unpunctate, with a few thin, white setae anterolaterally only; vertex rather strongly and widely convex, slightly depressed at

middle anteriorly, shagreened, with a fine groove at middle longitudinally, sparsely ocellate-punctate by very small punctures, each puncture with extremely short, almost inconspicuous, thin, white seta; eyes rather large, broadly ovoid, moderately projecting beyond outline of head, well visible from above; antennae rather long, antennomeres 6-11 widened.

Pronotum moderately convex, 2.01 times as wide as long, widest at the beginning of basal third; narrowly and rather shallowly transversely depressed along anterior margin, largely and more deeply so lateroposteriorly, very narrowly so along the sides at anterior half, with shallow depression on the disc; with rather well elevated bump lateroposteriorly; anterior margin very widely rounded (nearly straight), posterior margin strongly biemarginate, very slightly narrower than base of elytra, widely emarginate in front of scutellum, sides subparallel at anterior fifth, then stright dilated to the beginning of basal third, bluntly angulate and then slightly emarginately constricted to the base; surface rather strongly shagreened, sparsely ocellate-punctate by small punctures at the depressions, each puncture with an extremely short, thin, white seta; scutellum rather small, regularly cordiform, widely rounded anteriorly, finely shagreened, lustrous.

Elytra moderately convex, 2.07 times as long as wide, rather distinctly wider at humeri than pronotum at the widest part, widest at humeri and before the middle; lateral margins slightly emarginate behind humeri, rather narrowly rounded at middle, then very slowly arcuately tapering towards rather narrowly and very feebly separately rounded apices; apices rather strongly serrate by sharp teeth laterally; humeral swelling moderately developed, laterobasal depression small and rather deep; surface rather finely shagreened, apical third somewhat corrugate, punctures in rows longitudinally deeper and larger at basal third becoming fine posteriorly, almost inconspicuous at apical fourth; very sparsely pubescent by extremely short, almost inconspicuous, thin, white setae and with two (1+1) obsolete, circular spots at the beginning of elytral apical fourth of longer white setae; posthumeral elytral carina absent.

Ventral surface rather strongly shagreened, abdomen very lustrous, ocellate-punctate by medium-sized punctures opened posteriorly on first two visible sternites only, with very short, almost inconspicuous, thin, white setae laterally; anal ventrite narrowly rounded, with short, semicircular emargination on apical margin, preapical groove following outline of margin regularly semicircular, wide; antennal grooves rather shallow, very wide on prosternum; prosternal proces shortly elongate, wide, strongly shagreened, asetose, sides very feebly constricted between procoxae, moderately dilated behind, apex rhomboidal, with wide sulcus (not groove) at middle longitudinally.

Aedeagus (Fig. 9a).

Sexual dimorphism. Female unknown.

Measurements. Length 3.45 mm; width 1.30 mm.

Differential diagnosis. *T. likaveci* sp. nov. belongs to a number of very similar species around *T. stareki* Marek, 2018 (Figs. 11, 11a) (described from Brazil and Peru) that are characterised by more or less cuneiform general body shape, absence of prehumeral pronotal

and posthumeral elytral carinae, colouration, small ocellate punctures on the pronotum, extremely short pubescence of dorsal side (sometimes with two (1+1) obsolete spots on elytra) etc. Very similar species around *T. minutus* Kerremans, 1903 differ in body shape (oval) and presence of pronotal prehumeral carina. The most similar species *T. likaveci* sp. nov., *T. yanamono* sp. nov. (described below) and *T. stareki* can be distinguished by the characters given in Table E below.

Etymology. Named in honour of my friend Petr Likavec (Nové Město nad Metují, Czech Republic), my schoolfellow in 1984-1989; patronymic.

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

Type locality. Peru, Loreto Prov., Yanamono Lodge, Quebrada Yanamono, 1 km N R. Amazonas, ca. 3°22´S 72°47´W.

Type specimens. Holotype (♂): „PERU: Loreto Prov., Yanamono Lodge, Quebrada Yanamono, 1 km N R. Amazonas, ca. 3°22´S 72°47´W / 27. vi. 1978, H. A. Hespenheide“ (JMSC).

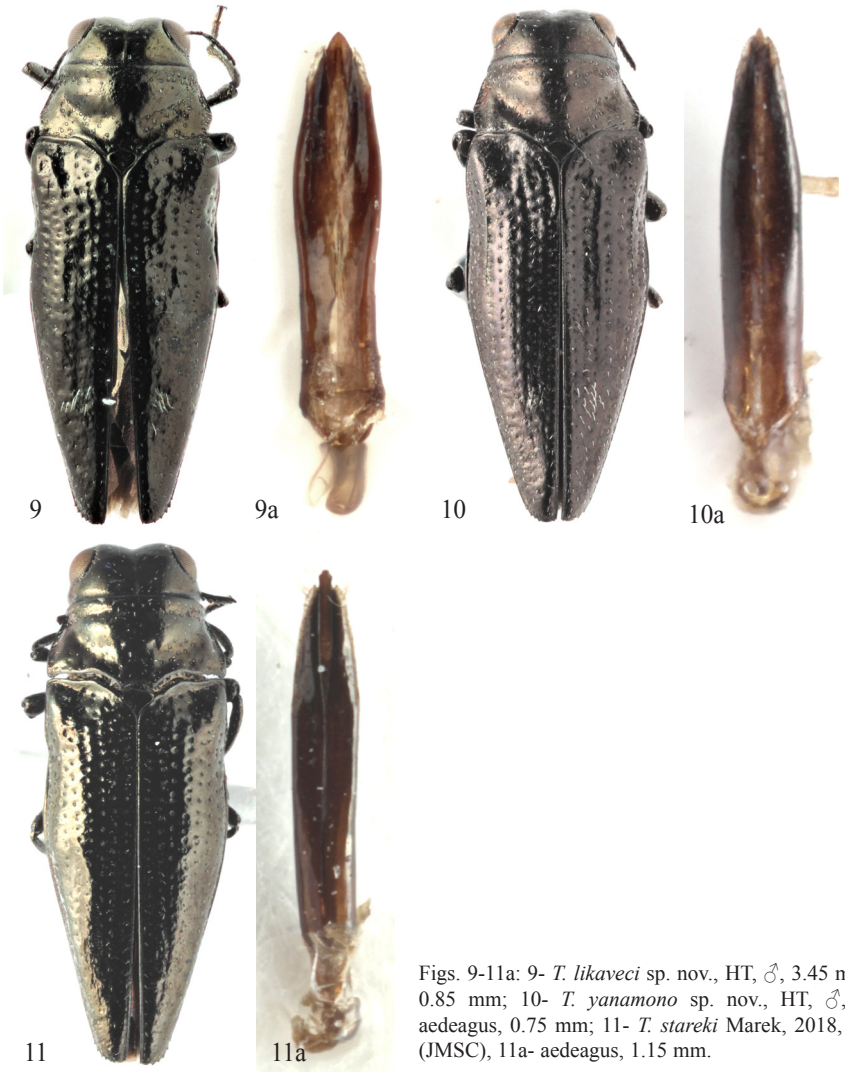
Diagnosis. Medium-sized (3.25 mm), rather robust, cuneiform, about 2.75 times longer than wide, widest at humeri and before the middle of elytra, moderately lustrous above, pronotum rather strongly convex, elytra somewhat flattened; above slightly bicoloured: head and pronotum black with very strong coppery tinge, elytra black with slight purple-violet tinge and feeble golden lustre; beneath black with golden-purple tinge including legs and antennae, rather feebly lustrous; sparsely covered by very short, thin, white setae, elytra with two (1+1) obsolete spots of somewhat denser and longer white setae at the beginning of apical fourth; prehumeral pronotal carina absent; posthumeral elytral carina present, well elevated and with sharp edge from subhumeri to the middle of elytra only, then becoming obsolete, with blunt edge to near of apices.

Description of holotype. Head medium-sized, rather distinctly narrower than posterior pronotal margin; clypeus very widely „V-shaped“, very strongly shagreened, separated from frons by a fine carina, epistomal pores large, slightly elongate transversely, separated more than their own diameter; frons very feebly convex, strongly shagreened, widely and shallowly depressed at middle, the depression merging into sulcus towards vertex, unpunctate, with sparse, short, thin, white setae at the depression and along the inner sides of the eyes only; vertex convex, finely shagreened, with a fine groove at middle longitudinally, very sparsely punctate by very small ocellate punctures, very sparsely pubescent by short, thin, white setae; eyes medium-sized, semicircular, moderately projecting beyond outline of head, well visible from above; antennae rather short, antennomeres 6-11 somewhat widened.

Pronotum rather strongly convex, 1.61 times as wide as long, widest at the beginning of third-fifth; rather widely transversely depressed along anterior margin, somewhat more shallowly and narrowly laterally, largely and rather deeply depressed lateroposteriorly, very slightly depressed on the disc at middle; with very vague prominence lateroposteriorly;

anterior margin very widely rounded (almost straight), posterior margin biemarginate, widely emarginate in front of scutellum, very slightly narrower than base of elytra, sides shortly subparallel anteriorly, then straight dilated to the beginning of third-fifth, angulate and then straight constricted to the base; surface moderately shagreened, sparsely ocellate-punctate by small punctures at the depressions, each puncture with a short, thin, white seta; scutellum medium-sized, widely triangular, widely rounded anteriorly, strongly shagreened.

Elytra moderately convex, distinctly wider at humeri than pronotum at the widest part, 2.13 times as long as wide, widest at humeri and before the middle; lateral margins rather narrowly emarginate behind humeri, narrowly rounded at middle, then very slowly, almost



Figs. 9-11a: 9- *T. likaveci* sp. nov., HT, ♂, 3.45 mm, 9a- aedeagus, 0.85 mm; 10- *T. yanamono* sp. nov., HT, ♂, 3.25 mm, 10a- aedeagus, 0.75 mm; 11- *T. stareki* Marek, 2018, HT, ♂, 3.35 mm (JMSC), 11a- aedeagus, 1.15 mm.

straight tapering towards widely, very slightly separately rounded apices; apices sharply and minutely serrate laterally; humeral swelling well developed, laterobasal depression small but deep; surface finely shagreened, punctures in longitudinal rows larger and deeper at basal half becoming fine posteriorly, apical fifth somewhat corrugate; sparsely covered by very short, thin, white setae and with two (1+1) obsolete spots of somewhat denser and longer white setae at the beginning of apical fourth; posthumeral elytral carina present, well elevated and with sharp edge from subhumeri to the middle only, then becoming very obsolete, with blunt edge to near of apices.

Ventral surface moderately lustrous, abdomen strongly shagreened, very finely punctate by ocellate punctures opened posteriorly, the punctures are medium-sized on the first visible sternite and very small on the next ones apically, sparsely pubescent by very short, almost inconspicuous, white setae; anal ventrite narrowly rounded, somewhat protruding posteriorly, with wide, shallow emargination on apical margin, preapical groove following outline of margin regularly semicircular, rather narrow; antennal grooves very wide on prosternum; prosternal process shortly elongate, dilated behind, apex rhomboidal, surface strongly shagreened, asetose, unpunctate, with narrow and shallow but well distinct sulcus at middle longitudinally.

Aedeagus (Fig. 10a).

Sexual dimorphism. Female unknown.

Measurements. Length 3.25 mm; width 1.20 mm.

Differential diagnosis. *T. yanamono* sp. nov. is somewhat similar to the species of *T. catharinae* species-group (definition of species-group in prep.) and differs namely in very small pronotal ocellate punctures (small but distinctly larger in the species of *T. catharinae* species-group), presence of sharp, well elevated posthumeral elytral carina from subhumeri to the middle only, then becoming very obsolete, with blunt edge to near of apices (sharp, well elevated, entire (from subhumeri to near of apices) in species of *T. catharinae* species-group) and in narrowly pointed apex of phallus (median lobe) of male genitalia (rounded and weakly widened in species of *T. catharinae* species-group). *T. yanamono* sp. nov. is also very similar to the species around *T. stareki* Marek, 2018 (Figs. 11, 11a) and to *T. likaveci* sp. nov. (Figs. 9, 9a) (described above), namely in general body shape (cuneiform) and some other details of morphology and it can be distinguished by the characters given in Table E below (see also Differential diagnosis under *T. likaveci* sp. nov. above). From another very similar species-group externally around *T. minutus* Kerremans, 1903 they can be easily distinguished by absence of prehumeral pronotal carina (strongly elevated, with sharp edge in species of *T. minutus* species-group).

Table E. Diagnostic characters of *T. likaveci* sp. nov., *T. yanamono* sp. nov. and *T. stareki* Marek, 2018.

	T. likaveci (♂)	*T. yanamono* (♂)	*T. stareki* (♂)
Pronotum	wider, about 2.0 times wider than long	narrower, about 1.6 times wider than long	wider, about 2.0 times wider than long
Maximal pronotal width	at the beginning of basal third	at the beginning of third-fifth	just before the base
Pronotal base	distinctly narrower than elytra at humeri	distinctly narrower than elytra at humeri	almost the same width as elytra at humeri
Pronotal sides	bluntly angulate at the widest part	bluntly angulate at the widest part	rounded at the widest part
Posthumeral elytral carina (sharp)	absent	present at basal second-fourth	absent
Pubescent spots (1+1) at the beginning of elytral apical fourth	present	present	absent
Aedeagus	more robust, about 4.2 times longer than wide; parameres emarginate at basal half; phallus (median lobe) wide and widely pointed at apex (Fig. 9a)	more robust, about 5.0 times longer than wide; parameres subparallel at basal half; phallus (median lobe) narrow and narrowly pointed at apex (Fig. 10a)	more slender, about 5.9 times longer than wide; parameres slightly dilated proximally at basal half; phallus (median lobe) narrow, rounded and protruding proximally (at middle) at apex (Fig. 11a)

Etymology. The species is named after the type locality (Yanamono Lodge, Quebrada Yanamono); noun in aposition.

Taphrocerus imitator sp. nov.
(Fig. 12)

Type locality. Bolivia, Santa Cruz Pr., Chiquitos Roboré, 300 m.

Type specimens. Holotype (♀): „Bolivia, Santa Cruz Pr., Chiquitos Roboré, 300 m, x-1959 / T 110 by Hespenheide, J. Marek labelled“ (JMSC).

Diagnosis. Medium-sized (3.10 mm), elongate, broadly oval, about 2.8 times longer than wide, widest before the pronotal base, at humeri and just before the middle of elytra, pronotum and elytra moderately convex, rather strongly lustrous; above dark coppery with slight violet lustre, anterior half of pronotal disc and areas under elytral ornamental pubescence „dirty“ golden-green; beneath black with slight purplish tinge including legs and antennae; with elytral ornamental pubescence (pattern) of rather long, white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, well elevated, entire, with sharp edge.

Description of holotype. Head rather large, wide, slightly narrower than posterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by well elevated carina, epistomal pores large, circular, separated more than their own diameter; frons moderately convex, largely depressed at middle, the depression merging into narrow and rather shallow sulcus towards vertex, finely shagreened at anterior half and rather strongly shagreened at posterior half, sparsely pubescent by rather long, thin, white setae above clypeus at middle and at posterior half, which is finely and very sparsely punctate by simple punctures; vertex moderately convex, very finely shagreened, weakly depressed at middle anteriorly, with a fine groove at middle longitudinally, sparsely punctate by fine punctures, each puncture with a thin, white seta; eyes medium-sized, broadly oval, slightly projecting beyond outline of head, moderately visible from above; antennae long and narrow.

Pronotum moderately convex, 1.78 times as wide as long, widest before the base; widely and rather shallowly transversely depressed along anterior margin, largely and rather deeply depressed lateroposteriorly, very shallowly so on the disc at middle; with rather well elevated longitudinal bump lateroposteriorly; anterior margin widely, regularly rounded, posterior margin rather strongly biemarginate, the same width as base of elytra, widely emarginate in front of scutellum, sides subparallel at anterior fifth, then stright dilated to the beginning of basal fourth, then weakly, arcuately dilated to just before the base and then very shortly constricted to the base; surface very finely shagreened, almost smooth on the disc laterally, ocellate-punctate by small punctures at the depressions and at the middle longitudinally, each puncture with rather long, white seta; scutellum rather small, widely cordiform, widely rounded anteriorly, rather strongly shagreened.

Elytra moderately convex, 2.04 times as long as wide, widest at humeri and just before the middle, the same width at humeri as pronoutum at the widest part; lateral margins rather widely and shallowly emarginate behind humeri, regularly and rather widely rounded at middle, then slowly arcuately tapering towards slightly separately and rather widely rounded apices; apices strongly and sharply serrate laterally, the top of apices very minutely, almost inconspicuously serrate; humeral swelling moderately developed, laterobasal depression small but rather deep, well distinct; surface very finely shagreened at base and at apical fifth, the rest of surface almost smooth, punctures in rows longitudinally fine, well distinct at basal half only and becoming very fine posteriorly, apical half is somewhat corrugate; with an ornamental pubescence (pattern) of rather long, white setae as follows: a few setae anterolaterally, short, wide but sparse perisutural stripe behind scutellum, sparse and rather narrow transverse stripe in the end of basal fourth, wide and dense „U-turned up-shaped“ transverse stripe at the middle of each elytron, narrow and dense, transverse, „U-shaped“ stripe at the beginning of apical fourth of each elytron, apical fifth sparsely covered by more shorter, white setae; posthumeral elytral carina present, well elevated, entire, with sharp edge.

Ventral surface strongly shagreened, abdomen rather strongly lustrous, rather densely ocellate-punctate by punctures opened posteriorly, pubescent by rather long, white setae, somewhat more densely laterally; anal ventrite rather narrowly rounded, with shallow emargination on apical margin, preapical groove following outline of margin rather widely rounded, wide; antennal grooves narrow and deep; prosternal process rather shortly elongate,

strongly shagreened, unpunctate, asetose, sides slightly constricted between procoxae, apex rhomboidal, with deep, longitudinally oval depression at middle.

Sexual dimorphism. Male unknown.

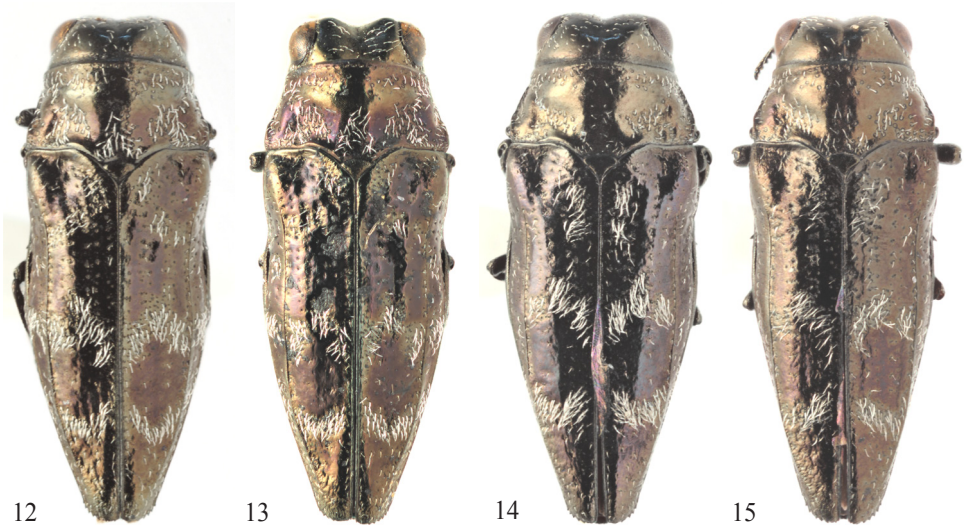
Measurements. Length 3.10 mm; width 1.10 mm.

Differential diagnosis. *T. imitator* sp. nov. is very similar and probably closely related to *T. scriptus* Obenberger, 1924 (Fig. 13) (described from Brazil, Sao Paulo). It is also similar to *T. marta* Marek, 2019 (Fig. 14) (described from Brazil, Benjamin Constant) and *T. paveli* Marek, 2019 (fig. 15) (described from Brazil, Manaus) and it can be distinguished by the characters given in Table F below.

Table F. Diagnostic characters of *T. imitator* sp. nov., *T. scriptus* Obenberger, 1924, *T. marta* Marek, 2019 and *T. paveli* Marek, 2019.

	T. imitator	*T. scriptus*	*T. marta*	*T. paveli*
Colouration of dorsal side	dark coppery with slight violet lustre, anterior half of pronotal disc and areas under elytral ornamental pubescence „dirty“ golden-green	bright coppery with very strong violet and golden tinge	bicoloured: head and pronotum black with golden-coppery tinge, elytra black with dark violet tinge and golden reflection	dark coppery with very slight violet tinge and golden reflections
Vertex	very slightly depressed at middle anteriorly only	strongly and largely depressed at middle (excavate)	widely depressed at middle anteriorly	slightly depressed at middle longitudinally
Eyes (DV)	slightly projecting beyond outline of head	strongly projecting beyond outline of head	very feebly projecting beyond outline of head	strongly projecting beyond outline of head
Pronotal sides	rounded at the widest part	rounded at the widest part	rounded at the widest part	angulate at the widest part
Maximal width of pronotum	before the base	before the base	at the beginning of basal third	at the beginning of basal third
Width of pronotum	the same width at the widest part as elytra at humeri	the same width at the widest part as elytra at humeri	slightly but distinctly narrower at the widest part than elytra at humeri	slightly but distinctly narrower at the widest part than elytra at humeri
Elytral transverse stripe at apical third	„U-shaped“ on each elytron	„U-shaped“ on each elytron	„U-shaped“ on each elytron	stright, obliquely up towards the suture on each elytron

Etymology. The specific epithet is the Latin noun in apposition *imitator* (imitator, mimic); named in reference to the external similarity with *T. scriptus*, *T. marta* and *T. paveli*.



Figs. 12-15: 12- *T. imitator* sp. nov., HT, ♀, 3.10 mm; 13- *T. scriptus* Obenberger, 1924, ST, ♀, 3.70 mm (NMPC); 14- *T. marta* Marek, 2019, HT, ♀, 3.60 mm (JMSC); 15- *T. paveli* Marek, 2019, HT, ♂, 3.30 mm (JMSC).

***Taphrocerus cuprescens* sp. nov.**
(Figs. 16, 16a)

Type locality. Brazil, Sao Paulo.

Type specimens. Holotype (♂): „Brasil: Est. São Paulo, São Paulo, 6. x. 1970, V. N. Alin / T 1039 by Hespenheide, J. Marek labelled“ (JMSC). Paratypes (4): the same data as holotype except for date „11. xi. 1971“ (1 ♂, CHAH); „Corcovado. Rio de J., Wygodzinski, 9. 3. 47 / Typus / Taphrocerus Corcovadensis m. Type, Det. Dr. Obenberger / Popsat! (to describe!)“ (1 ♀, NMPC); „Hab.? / Saunders. 74.18.“ (1 ♂, BMNH); „Braz. / Saunders. 74.18.“ (1 ♀, BMNH).

Diagnosis. Small to medium-sized (2.95-3.15 mm), elongate, narrowly oval, somewhat attenuate posteriorly, about 2.6 times longer than wide, widest before the middle of elytra, pronotum rather strongly convex at anterior half, elytra moderately convex; above coppery with strong golden lustre, head and pronotum with brown tinge, scutellum dark brown, elytra brown-violet in asetose parts; beneath black, legs and antennae black with coppery tinge; with an elytral ornamental pubescence (pattern) of rather long, white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, well elevated, entire, with sharp edge.

Description of holotype. Head medium-sized, wide relatively, rather strongly narrower than posterior pronotal margin; clypeus widely „V-shaped“, strongly shagreened, separated from frons by a fine carina, epistomal pores large, elongate transversely, separated less than their own diameter; frons moderately convex, with narrow and shallow depression at middle, the depression merging into rather deep sulcus towards vertex, densely punctate by fine

punctures at anterior half becoming almost smooth, very finely shagreened only towards vertex, with very wide and dense „fronto-clypeal pubescent stripe“ (♂) of wide, cream-white setae; vertex convex, moderately and widely depressed anteriorly, with a fine groove at middle longitudinally, very finely, almost inconspicuously shagreened, sparsely ocellate-punctate by small punctures, sparsely pubescent by long, thin, cream-white setae anteriorly; eyes medium-sized, oval, very feebly projecting beyond outline of head, poorly visible from above; antennae long and rather narrow.

Pronotum rather strongly convex, 1.98 times as wide as long, widest at the base; narrowly and rather shallowly transversely depressed along anterior margin, largely and shallowly so lateroposteriorly, narrowly and deeply so along the sides, very shallowly depressed on the disc anteriorly; with moderately elevated prominence at lateroposterior angles; anterior margin widely, regularly rounded, posterior margin biemarginate, slightly wider than base of elytra, widely and rather feebly emarginate in front of scutellum, sides shortly subparallel anteriorly, then arcuately dilated to the base; surface very finely, almost inconspicuously shagreened, with medium-sized ocellate punctures at the depressions, each puncture with thin, long, white seta; scutellum small, cordiform, widely rounded anteriorly, very finely shagreened, moderately lustrous.

Elytra moderately convex, somewhat flattened at apical half, 1.98 times as long as wide, widest before the middle, the same width at humeri as pronotum at the widest part; lateral margins rather feebly and narrowly emarginate behind humeri, rather feebly and narrowly rounded at middle, then slowly, slightly arcuately tapering towards rather widely and slightly separately rounded apices; apices almost smooth, with a few shallow, almost inconspicous teeth laterally only; humeral swelling moderately developed, laterobasal depression small but rather deep; surface finely shagreened in aereas covered by ornamental pubescence only, punctures in rows longitudinally larger and deeper at basal third becoming more finer apically, almost inconspicuous at apical fourth, with two (1+1) small, longitudinally oval depressions in the end of basal third at middle; with ornamental pubescence (pattern) of thin, white setae as follows: a few short setae at basal depressions, rather wide but short perisutural stripe behind scutellum of long setae becoming in more narrower, transverse stripe posteriorly in the end of basal fourth, wide but sparse, irregular, transverse stripe at the middle, two (1+1) irregular spots of somewhat denser, long setae at the beginning of apical fourth, apical fourth very sparsely irregularly pubescent; posthumeral elytral carina well elevated, entire, with sharp edge.

Ventral surface very lustrous, abdomen finely shagreened, punctate by „U-turned up-shaped“ punctures, the punctures are very large on first visible sternite becoming more finer apically, rather densely pubescent by thin, long, white setae laterally and apically; anal ventrite widely, regularly rounded, with shallow but well distinct wide emargination on apical margin; preapical groove following outline of margin regularly semicircular and rather narrow; antennal grooves rather long and narrow; prosternal process elongate, constricted between procoxae, very strongly dilated behind, with sulcus at middle longitudinally, the sulcus becoming into deep, longitudinally oval depression on apex, apex rhomboidal, with a few thin, white setae.

Aedeagus (Fig. 16a).

Sexual dimorphism. Female is somewhat stouter than male; the „fronto-clypeal pubescent stripe“ of wide, cream-white setae present in male, a few short, thin, white setae above clypeus only in female.

Measurements. Length 2.95-3.15 mm (holotype 2.95 mm); width 1.15-1.20 mm (holotype 1.15 mm).

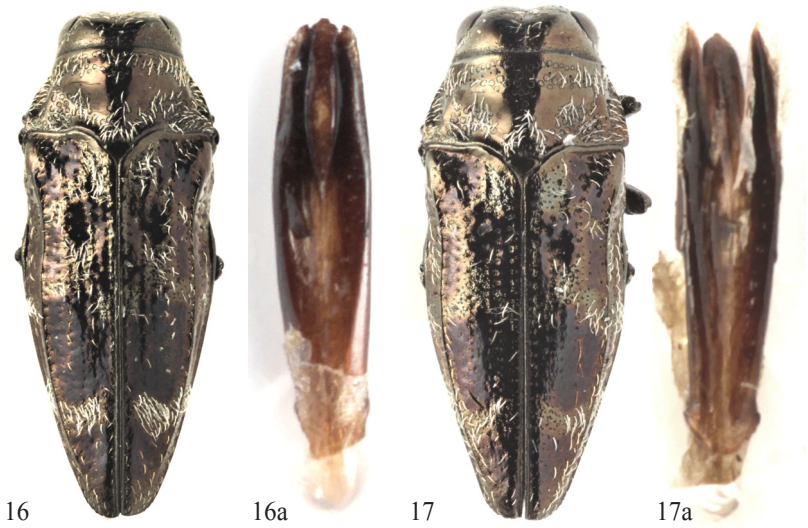
Variability. Except for the size no substantial variability was found.

Differential diagnosis. *T. cuprescens* sp. nov. is very similar and probably closely related to *T. santaremensis* Marek, 2019 (Figs. 17, 17a) (described from Brazil, Santarém) and it can be distinguished namely by larger size, distinctly slender body and markedly narrower anterior pronotal margin relatively. For distinguishing these two species see also the characters given in Table G below.

Table G. Diagnostic characters of *T. cuprescens* sp. nov. and *T. santaremensis* Marek, 2019.

	T. cuprescens	*T. santaremensis*
Size	larger, 2.95-3.15 mm	smaller, 2.60-2.75 mm
Body shape	narrowly oval, somewhat attenuate posteriorly, about 2.6 times longer than wide, the maximal body width before the middle of elytra	broadly oval, less than 2.5 times longer than wide, the maximal body width at the pronotal base
Ratio length of body to width of anterior pronotal margin	about 4.0	about 3.4
Clypeus	widely „V-shaped“; lateral branches wide	almost „T-shaped“; lateral branches narrow
Frons	with narrow and shallow depression at middle longitudinally	with wide and rather deep depression at middle longitudinally
Posterior pronotal margin	slightly wider than base of elytra (the same width as elytra at humeri)	distinctly wider than base of elytra (slightly wider than elytra at humeri)
Prosternal process	with deep, longitudinally oval depression at apex	with wide sulcus at middle longitudinally
Punctures on first visible sternite	distinctly narrower, „U-turned up-shaped“	distinctly wider, circular ocellate punctures opened posteriorly
Aedeagus	parameres constricted proximally at apical fourth; semimembranous apical parts narrower and short, poorly visible	parameres dilated proximally at apical fourth; semimembranous apical parts wider and long, well visible

Etymology. The specific epithet is the Latin adjective *cuprescens* (coppery) to stress the colouration of this species.



Figs. 16-17a: 16- *T. cuprescens* sp. nov., HT, ♂, 2.95 mm, 16a- aedeagus, 0.65 mm; 17- *T. santaremensis* Marek, 2019, HT, ♂, 2.60 mm (JMSC), 17a- aedeagus, 0.65 mm.

***Taphrocerus bamboo* sp. nov.**
(Figs. 18, 18a)

Type locality. Peru, Loreto Prov., ´Tambo Pirana´ on Rio Cochiquinas, cca 3° 40´ S 71° 34/35´ W.

Type specimens. Holotype (♂): „PERU: Loreto Prov., ´Tambo Pirana´ on Rio Cochiquinas, cca 3° 40´ S 71° 34/35´ W / 1. vii. 1978, H. A. Hespenheide / T 1048 by Hespenheide, J. Marek labelled“ (JMSC). Paratype the same data and with additional label: „BAMBOO“ (1 ♀, JMSC).

Diagnosis. Small to medium-sized (2.75-3.15 mm), broadly elongate, stout, about 2.7 times longer than wide, widest just before the pronotal base and at the middle of elytra, moderately convex, elytra somewhat flattened, rather moderately lustrous above; above black, with strong violet or dark bluish-black tinge and with slight bluish or golden lustre on head, pronotum and on aereas covered by elytral ornamental pubescence; beneath black including legs, antennae black with slight purple tinge; elytra with ornamental pubescence of long, white setae; prehumeral pronotal carina present, well elevated, with sharp edge; posthumeral elytral carina present, well elevated, entire, with sharp edge from humeri to very near of apex but not reaching apices.

Description of holotype. Head rather large, distinctly narrower than posterior pronotal margin; clypeus almost „T-shaped“, strongly shagreened, separated from frons by well elevated carina, epistomal pores medium-sized, slightly elongate transversely, separated by their own diameter; frons rather strongly convex, strongly shagreened, deeply depressed longitudinally at middle, the depression is widened above clypeus and merging into sulcus towards vertex, unpunctate, with very short, white setae at middle above clypeus, along

the inner sides of the eyes and at the depression anteriorly; vertex very strongly convex, rather strongly shagreened, very slightly depressed at middle anteriorly, with a fine groove at middle longitudinally, sparsely ocellate-punctate by small punctures, each puncture with brownish seta, the setae are long anteriorly and distinctly more shorter posteriorly along anterior pronotal margin; eyes medium-sized, broadly oval, moderately projecting beyond outline of head, rather poorly visible from above; antennae long and narrow.

Pronotum rather strongly convex anteriorly, somewhat flattened posteriorly, 1.88 times as wide as long, widest just before the base; narrowly transversely depressed along anterior margin, more deeply laterally and almost interruptly at middle, largely and rather deeply depressed lateroposteriorly, shallowly depressed on the disc at middle and in front of scutellum; with well elevated prehumeral carina with sharp edge lateroposteriorly; anterior margin widely, regularly rounded, posterior margin strongly biemarginate, widely emarginate in front of scutellum, distinctly wider than base of elytra, sides shortly subparallel anteriorly, then widely arcuately dilated to the beginning of basal fourth, slightly undulate and then straight dilated to just before the base and then constricted to the base; surface strongly shagreened, ocellate-punctate by medium-sized punctures at anterior transverse depression and on the disc at middle and by large punctures at lateroposterior depressions and in front of scutellum, each puncture with long, thin, white seta except for yellowish setae on the disc; scutellum medium-sized, strongly shagreened, rather widely cordiform, moderately lustrous.

Elytra moderately convex at basal third, somewhat flattened apically, 2.04 times as long as wide, widest at the middle, slightly narrower at humeri than pronotum at the widest part; lateral margins weakly and rather narrowly emarginate behind humeri, regularly rounded at middle, then almost straight tapering towards widely, feebly separately rounded apices; apices very shallowly, almost inconspicuously, bluntly serrate laterally; humeral swelling rather feebly developed, laterobasal depression small but rather deep; surface rather strongly shagreened at basal third becoming rather finely shagreened posteriorly, punctures in rows longitudinally larger and deeper at basal half becoming finer posteriorly, almost inconspicuous at apical third; an ornamental pubescence of long, white setae as follows: a few setae anterolaterally, two (1+1) very sparse spots at basal fourth at middle, wide transverse stripe at middle, two (1+1) large and somewhat denser triangular spots at the beginning of apical fifth and a few setae at apex; posthumeral elytral carina strongly elevated, entire, with sharp edge, from humeri to very near of apex but not reaching apices.

Ventral surface very lustrous, abdomen rather finely shagreened, very finely punctate, sparsely pubescent by long, thin, white setae laterally and apically; anal ventrite rather widely rounded, with short and shallow emargination on apical margin, preapical groove following outline of margin semicircular, wide; antennal grooves long and narrow; prosternal process elongate, sides constricted between procoxae, rather strongly dilated behind, apex rhomboidal, surface strongly shagreened, unpunctate, with a few very short, white setae only, with shallow sulcus at middle longitudinally.

Aedeagus (Fig. 18a).

Sexual dimorphism. Observed weakly in pubescence of frons only: very slightly more denser, short, white setae above clypeus at middle in male (!not „fronto-clypeal pubescent stripe“!).

Measurements. Length 2.75-3.15 mm (holotype 3.15 mm); width 1.00-1.15 mm (holotype 1.15 mm).

Variability. The pronotal pubescence of the paratype (♀) consisting from white setae only.

Differential diagnosis. Although *T. bamboo* sp. nov. is very similar to *T. hornburgi* Marek, 2017 (Figs. 22, 22a) (described from Peru, Panguana and known to me from type-locality of *T. bamboo* sp. nov. also) by its body shape, colouration and elytral ornamental pubescence (pattern), it belongs in fact to species complex around *T. nigritulus* Waterhouse, 1889 (Figs. 19, 19a) (described from Panama) by its characters of morphology and male genitalia and it can be distinguished from the most similar species *T. nigritulus* and *T. collarti* Cobos, 1959 (Figs. 20, 20a) (described from French Guiana) by the characters given in Table H below.

Table H. Diagnostic characters of *T. bamboo* sp. nov., *T. nigritulus* Waterhouse, 1889 and *T. collarti* Cobos, 1959.

	T. bamboo (♂)	*T. nigritulus* (♂)	*T. collarti* (♂)
Body shape	stouter, less than 2.8 times as long as wide, widest just before pronotal base and at the middle of elytra	slender, more than 2.9 times as long as wide, widest at humeri and at the middle of elytra	slender, about 2.9 times as long as wide, widest at humeri
Pubescence of dorsal side	markedly longer, somewhat widened setae	markedly shorter, thin setae	markedly shorter, thin setae
Pubescence of frons	very short and sparse setae above clypeus at middle only	dense and wide „fronto-clypeal pubescent stripe“	dense and wide „fronto-clypeal pubescent stripe“
Pronotal punctation	medium-sized to large ocellate punctures	small ocellate punctures	small ocellate punctures
Pronotal base	slightly but markedly wider than base of elytra (slightly wider than elytra at humeri)	slightly narrower than base of elytra (rather markedly narrower than elytra at humeri)	slightly narrower than base of elytra (rather markedly narrower than elytra at humeri)
Aedeagus	stouter, parameres about 3.3 times longer than wide, widest at the beginning of apical third, strongly dilated proximally at basal two-thirds; semimembranous apical part narrower, less distinct (Fig. 18a)	slender, parameres more than 4.2 times longer than wide, widest at the beginning of apical eighth, very weakly dilated proximally at basal two-thirds; semimembranous apical part wider, more distinct (Fig. 19a)	slender, parameres more than 4.0 times longer than wide, widest at the beginning of apical eighth, subparallel at basal two-thirds; semimembranous apical part wider, more distinct (Fig. 20a)

Etymology. Named in reference to herb on which the female-paratype was collected (bamboo, see Type specimens above); noun in apposition.

18

18a

19

19a

20

20a

Figs. 18-20a: 18- *T. bamboo* sp. nov., HT, ♂, 3.15 mm, 18a- aedeagus, 0.65 mm; 19- *T. nigritulus* Waterhouse, 1889, LT, ♂, 3.10 mm (BMNH), 19a- aedeagus, 0.85 mm; 20- *T. collarti* Cobos, 1959, specimen ♂ from French Guiana, 3.60 mm (JMSC), 20a- aedeagus, 1.05 mm.

Taphrocerus hespenheidei sp. nov.

(Figs. 21, 21a)

Type locality. Peru, Loreto Prov., Amazon Safari Camp, Rio Mamón NNW Iquitos, ca. 3°42´S 73°14´W.

Type specimens. Holotype (♂): „PERU: Loreto Prov., Amazon Safari Camp, Rio Mamón NNW Iquitos, ca. 3°42´S 73°14´W / 25. vi. 1978, H. A. Hespenheide / PALM“ (JMSC).

Diagnosis. Small (2.95 mm), broadly elongate, stout, about 2.7 times longer than wide, widest at humeri and just before the middle of elytra, moderately convex, elytra flattened, moderately lustrous above; dorsal surface black, frons coppery-green, vertex with slight golden-orange lustre, pronotum with slight green tinge along the sides, elytra with strong brown tinge at basal half laterally and at apical half; beneath black, legs and antennae black with coppery-green tinge; elytra with an ornamental pubescence of white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, entire, sharp, strongly elevated.

Description of holotype. Head medium-sized, wide, strongly narrower than posterior pronotal margin; clypeus widely „V-shaped“, lateral branches extremely wide (clypeus

almost triangular), very strongly shagreened, separated from frons by well elevated carina, epistomal pore one only, large, elongate transversely, in the middle above clypeus; frons very feebly convex, strongly shagreened, with wide depression above clypeus and rather shallow, widely triangular depression towards vertex, the depression is almost interrupted by rather wide but short carina at middle longitudinally, with dense, wide „fronto-clypeal pubescent stripe“ (♂) of cream-white setae above clypeus becoming in golden setae towards vertex; vertex rather weakly convex, strongly shagreened, slightly depressed at middle, sparsely and very shallowly punctate, with a fine groove at middle longitudinally, rather densely covered by thin, cream-white setae; eyes large, ovoid, rather strongly projecting beyond outline of head; antennae long, narrow, antennomeres 6-11 distinctly widened.

Pronotum moderately convex, 2.09 times as wide as long, widest in the end of second-third; narrowly and rather deeply transversely depressed along anterior margin, broadly and rather deeply so lateroposteriorly, narrowly and deeply so along the sides, with wide, rather deep but short longitudinal sulcus at the middle of disc anteriorly; with a very vague bump lateroposteriorly; anterior margin very widely rounded, straight at the middle, posterior margin strongly biemarginate, widely emarginate in front of scutellum, very slightly narrower than base of elytra, sides strongly dilated posteriorly at anterior two-thirds, then strongly angulate and then slightly emarginately constricted to the base; surface strongly shagreened, ocellate-punctate by medium-sized punctures at anterior transverse depression and by large punctures at the laterposterior ones, with sparse but rather long, thin, white setae at the depressions and above scutellum, more densely anterolaterally; scutellum cordiform, rather finely shagreened, moderately lustrous.

Elytra rather strongly flattened, 1.94 times as long as wide, widest at humeri and just before the middle, slightly wider at humeri than pronotum at the widest part; lateral margins widely emarginate behind humeri, very shortly and rather strongly rounded at middle, then almost straight tapering towards narrowly and feebly separately rounded apices; apices almost smooth; humeral swelling moderately developed, laterobasal depression small and shallow; surface strongly shagreened at basal fifth and along the suture, punctures in rows longitudinally deeper and larger at basal half along suture becoming fine and almost inconspicuous posteriorly; an ornamental pubescence of white setae as follows: sparse, thin, long setae at lateroanterior angles, two (1+1) vague spots of sparse, long setae at basal fourth near suture, rather wide transverse stripe 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 near of apices.

Ventral surface very lustrous, abdomen rather finely shagreened, sparsely white pubescent by thin, long setae laterally and apically, very finely punctate by shallow and small „U-turned up-shaped“ punctures on first two visible strenites only; anal ventrite somewhat elongate and rather narrowly rounded, with rather shallow and wide emargination on apical margin, preapical groove following outline of margin regularly semicircular, rather narrow; antennal grooves long and narrow; prosternal process elongate, very strongly constricted between procoxae, very strongly dilated behind, apex rhomboidal, strongly shagreened, with deep and rather wide sulcus at middle longitudinally, asetose, unpunctate.

Aedeagus (Fig. 21a).

Sexual dimorphism. Female unknown.

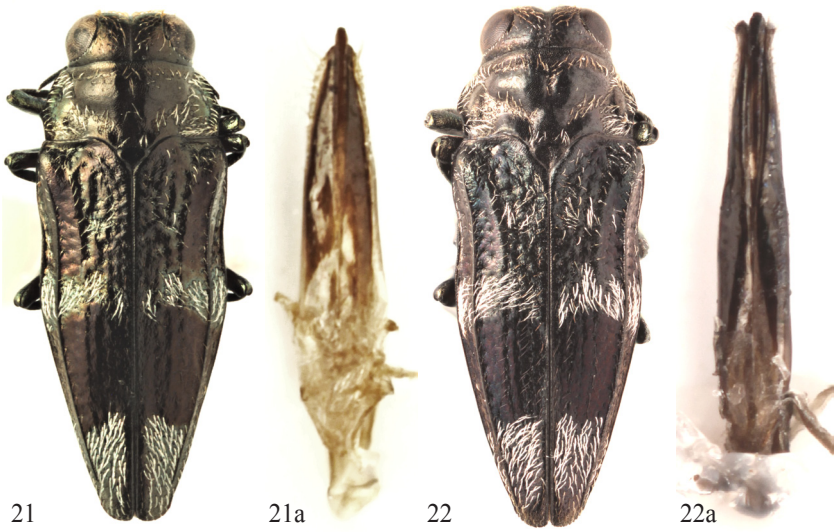
Measurements. Length 2.95 mm; width 1.10 mm.

Differential diagnosis. *T. hespenheidei* sp. nov. belongs to *T. amazonicus* species-group (definition of species-group in prep.) and it is the most similar and probably closely related to *T. hornburgi* Marek, 2017 (Figs. 22, 22a) (described from Peru, Panguana and known to me from type locality of *T. hespenheidei* sp. nov. also from four male-specimens). It can be distinguished by the characters given in Table I below. The species of *T. amazonicus* species-group are very similar to each other externally but with strongly different sculpture of the frons.

Table I. Diagnostic characters of *T. hespenheidei* sp. nov. and *T. hornburgi* Marek, 2017.

	T. hespenheidei ♂	*T. hornburgi* ♂
Eyes	larger relatively, upper side of eye in the same level as upper side of vertex (FV)	smaller relatively, upper side of eye low than upper side of vertex (FV)
Clypeus	lateral branches extremely wide, clypeus almost triangular	lateral branches narrow relatively, clypeus widely „V-shaped“
Sculpture of frons	wide, transverse depression above scutellum and shallow, widely triangular depression towards vertex, almost interrupted by wide, short carina at middle longitudinally	wide, transverse depression above clypeus and deep, regularly triangular depression towards vertex
Pronotal shape	wider, about 2.1 times wider than long; anterior margin very widely rounded	narrower, about 1.9 times wider than long; anterior margin markedly more arcuately rounded
Sculpture of pronotum	less sculptured relatively, the depressions shallower, the bump lateroposteriorly very vague	more sculptured relatively, the depressions deeper, the bump lateroposteriorly more distinct
Elytral shape	lateral margins straight constricted posteriorly at apical half; apices more widely and separately rounded	lateral margins very widely but markedly arcuately constricted posteriorly at apical half; apices more narrowly and conjointly rounded
Prosternal process	sides more strongly constricted between procoxae; apex with deep sulcus at middle longitudinally	sides rather weakly constricted between procoxae; apex with shallow sulcus at middle longitudinally
Aedeagus	parameres regularly, very slightly arcuately constricted proximally from base to apex; semimembranous part (at apex) not dilated; phallus (median lobe) narrower relatively (Fig. 21a)	parameres almost subparallel at basal half, then staight and strongly constricted proximally to apex; semimembranous part (at apex) dilated; phallus (median lobe) wider relatively (Fig. 22a)

Etymology. It´s a big pleasure for me to name this new species in honour of Henry Hespenheide (Los Angeles, U.S.A.), well known specialist in the taxonomy of Buprestidae, collector of the type-specimen of this species; patronymic.



Figs. 21-22a: 21- *T. hespenheidei* sp. nov., HT, ♂, 2.95 mm, 21a- aedeagus, 0.80 mm; 22- *T. hornburgi* Marek, 2017, HT, ♂, 3.25 mm (MUSM), 22a- aedeagus, 1.10 mm.

Taphrocerus hyacinthus sp. nov.
(Figs. 23, 23a)

Type locality. Venezuela, Edo, Amazonas, Rio Autana, B:4°44´N, L:67°41´W.

Type specimens. Holotype (♂): „Venezuela, Edo. Amazonas, Rio Autana, B:4°44´N, L:67°41´W, 22. viii. 2001 leg. O. Hillert (p) (green label with black margin)“ (JMSC). Paratypes (4): „Peru: Madre de Dios, Tambopata Wildlife Res, 30 km SW Pto. Maldanado (error!), 12°50´S, 69°20´W; 290m, 30. X. 1982, Joseph J. Anderson Coll.“, (1 ♂, CHAH); „Peru, Dept. Huanuco, ACP Panguana, Rio Yuyapichis, 09°36´S, 74°56´W, 230m, v. 2013 leg. E. Diller“, (1 ♀, ZSMC); „PERU, Dept. Huanuco, ACP Panguana, Rio Yuyapichis, 09°37´S, 74°56´W, 230 m, IX.-X. 2016, leg. M. Hornburg / „malaise trap“ (h, on the reverse)“ (1 ♀ , MHCB); „PERU Ucayali, Velo de la Novia - “Torre“ trail, 9°03.7´S, 75°40.69´W., 430-721 m, on *Chamaedorea* or *Prestoea*, 4.vii.2019, L. SEKERKA & R. CÁSAS REÁTEGUI lgt.“ (1 ♀, NMPC).

Diagnosis. Medium-sized (3.30-3.95 mm), broadly elongate, stout, about 2.7 times longer than wide, widest at humeri and just before the middle of elytra, moderately convex above, elytra flattened, lustrous; head and pronotum black with light blue-green tinge, scutellum black, elytra dark metallic blue with strong violet tinge, light metallic blue humeri, wide transverse stripe just before the middle and apical fourth of elytra, two (1+1) large, violaceous spots at elytral third-fourth; beneath black, legs and antennae black with feeble green or coppery lustre; elytra with an ornamental pubescence of rather long, white setae; prehumeral pronotal carina absent, posthumeral elytral carina present, strongly elevated, entire, sharp.

Description of holotype. Head large, rather distinctly narrower than posterior pronotal margin; clypeus very widely „V-shaped“, strongly shagreened, separated from frons by very

fine groove, epistomal pore one, medium-sized, circular, in the middle above clypeus; frons very feebly convex, strongly shagreened, broadly depressed above clypeus transversely, with very dense pubescent stripe of long, wide, cream-white setae at the depression („fronto-clypeal pubescent stripe“ - ♂); vertex convex, with a fine groove at middle longitudinally, rather finely shagreened, finely punctate by simple punctures, covered by rather long, thin, dark-brown setae; eyes large, reniform, strongly projecting beyond outline of head; antennae long and narrow.

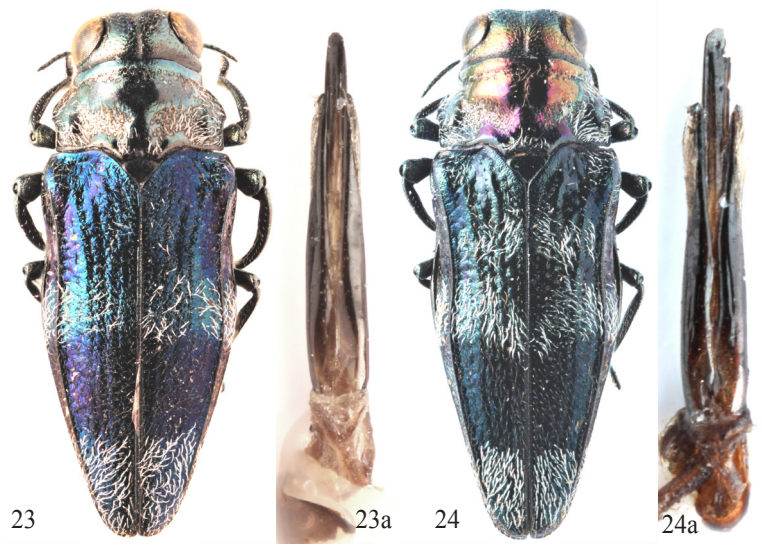
Pronotum moderately convex, 1.74 times as wide as long, widest just before the basal third; transversely depressed along anterior margin, more deeply and narrowly laterally, widely and almost interruptly at middle, very broadly and deeply depressed along posterior margin but rather widely interrupted at middle; a vague bump at lateroposterior angles; anterior margin widely rounded, pronotal lobe widely emarginate, posterior margin strongly biemarginate, deeply emarginate in front of scutellum, slightly but distinctly narrower than base of elytra, sides strongly dilated to just before the basal third, then strongly and narrowly emarginate and then slightly dilated to the base; surface rather strongly shagreened, with rather small, ocellate punctures at the depressions, each puncture with relatively long, white seta; scutellum large, triangular, rather widely rounded anteriorly, strongly shagreened.

Elytra moderately flattened, distinctly wider at humeri than pronotum at the widest part, 2.00 times as long as wide, widest at humeri and just before the middle; lateral margins rather deeply and narrowly emarginate behind humeri, narrowly and rather strongly rounded at middle, then very slowly arcuately tapering towards almost conjointly rounded apices; apices smooth; humeral swelling rather feebly developed, laterobasal depression shallow and small; surface strongly shagreened, coarsely rugose at basal half becoming more finer at apical half, with a few rows of very coarse, irregular punctures, well marked at basal half only, disappearing apically; an ornamental pubescence as follows: a few thin but rather long, white setae at lateroanterior angles and in the end of basal fourth near suture, sparse but rather wide transverse stripe of long and wider, white setae just behind the middle, very thin, sparse but long, gris setae at third-fourth, dense, long and wide, white setae at apical fourth; posthumeral elytral carina strongly elevated, with sharp edge, entire, extending from humeri to near of apex.

Ventral surface lustrous, strongly shagreened, abdomen sparsely, irregularly punctate by very shallow „U-turned up-shaped“ punctures, sparsely pubescent by thin but rather long, white setae, more denser laterally; anal ventrite elongate, cuted apically, with a quadrate emargination on apical margin, preapical groove following outline of margin regularly semicircular, wide; antennal grooves long and rather narrow; prosternal process slightly constricted between procoxae, dilated behind, apex rhomboidal, surface strongly shagreened, with wide and shallow groove longitudinally at middle.

Aedeagus (Fig. 23a).

Sexual dimorphism. Observed in: the „fronto-clypeal pubescent stripe“ of long, cream-white setae in male, missing in female; preapical groove following outline of margin regularly semicircular in male, cuted apically in female.



Figs. 23-24a: 23- *T. hyacinthus* sp. nov., HT, ♂, 3.95 mm, 23a- aedeagus, 1.25 mm; 24- *T. michaeli* Marek, 2017, specimen ♂ from Peru, Panguana, 4.05 mm, 24a- aedeagus, 1.20 mm.

Measurements. Length 3.30-3.95 mm (holotype 3.95 mm); width 1.20-1.40 mm (holotype 1.40 mm).

Variability. Except for the size observed in colouration: head and pronotum black with light blue or green tinge; head gold and pronotum gold at middle, light green laterally and golden-purplish at middle of base in the male paratype; all the paratypes have the elytra with a large, purple spot around scutellum (absent in the holotype); paratype male has markedly more intensive violet tinge of elytra; clypeus is black in the holotype, coppery in all the paratypes (♂+♀!); the longitudinal groove at apex of prosternal process absent in the male paratype and the female paratype from Peru, Ucayali.

Differential diagnosis. *T. hyacinthus* sp. nov. belongs to *T. amazonicus* species-group (definition of species-group in prep., see also Differential diagnosis under *T. hespenheidei* sp. nov. above). *T. hyacinthus* sp. nov. is the most similar to *T. michaeli* Marek, 2017 (Figs. 24, 24a) (described from Peru, Panguana). It differs first of all in colouration, somewhat more stouter body (about 2.7 times longer than wide in *T. hyacinthus* sp. nov., about 2.8 times so in *T. michaeli*) as well as in many other details of its morphology.

Etymology. The specific epithet is derived from the Latin adjective *hyacinthum* (violet) to stress the colouration of dorsal side of this species.

Taphrocerus stephani sp. nov.
(Figs. 25, 25a, 25b)

Type locality. Peru, Loreto Prov., ´Tambo Pirana´ on Rio Cochiquinas, ca 3° 40´ S 71° 34/35´ W.

Type specimens. Holotype (♂): „PERU: Loreto Prov., ´Tambo Pirana´ on Rio Cochiquinas, cca 3° 40´ S 71° 34/35´ W / 30. vi. 1978, H. A. Hespenheide / Desmoncus“ / T 1047 by Hespenheide, J. Marek labelled“, (JMSC). Paratypes (30): the same data as holotype (4 ♂♂, 1 ♀, CHAH; 2 ♀♀, JMSC); the same data as holotype but with date „1. vii. 1978“ (1 ♂, 1 ♀, CHAH, 1 ♂, 1 ♀, JMSC); the same data but with label: „Taphrocerus T 1047 det. Hespenheide“ (1 ♂, TCMC); „Peru (Huánuco): Distrito de Yuyapichis, ACP Panguana, 230 m, 9°37´ S / 74°56´ W, 12. x. 2016, leg. S. Gottwald“ (2 ♂♂, 2 ♀♀, JMSC; 6 ♂♂, 2 ♀♀, SGCB); „PERU, Dept. Huanuco, ACP Panguana, Rio Yuyapichis, 09°37´S, 74°56´W, 230 m, IX.-X. 2016, leg. M. Hornburg“ (3 ♂♂, MHCB); „BRAZIL: Am. Reseva Ducke 26km NE Manaus Barbosa, M. G. V. \ Plot A Malaise 4 Feb. 1995 \ 57. ⊥ \ BMNH {E} 2003-84“ (1 ♀, BMNH); „Cayenne / Saunders. 74.18.“ (1 ♂, BMNH); „Hab ? / Saunders. 74.18.“ (1 ♂, BMNH, note: strongly damaged - pined originally).

Diagnosis. Medium-sized to large (3.40-4.55 mm), broadly elongate, stout, about 2.55 times longer than wide, widest at humeri or at humeri and before the middle of elytra, pronotum rather strongly convex above, elytra somewhat flattened, strongly lustrous; slightly bicoloured above: head and pronotum black with more or less intensive purple, greenish or blue lustre, elytra black with more or less intensive blue lustre and purple-violaceous, blue or greenish tinge; beneath black with very feeble golden-purple lustre including legs and antennae; elytra with an ornamental pubescence of rather long, thin, white setae; prehumeral pronotal carina absent; posthumeral elytral carina present, entire, strongly elevated, sharp.

Description of holotype. Head medium-sized, wide, strongly narrower than posterior pronotal margin; clypeus widely „V-shaped“, strongly shagreened, separated from frons by a fine carina, epistomal pores medium-sized, elongate transversely, touching each other; frons moderately convex, strongly shagreened, largely and rather deeply depressed at middle, the depression merging into sulcus at middle longitudinally towards vertex, coarsely and densely punctate by simple punctures at anterior half, unpunctate at posterior one, with rather sparse but wide „fronto-clypeal pubescent stripe“ (♂) of wide, white setae and with row of thin, white setae along inner sides of the eyes; vertex rather strongly convex, widely protruding between the eyes (FVV), very finely shagreened, rather deeply and narrowly depressed at middle longitudinally, punctate by fine, simple punctures, with groove at middle longitudinally, sparsely covered by cream-white setae anteriorly and by thin, white setae posteriorly; eyes medium-sized, ovoid, very slightly projecting beyond outline of head; antennae long and rather narrow.

Pronotum rather strongly convex, 1.92 times as wide as long, widest just before the base; widely and shallowly depressed transversely along anterior margin, somewhat deeply laterally, largely and rather deeply depressed lateroposteriorly, narrowly and deeply so anterolaterally, with small but rather deep, longitudinally oval depression on the disc; with well elevated longitudinal bump lateroposteriorly; anterior margin widely rounded, straight at middle, posterior margin strongly biemarginate, widely emarginate in front of scutellum, very slightly narrower than base of elytra, sides strongly dilated at anterior two-thirds, then weakly angulate and feebly constricted to basal sixth, then moderately dilated to just before

the base and then shortly constricted to the base; surface rather finely shagreened, rather densely ocellate-punctate by small punctures at the depressions and above scutellum, each puncture with rather wide and long, white seta; scutellum rather small, triangular, strongly shagreened, moderately lustrous.

Elytra flattened, slightly wider at humeri than pronotum at the widest part, 1.87 times as long as wide, widest just before the middle; lateral margins narrowly and feebly emarginate behind humeri, rather widely, regularly rounded at middle, then very slowly arcuately tapering towards rather widely and separately rounded apices; apices almost smooth, serrate by a few very indistinct, almost inconspicuous teeth; humeral swelling moderately developed, laterobasal depression small but rather deep; surface very finely shagreened, fine punctures in rows longitudinally well distinct at basal half only, missing at apical half, with a vague, narrow elevation laterally at basal half (subparallelly with the suture from humeri to the middle); an ornamental pubescence of thin, long, white setae as follows: entire basal fourth except for humeri and basal depressions, wide, „zic-zag, transverse stripe at the middle, entire apical fourth except for two (1+1) small, asetose spots at middle of each elytron near of apex; the third-fourth of elytra sparsely covered by long, very thin, gris setae; posthumeral elytral carina strongly elevated, sharp, entire, extending from humeri to very near of apices but not reaching apex.

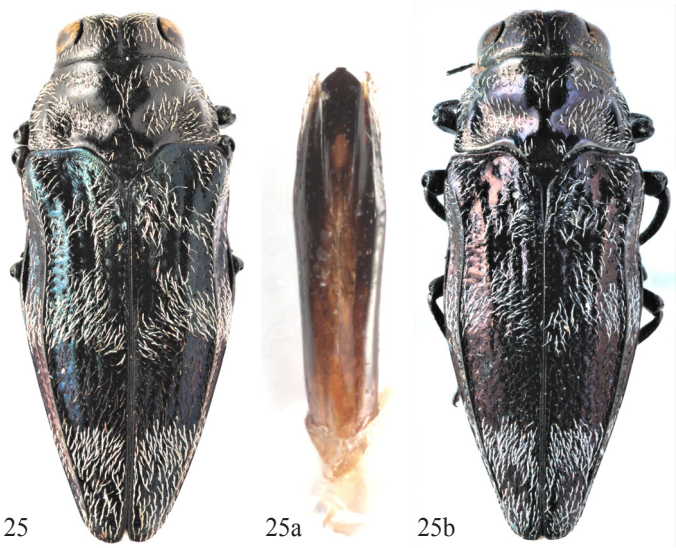
Ventral surface very lustrous, abdomen rather finely shagreened, sparsely pubescent by long, thin, white setae laterally and apically, sparsely ocellate-punctate by small punctures opened posteriorly; anal ventrite widely rounded, with a wide and rather deep emargination on apical margin, preapical groove following outline of margin semicircular, wide; antennal grooves long, deep and rather narrow; prosternal process strongly constricted between procoxae, strongly dilated behind, apex rhomboidal, rather finely shagreened, with wide and deep groove at middle longitudinally.

Aedeagus (Fig. 25a).

Sexual dimorphism. Observed in: markedly denser and longer setae at the „fronto-clypeal pubescent stripe“ in the male; frons black with feeble blue or green lustre in the male, black with purple-violaceous tinge in the female; markedly more protruding vertex between the eyes in the female (DV); the emargination on apical margin of anal ventrite markedly wider and deeper in the female.

Measurements. Length 3.40-4.55 mm (holotype 4.05 mm); width 1.30-1.75 mm (holotype 1.60 mm).

Variability. Rather strongly variable species. Except for the size the variability observed in: the colouration (the intensity of blue lustre and purple-violaceous, blue or greenish tinge of elytra); the frons is almost flat towards vertex in the female-paratypes from Peru - Loreto and Brazil, Manaus (deeply depressed longitudinally with distinct sulcus towards vertex in the female-paratypes from Peru - Panguana) (!note: the male-paratypes are not variable in the sculpture of frons); the pubescence of vertex anteriorly varies from white to dark brown setae; pronotum is 1.70 to 1.95 times as wide as long, elytra 1.85 to 2.00 times as long



25 25a 25b

Figs. 25-25b: *T. stephani* sp. nov. 25- HT, ♂, 4.05 mm, 25a- aedeagus, 1.00 mm, 25b- PT, ♀ from Peru, Panguana, 4.00 mm.

as wide; anterior pronotal margin is straight to slightly and widely emarginate at middle; the paratypes from French Guiana (2 ♂♂, BMNH, from old collection) have the posterior pronotal margin distinctly narrower than base of elytra; surface of pronotum is sometimes more strongly shagreened; the scutellum varies from triangular to cordiform; apices of elytra are from separately to almost conjointly rounded; the epistomal pores are small to medium-sized, elongate transversely to circular, touching each other or conjointed.

Differential diagnosis. *T. stephani* sp. nov. is similar to species of *T. amazonicus* species-group (definition of species-group in prep., see also Differential diagnosis under *T. hespenheidei* sp. nov. above) but it differs namely by the maximal pronotal width being just before the base (at the beginning of basal third in *T. amazonicus* species-group). *T. stephani* sp. nov. is also similar to *T. bamboo* sp. nov. described above (Figs. 18, 18a) and it can be distinguished by the larger size, distinctly narrower head relatively, presence of dense pubescence at elytral apical fifth and by strongly different male genitalia.

Etymology. It´s pleasure for me to name this new species in honour of Stephan Gottwald (Berlin, Germany), specialist in the Buprestidae, collector of many type-specimens of this species.

LECTOTYPE DESIGNATIONS
NEW SYNONYMY

Taphrocerus alboplagiatus Kerremans, 1896
(Figs. 26, 26a, 27, 27a)

Taphrocerus alboplagiatus Kerremans, 1896: 309.
Taphrocerus quadriplagiatus Obenberger, 1924: 56, 75-76. **syn. nov.**

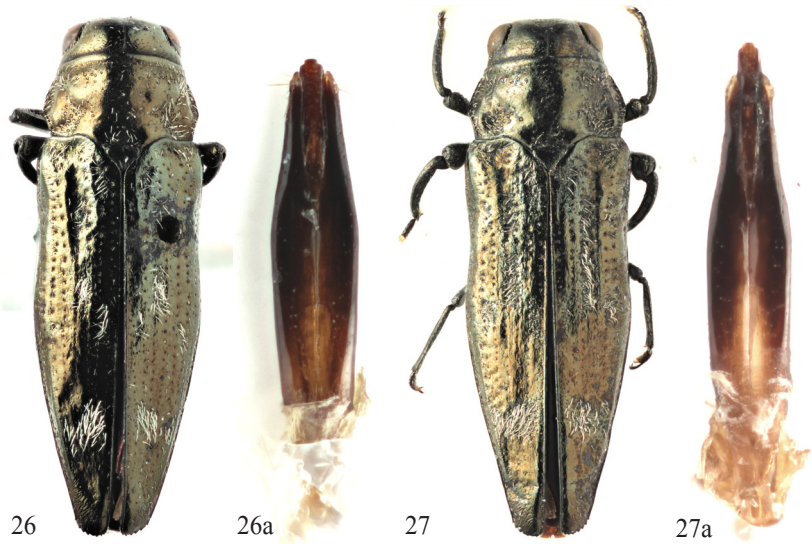
Type specimens studied. *Taphrocerus alboplagiatus*: lectotype (BMNH, ♂) by present designation: „Type [p] [round label with red margin] \ Brésil Chevrol. [h] \ Collection Chevrolat [p] [white label with black frame] \ alboplagiatus Kerr. Type [h] [Kerremans´ MS] \ T. alboplagiatus Kerr. Ann. Belg. 1896. 309. Brés. [h] [white label with three intermissing printed lines and with frame of two printed lines \ Kerremans. 1903-59. [p]". The exact number of syntypes unknown. *Taphrocerus quadriplagiatus*: lectotype (NMPC, ♂) by present designation: „America c. [h] \ TYPUS [p] [red label with black margin] \ Taphrocerus 4-plagiatus m. Type [h] [Obenberger´s MS] Det. Dr. Obenberger [p]". The exact number of syntypes unknown.

The lectotype of *T. quadriplagiatus* is conspecific with the lectotype of *T. alboplagiatus*. The name *T. quadriplagiatus* is a new subjective synonym of the name *T. alboplagiatus*.

Other specimens examined. „Brazil / Saunders. 74.18. / Taphrocera Reichei Lap. Bras." (1 ♀, BMNH); „Fry Rio Jan. / Fry Coll. 1905-100." (1 ♂, 2 ♀♀, BMNH); „506 / 67.17" (1 ♀, BMNH).

Distribution. Brazil (Kerremans 1896), „Colombia and America centralis"* (Obenberger 1924, under *T. qadriplagiatus*).

Variability. Observed in the colouration (above from bottle-green to coppery with slight purple tinge) and density of setae in the elytral ornamental pubescence (pattern).



Figs. 26-27a: 26- *T. alboplagiatus* Kerremans, 1896, LT, ♂, 4.65 mm (BMNH), 26a- aedeagus of LT, 1.20 mm; 27- *T. quadriplagiatus* Obenberger, 1924, LT, ♂, 4.80 mm (NMPC), 27a- aedeagus of LT, 1.40 mm.

Remarks. *Obenberger get the type locality of *T. quadriplagiatus* „Amérique centrale (Columbia?)“ both in his description and the key in 1924 and in the key in 1934. In fact, there are one „Type“ specimen (syntype) in NMPC only, with handwritten (Obenberger´s MS) locality label „America c.“ designated herein as the lectotype and both „America c.“ and „Columbia?“ are probably mistakes.

I mentioned *T. alboplagiatus* in the last year (Marek 2019a) in the Differential diagnosis of newly described *T. batesi* together with the picture of *T. cyanipennis* Obenberger, 1934-syntype with the note: „(= *T. alboplagiatus*, synonymy in prep.)“. This act was made according to a study of specimen of „*T. alboplagiatus*“ stored in MNHN that I eroneously considered to be the syntype. The specimen in MNHN is not the syntype of *T. alboplagiatus* and all characters in Marek 2019a concerning *T. alboplagiatus* belong to *T. cyanipennis* (see lectotype designation below).

***Taphrocerus cupriceps* Kerremans, 1900**
(Figs. 28, 28a, 29)

Taphrocerus cupriceps Kerremans, 1900: 344-345.
Taphrocerus oliveirai Cobos, 1978: 59-61. **syn. nov.**

Type specimens studied. *Taphrocerus cupriceps*: lectotype (BMNH, ♂) by present designation: „SYN-TYPE [p] [round label with blue margin] \ Jatahy Donckier [h] \ cupriceps Kerr. Type [h] [Kerremans´ MS] \ Kerremans. 1903-59. [p]“. Paralectotype the same data as lectotype and with next label: „T. cupriceps Kerr. Brés. [h] [white label with three intermissing printed lines and with frame of two printed lines“ (1 ♀, BMNH). The exact number of syntypes unknown. *Taphrocerus oliveirai*: holotype (MNCN, ♂): „Pedra Azul, Minas Geraes, Brasil, F. M. Oliveira coll. XXI-1971, M. Alvarenga leg“. Described for the unique male specimen.

The holotype of *T. oliveirai* is conspecific with the lectotype of *T. cupriceps*. The name *T. oliveirai* is a new subjective synonym of the name *T. cupriceps*.

Other specimens examined. See Marek 2019a (under *T. oliveirai*).

Distribution. So far known from Brazilian states Bahia (Marek 2019a under *T. oliveirai*), Goiás (Kerremans 1900) and Minas Gerais (Cobos 1978 under *T. oliveirai*).

Remarks. The difference given in the key of *T. cupriceps* species-group (Marek 2016) between *T. cupriceps* and *T. oliveirai* is the sexual dimorphism of this species - vertex less protruding between the eyes in male, distinctly more protruding in female. This morphological character is well marked in *Taphrocerus* species associated with the palms (except for species around *T. amazonicus* Kerremans, 1896) by my observations.

28 28a 29

Figs. 28-29: 28- *T. cupriceps* Kerremans, 1900, LT, ♂, 4.05 mm (BMNH), 28a- aedeagus of LT, 0.75 mm; 29- *T. oliveirai* Cobos, 1978, HT, ♂, 3.75 mm (MNCN) (photo S. Bílý).

Taphrocerus cyanipennis Obenberger, 1934

Taphrocerus cyanipennis Obenberger, 1934: 8, 35.

Type specimens studied. *Taphrocerus cyanipennis*: lectotype (NMPC, ♀) by present designation: „Sao Paulo, Jaro Mráz [p] \ TYPUS [p] [red label with black margin] \ Taphrocerus cyanipennis m. Type [h] [Obenberger´s MS] Det. Dr. Obenberger [p]". The exact number of syntypes unknown.

Other specimens examined. BRAZIL: „Brasil: São Paulo St., Parelheiros, 3. xii. 1973, V. N. Alin / T 1037" (2 ♂♂, CHAH, JMSC).

Distribution. Brazil, Sao Paulo (Obenberger 1934).

Remarks. I get the picture of *T. cyanipennis* Obenberger, 1934-syntype with the note: „(= *T. alboplagiatus*, synonymy in prep.)" in Marek 2019a. This act was made according to a study of specimen of „*T. alboplagiatus*" stored in MNHN that I eroneously considered to be syntype. The specimen in MNHN is not the syntype of *T. alboplagiatus* and all characters in Marek 2019a concerning *T. alboplagiatus* belong to *T. cyanipennis*.

Taphrocerus depilis Kerremans, 1896

Taphrocerus depilis Kerremans, 1896: 311.
Taphrocerus brevicarinatus Fisher, 1929: 17-19. syn. (Hespenheide 1979: 119)

Type specimens studied. *Taphrocerus depilis*: lectotype (BMNH, ♀) by present designation: „Type [p] [round label with red margin] \ Amazone Stauding. [h] \ depilis Kerr. Type [h] [Kerremans´ MS] \ T. depilis Kerr. Ann. Belg. 1896. 311. Amaz. [h] [white label with three intermissing printed lines and with frame of two printed lines \ Kerremans. 1903-59. [p]". The exact number of syntypes unknown.

Other specimens examined. BRAZIL: „Amaz. bl / Saunders. 74.18“ (1 ♂, BMNH); „Brazil: Manáos. July 1935. G.V.Vredenburg / Brit. Mus. 1935-615.“ (2 spec. sex not examined, BMNH). COLOMBIA: „Leticia, Amazonas, 700´, Colombia, July 8, 1970, H. & A. Howden / T 1036 depilis Kerr“ (1 spec. sex not examined, JMSC). ECUADOR: „Ecuador, Napo, Tena“, 1 ♂, (JMSC); FRENCH GUIANA: „GUYANE Francaise, Cayenne, Mt. Bourda, J. Marek lgt. iv. 1992“ (1 ♂, JMSC); the same data but „v. 1992“ (2 ♂♂, JMSC); the same data but „ix. 1992“ (2 ♂♂, 1 ♀, JMSC); „GUYANE Francaise, Fourgassier env. MSA, J. Marek lgt. iii. 1993 (3 ♂♂, JMSC); „Guyane Francaise, St. Laurent du Maroni, J. Marek lgt., v. 1993“ (2 ♂♂, 3 ♀♀, JMSC); „Guyane Francais, Mont Grang Matoury, 5.-14. 9. 1995, M. Kocian lgt.“ (4 ♂♂, 1 ♀, JMSC); „French Guyane, 6.-14. ix. 1995, Matoury env., Mont Grand Matoury, M. Trýzna lgt. (4 ♂♂, 1 ♀, JMSC); „Fr. Guyane, Cacao env., 17-19.12.2004, Oliver Dulík leg.“ (1 spec. sex not examined, EJCB); „GUYANE Francaise, Mt. de Kaw, Fourgassie, 5. viii. 2006, Snížek lgt. (2 ♂♂, 3 ♀♀, JMSC); „GUYANE Francaise, Kourou, Guatemala, 19. viii. 2006, Snížek lgt.“ 1 ♀, JMSC); „GUYANE Francaise, Route de Kaw, Caiman Camp env., 7. xii. 2006 Snížek lgt (1 ♂, 1 ♀, JMSC); „GUYANE Francaise, E St. Laurent du Mar., Rt. Crique NAI, 10. xii. 2006, Snížek lgt.“ (1 ♀, JMSC); „GUYANE Francaise, Roura, Fourgassie env. , 15. xii. 2006, Snížek lgt. (1 ♀, JMSC); „GUYANE Francaise, Saint Laurent du Mar., Rt. Paul Isnard, 17. i. 2007 Snížek lgt.“ (2 ♀♀, JMSC). PANAMA: „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. (1 ♂, NMPC). PERU: „Peru: Madre de Dios, Puerto Maldonado, 1. i. 1984, leg. L. Huggert“ (1 ♂, JMSC); „Peru: Junin, Satipo, 18. i. 1984, leg. L. Huggert“ (1 ♀, JMSC) „Peru: Junin, Satipo, Paratuchali, 22. i. 1984, leg. L. Huggert / T 1055“ (1 spec. sex not examined, JMSC). SURINAME: „SURINAM S.A., (Para), Zanderij, 17.-20. VII. 1975, A. P. J. Teunissen“ (1 ♂, JMSC). VENEZUELA: „Venezuela, Carabobo, Canoabo, 21. viii. 1992, 1000 m, L. Masner“ (1 ♀, JMSC).

Distribution. Brazil (Kerremans 1896), Costa Rica (Fisher 1929 under *T. brevicarinatus*), French Guiana (Marek 2015), Honduras (Cave et Hespenheide 2014), Nicaragua (Maes et al. 1993), Panama (Westcott et Hespenheide 2006), Peru (Hespenheide et Chaboo 2015), new to Colombia, Ecuador, Suriname and Venezuela.

***Taphrocerus nigritulus* Waterhouse, 1889**
(Figs. 19, 19a)

Taphrocerus nigritulus Waterhouse, 1889: 128.

Type specimens studied. *Taphrocerus nigritulus*: lectotype (BMNH, ♂) by present designation: „SYN-TYPE [p] [round label with blue margin] \ San Miguel, Pearl Isl. Champion. [p] \ LECTOTYPE [p] Taphrocerus nigritulus W [h] H. Hespenheide det. 1971. [p] [lectotype designation unpublished]“. Paralectotype: „SYN-TYPE [p] [round label with blue margin] \ San Miguel, Pearl Isl. Champion. [p] \ Taphrocerus nigritulus, (Type) Waterh. [h] \ PARA [h] LECTOTYPE [p] T. nigritulus W. [h] H. Hespenheide det. 1971. [p]“ (1 ♀, BMNH). The exact number of syntypes unknown.

Other specimens examined. BRAZIL: „Brazil, Amazonas, Manaus, viii. 1992, J. Marek lgt.“ (1 ♀, JMSC). VENEZUELA: see Marek 2017.

Distribution. Panama (Waterhouse 1889), Costa Rica, Venezuela (Marek 2017), new to Brazil.

Taphrocerus orizabae Obenberger, 1934
(Fig. 30)

Taphrocerus Orizabae Obenberger, 1934: 26, 56.

Type specimens studied. *Taphrocerus orizabae*: lectotype (NMCP, ♀) by present designation: „Mexico: Orizaba [h] \ TYPUS [p] [red label with black margin] \ Taphrocerus Orizabae m. Type [h] [Obenberger´s MS] Det. Dr. Obenberger [p] \ Taphrocerus orizabae Obenberger, 1934 SYNTYPE 1 V. Kubáň labeled 2014 [p] [red label]". Paralectotypes: the same data as lectotype except for syntype label: „Taphrocerus orizabae Obenberger, 1934 SYNTYPE 2 V. Kubáň labeled 2014 [p] [red label]" (1 ♀, NMPC); „Mexico: Cuernavaca [h] \ TYPUS [p] [red label with black margin] \ Taphrocerus Orizabae m. Type [h] [Obenberger´s MS] Det. Dr. Obenberger [p] \ Taphrocerus orizabae Obenberger, 1924 SYNTYPE 3 V. Kubáň labeled 2014 [p] [red label]" (1 ♀, NMPC, note: = *T. communis* Waterhouse, 1889). The exact number of syntypes unknown.

Other specimens examined. GUATEMALA: „GUATEMALA: Baja Ver., Pantin to Salama road, 15°14.57´N, 90°19.98´, October 7, 2007; day, sweeping, beating & gleaning; W.B.Warher" (1 ♂, TCMC). MEXICO: „MEXICO: Michoacán, S. side L. Cuitzeo, 1850 m. vii. 6. 1947, 74 T. H. Hubbell / Typus / Taphrocerus Hubbeli m. Type Det. Dr. Obenberger (unpublished manuscript name) / Taphrocerus orizabae Ob. det. Hespenheide vii-1984" (1 ♂, 2 ♀♀, NMPC); „MEX (Puebla) 15. vii. 1992 ESPERANZA, S. Bílý leg." (1 ♂, 1 ♀, NMPC); „MEXICO/Puebla, Texmelucan, 15.7.1992, leg. H. Mühle" (1 ♂, JMSC, 2 ♀♀, HMCM); „Cuernavaca Mor., 3-17´59 MEX., 5000 ft. elev. / H. E. Evans & DM Anderson collectors" (1 ♂, CHAH).

Distribution. Mexico (Obenberger 1934), Nicaragua (Maes et al. 1993), new to Guatemala.

Remarks. There are mixed two different species in Obenberger´s type-serie of *T. orizabae* stored in NMPC. One paralectotype (PLT/ST 3) (Fig. 30a) is conspecific with *T. communis* Waterhouse, 1889. The Obenberger´s description corresponds to *T. orizabae* lectotype designated herein.

30 30a

Figs. 30-30a: selected type specimens of *T. orizabae* Obenberger, 1934. 30- LT/ST1, ♀, 3.80 mm, 30a- PLT/ST 3, ♀, 3.75 mm (= *T. communis* Waterhouse, 1889).

Taphrocerus pictus Kerremans, 1896

Taphrocerus pictus Kerremans, 1896: 311-312.

Type specimens studied. *Taphrocerus pictus*: lectotype (BMNH, ♂) by present designation: „Type [p] [round label with red margin] \ Brésil Chevrol. [h] \ Collection Chevrolat [p] [white label with black frame]\ pictus Kerr. Type [h] [Kerremans´ MS] \ T. pictus Kerr. An. Belg. 1896 311 Brésil [h] [white label with three intermissing printed lines and with frame of two printed lines \ Kerremans. 1903-59. [p]". The exact number of syntypes unknown.

Distribution. Brazil (Kerremans 1896, without precise locality data).

Remarks. *T. pictus* belongs to an extremely difficult complex for distinguishing of number of very similar species externally but with rather strong different male genitalia. There are another specimen in BMNH coming from Kerremans´ collection from „Jatahy“ (now Jataí (Brazil) and determined „pictus Kerr.“ (Kerremans´ MS!) that is conspecific with *T. catacaustus* Obenberger, 1941 (described from Brazil, Manaus).

Taphrocerus squamulatus Kerremans, 1896

Taphrocerus squamulatus Kerremans, 1896: 309-310.

Type specimens studied. *Taphrocerus squamulatus*: lectotype (BMNH, ♂) by present designation: „SYN-TYPE [p] [round label with blue margin] \ Bahia Chevrol. [h] \ Collection Chevrolat [p] [white label with black frame] \ squamulatus Kerr. Type. [h] [Kerremans´ MS] \ Kerremans. 1903-59. [p]“. Paralectotype: „Type [p] [round label with red margin] \ SYN-TYPE [p] ? [h] [round label with blue margin] \ Brésil Tarnier [h] \ squamulatus Kerr. Type. [h] [Kerremans´ MS] \ Kerremans. 1903-59. [p]“ (1 ♀, BMNH). The exact number of syntypes unknown.

Other specimens examined. „485. / squamulata ? (Reiche) Jeapa (Mex.) ?“ (1 spec. sex not examined, BMNH, erroneous locality probable); „Hab. ? / Saunders. 74.18.“ (1 ♂, 1 spec. sex not examined, BMNH); „Brazil Bahia i. 1928 Dr. G. Bondar. / On leaves of Cyperus ligularis / Pres. by Imp. Bur. Ent. Brit. Mus. 1928-166. / Taphrocerus squamulatus Kerr. Det. G.A.K. Marshall“ (1 spec. sex not examined, BMNH).

Distribution. Brazil, Bahia (Kerremans 1896).

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REFERENCES

Cave R. D. & Hespenheide H. A. 2014: An Annotated List of the Buprestidae (Coleoptera) Known to Occur in Honduras. *The Coleopterists Bulletin* 1(68): 53-60.

Cobos A. 1959: Novena nota sobre Bupréstidos neotropicales. Rectificaciónes y descriptiónes diversas (Coleoptera, Buprestidae). *Archivos de Instituto de Aclimatación* 8: 29-43, 2pl.

Cobos A. 1978: Notas sobre Bupréstidos neotropicales, XX. (Col. Buprestidae). EOS, *Revista Española de Entomología* 52 (1976): 29-63.

Fisher W. S. 1929: New species of buprestid beetles from Costa Rica. *Proceedings of the United States National Museum* No. 2803, 76(6): 1-20.

Gory H. L. 1841: *Histoire naturelle et iconographie des insectes Coléoptères. Supplément aux Buprestides.* Paris: P. Duménil. Volume 4, livraisons 43-52, genera: *Melanophila* (pp. 73-77), *Buprestis* (pp. 107-111, 126), *Stigmodera*, *Colobogaster*, *Chrysobothris*, *Belionota*, *Castalia*, *Poecilonota*, *Zemina*, *Stenogaster*, *Agrilus*, *Amorphosoma*, *Eumerus*, *Coraebus*, *Anthaxia*, *Evagora*, *Sphenoptera*, *Sponsor*, *Brachys*, *Trachys*, *Aphanisticus* (pp. 127-356).

Hespenheide H. A. & Chaboo C. S. 2015:Beetles (Coleoptera) of Peru. A Survey of the Families. Buprestidae. *Journal of the Kansas Entomological Society* 88(2): 211-214.
ICZN 1999: International Code of Zoological Nomenclature, Fourth Edition, adopted by the International Union of Biological Sciences. London: International Trust for Zoological Nomenclature, xxix + 305 pp.
Kerremans C. 1896: Trachydes nouveaux. *Annales de la Société Entomologique de Belgique* 40: 306-333.
Kerremans C. 1900: Buprestides nouveaux et remarques synonymiques. *Annales dela Société Entomologique de Belgique* 44: 282-351.
Kerremans C. 1903: Coleoptera Serricornia, Fam. Buprestidae. *In*: P. Wytsman. (Ed.). *Genera Insectorum*, Fasc, 12b, 12c, 12d. Verteneuil & Desmet, Bruxelles, pp. 49-338.
Maes J.- M., Hespenheide H. A. & Van Den Berghe E. 1993: Catalogo de los Buprestidae (Coleoptera) de Nicaragua. *Revista Nicaragua Entomología* 25: 21-35.
Marek J. 2015: Studies on the genus *Taphrocerus* (Coleoptera: Buprestidae: Agrilinae) part II. *Studies and Reports, Taxonomical Series* 11(2): 339-357.
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.
Marek J. 2018a: Studies on the genus *Taphrocerus* (Coleoptera: Buprestidae: Agrilinae) part VII. *Taphrocerus* in collection of Hungarian Natural History Museum. *Studies and Reports, Taxonomical Series* 14(1): 101-127.
Marek J. 2018b: Studies on the genus *Taphrocerus* (Coleoptera: Buprestidae: Agrilinae) part VIII. *Studies and Reports, Taxonomical Series* 14(2): 417-450.
Marek J. 2019a: Species of the genus *Taphrocerus* (Coleoptera: Buprestidae: Agrilinae) collected by Bates and Darwin during their fabulous voyages wizh description of eight new species. *Studies and Reports, Taxonomical Series* 15(1): 99-129.
Marek J. 2019b: Four new species of the genus *Taphrocerus* Solier, 1833 from Brazil (Coleoptera: Buprestidae: Agrilinae). *Studies and reports, Taxonomical Series* 15(1): 131-141.
Obenberger J. 1917: Analecta III. (Fam. Buprestidae). *Neue Bieträge zur Systematischen Insektenkunde* 1: 60-63.
Obenberger J. 1924: Révision monographique du genre *Taphrocerus* Solier. (Col. Buprestidae). *Acta Entomologica Musei Nationalis Pragae* 2: 45-83.
Obenberger J. 1934: Monographie du genre *Taphrocerus* Sol. (Col. Bupr.). *Acta Entomologica Musei Nationalis Pragae* 12: 5-62.
Waterhouse C. O. 1889: Buprestidae. Pp. 1-193. In: Godman F. & Salvin O. (eds.): *Biologia Centrali Americana. Insecta. Coleoptera. Vol. III. Part. 1. Serricornia.* London: Taylor & Francis, xv + 690 pp.
Westcott R. L. & Hespenheide H. A. 2006: The description of a new species of *Agrilus* Curtis, with distributional records, and taxonomic and biological notes for Agrilinae and Trachyinae (Coleoptera: Buprestidae) of Mexico and Central America. *Zootaxa* 1367: 1-35.

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