

New species and records of Xyleborini (Coleoptera: Curculionidae: Scolytinae) from Peru

Новые виды и дополнения списка трибы Xyleborini (Coleoptera: Curculionidae: Scolytinae) из Перу

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KEY WORDS: Coleoptera, Curculionidae, Scolytinae, Xyleborini, *Taurodemus*, *Theoborus*, ambrosia beetles, taxonomy, Peru.

КЛЮЧЕВЫЕ СЛОВА: Coleoptera, Curculionidae, Scolytinae, Xyleborini, *Taurodemus*, *Theoborus*, древесинники, систематика, Перу.

ABSTRACT. Four new species of tribe Xyleborini are described from Peru: *Taurodemus peruanus*, *T. militaris*, *Theoborus amazonicus*, and *T. magnus* **spp.n.** Additional records are given for *Sampsonius sexdentatus* Eggers, 1933 and *Taurodemus salvinii* (Blandford, 1898).

РЕЗЮМЕ. Описаны новые виды жуков трибы Xyleborini из Перу: *Taurodemus peruanus*, *T. militaris*, *Theoborus amazonicus* и *T. magnus* **spp.n.** Приведены данные о находках *Sampsonius sexdentatus* Eggers, 1933 и *Taurodemus salvinii* (Blandford, 1898).

The interest of entomologists in study of the Neotropical entomofauna has grown during the last decades. Recent taxonomic work has highlighted the richness of the bark- and ambrosia beetle fauna in the Neotropical Region [Atkinson et al., 2018; Bright, 2019; Cognato, 2018; Dole, Cognato, 2007; Jordal, Smith, 2020; Petrov, Flechtmann, 2013, 2020; Petrov, Mandelshtam, 2018; Smith, Cognato 2010; Wood, 2007]. The Peruvian fauna includes 254 species from 56 genera and 15 tribes [Petrov, 2017, 2020; Petrov, Mandelshtam 2016; Petrov, Flechtmann, 2020; Smith et al., 2017]. Fieldwork in the Peruvian forests has allowed description of new Scolytinae species, and addition of new data concerning their distribution and natural history. Two more species of the tribe Xyleborini are described here, and it is shown that several species are distributed much more widely than believed before.

Material and methods

Specimens of Xyleborini used in the present work were collected by the author from 2005 to 2019 in the forests of Peru. Most of the collected material originates from four

regions (Huánuco, Junín, Loreto and Pasco). Type material deposited in the was also examined.

List of Museums cited by Acronyms: CDFA — California State Collection of Arthropods, Sacramento, CA, USA; MSUC — Michigan State University Arthropod Research Collection, East Lansing, USA; NHMUK — Natural History Museum, (London, United Kingdom); NMNH — United States National Museum of Natural History (Washington, USA); NHNW — Naturhistorisches Museum Wien, (Vienna, Austria); ZIN — Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia; ZMMU — Zoological Museum at Moscow State University, Moscow, Russia; APP — Alexander V. Petrov private collection, Moscow, Russia; RABC — Roger A. Beaver collection, Chiang Mai, Thailand.

Images of the beetles were made with a Canon 50D camera and a MP-E65 mm macro lens.

Results

Taurodemus militaris Petrov, **sp.n.**

Figs 1–4, 9, 10.

MATERIAL. Holotype, ♀ (ZMM): Peru: **Huanuco** region: 20 km S from Tingo Maria, Cayumba village, S 9°29'14.0''W75°57'04.3'' h~780 m, 29.01.2005, leg. A.V Petrov Paratypes (2 ♀♀ in CDFA, 2 ♀♀ in MSUC, 2 ♀♀ in NHMUK, 2 ♀♀ in NHNW, 2 ♀♀ in NMNH, 2 ♀♀, 1 ♂ in RABC, 2 ♀♀, 1 ♂ in ZIN, 59 ♀♀, 9 ♂♂ in APP); same place and date as HOLOTYPE (1 ♂), near Cayumba village but S 9°29'36.7''W75°57'23.0'', h~765 m, 22.XII.2019 leg. A.V Petrov (25 ♀♀ and 5 ♂♂), 7 km SSW from Tingo Maria, near Las Pavas village, 9°21'71.7''W75°58'57.5'', h~670 m, 12.IV.2014, leg. A.V Petrov (4 ♀♀, 1 ♂); **Junin** region: Satipo province, 15 km NW from Satipo, near Rio Venado village, S11°11'25.0''W74°46'12.5'' h~1160 m, 24.03.2013, leg. A.V Petrov (15 ♀♀, 4 ♂♂); same place but 17.V.2014 (6 ♀♀), in S11°11'35.2''W74°46'07.0'', h~1300 m, 9–12.X.2015, leg. A.V Petrov (9 ♀♀); 25 km NW from Satipo, Cuviriaki village,

S11°08'59.6''W74°51'13.9'', h~1000 m, ex. "Moena", 4–7.IV.2014, leg. A.V Petrov (4 ♀♀, 1 ♂); 44 km NNE from Satipo, left river bank of Perene, near Canan Eden village, S11°04'30.5''W74°16'50.9'', h~1100 m 15.II.2006 and 7.I.2007, leg. A.V Petrov (3 ♀♀); Loreto region: 58 km SW from Iquitos, Itaya river, 04°15'23.3''S 73°27'59.1''W, h~120 m, FIT, 8.III.2008, leg. A.V Petrov (1 ♀); Pasco region: 13 km NNE from Pozuzo, near Sta Roza village, S09°41'36.6''W76°05'05.2'', h~1150 m, FIT, 6–11.X.2017, leg. A.V Petrov (4 ♀♀)

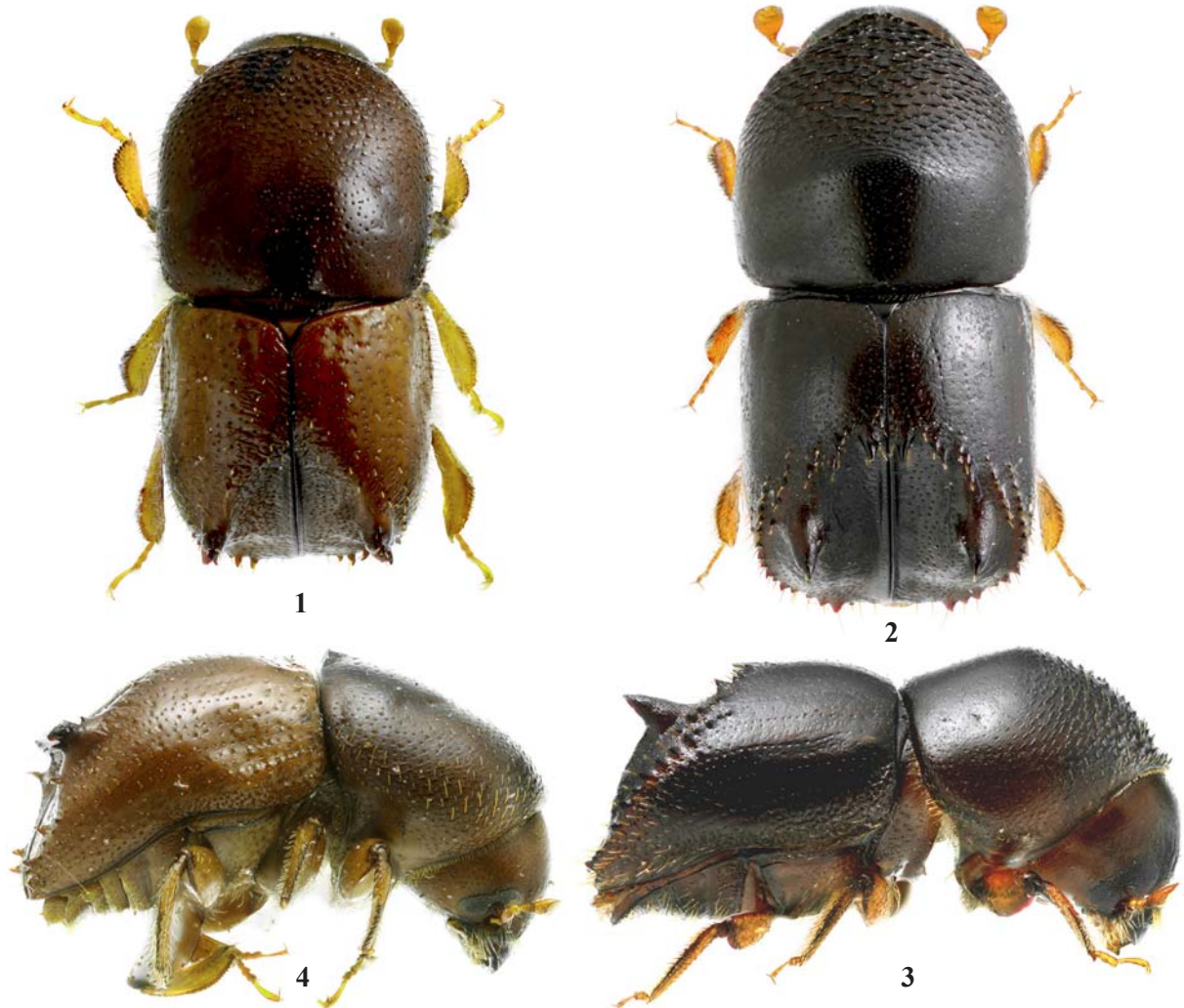
DESCRIPTION. Female. Body stout, length 3.6 mm, 1.90 times as long as wide, body dark brown with reddish brown antennae and legs (Figs 3–4).

Head dark brown, weakly shining. Frons broadly convex, with median, weakly elevated carina from level of upper half of eyes to vertex; frontal surface minutely reticulate, evenly punctured by large, sparse pointunctures, in upper part of the frons with sparse, longitudinal shallow wrinkles; vertex minutely reticulate without punctures; vestiture of fine sparse pale hairs, epistoma with transverse row of abundant short yellow setae. Eyes shallowly emarginate, 3.1 times as long as widely, flat, eyes wide separated above by distance 3.2 times their width. Antennomeres reddish brown, scape almost as long as wide as club, funicle 5-segmented, pedicel scyphoid, club obliquely truncate, segment 1 on anterior face corneous.

Pronotum dark brown, disc shining in the basal half, 0.91 as long as wide; the base straight, lateral margins rounded; sides subparallel in basal half, broadly rounded an anterior half, anterior margin armed by eight coarse median serrations; summit at middle, anterior slope closely asperate; basal half of pronotal disc minutely reticulate, with numerous, small, shallow punctures. Vestiture of fine sparse pale hairs on anterior half and lateral margins of pronotum, basal half of disc glabrous.

Scutellum dark brown, glabrous, triangular.

Elytra dark brown to black, shining; 1.06 times as long as wide, 1.16 times as long as pronotum; lateral margins subparallel, disc occupying 45 percent of elytra length; surface glabrous, with transversal shallow wrinkles; striae not impressed, punctures small, shallow, distinct; interstriae about six times as wide as striae, smooth, shining, punctures confused, half as large as those of striae. Declivity on basal half strongly sulcate between interstriae 3, much more broadly impressed on anterior slope; surface of declivity glabrous, shining; the base of declivity ornamented by medium-sized pointed tubercles and small granules, tubercles of interstriae 1 longer as those of interstriae 2–5 (Fig. 9); in addition to larger tubercles, a very small tubercle on interstriae 1; interstriae 2 with two medium-sized pointed tubercles, interstriae 3 armed at the base of



Figs 1–4. Habitus of *Taurodemus militaris* sp.n.: 1, 4 — male; 2, 3 — female; 1–2 — dorsal view; 3–4 — lateral view.
Рис. 1–4. Габитус *Taurodemus militaris* sp.n.: 1, 4 — самец; 2, 3 — самка; 1–2 — сверху; 3–4 — сбоку.

declivity by three medium-sized pointed tubercles and one very small tubercle; interstriae 4 armed by four pointed tubercles and three very small granules, interstriae 5 ornamented by a row of 13 pointed tubercles; interstriae 6 armed by 3 very small pointed tubercles. Interstriae 3 armed by a major, pointed, conical spine at about 1/2 of declivity length from anterior margin. Surface of declivity glabrous, shining, with confused, deep, round punctures.

Metepisternum and metasternum dark brown, with numerous deep punctures, covered by erect short setae. Abdomen dark brown, ventrites 1–4 with numerous punctures, covered by long erect pale setae, ventrite 5 glabrous.

Procoxae separated. Legs unicolored, reddish brown, tibiae with abundant short erect pale setae, protibia with twelve small lateral socketed teeth on distal half.

MEASUREMENTS. Paratypes (females): Mature color almost dark brown to black, length 3.4–3.8 mm, 1.9–2.0 times as long as wide; anterior margin of pronotum armed by 6–8 coarse median serrations, elytra 1.1–1.2 times as long as wide.

Male: body stout, bicoloured, length 2.7–3.5 mm, 1.8 times as long as wide (Figs 1–2); frons similar to female, except for a median fovea on vertex, and longer setae on epistoma over mandibles; eye half as large as female, eyes widely separated above by 3.2 times their width. Pronotum reddish brown to dark brown, as long as wide, median part of pronotal base with triangular projection directed towards scutellum, lateral margins weakly rounded, pronotum widest in anterior third; apical margin broadly rounded, unarmed. Anterior slope flat, median part on middle third of pronotal length flattened, summit at middle of anterior slope, weakly asperate, basal third punctured by minute points. Surface glabrous, sparse minute setae on lateral part of pronotum. Scutellum reddish brown, triangular.

Elytra reddish brown, 1.0–1.1 as long as wide, 1.26–1.3 as long as pronotum. Lateral margins weakly rounded, elytra widest in the middle part of the length. Disc occupying 50 percent of elytra length; striae not impressed, punctures small, distinct; interstriae about five times as wide as striae, smooth, weakly shining, punctures as large as those of striae; interstriae 1 with transverse shallow wrinkles. Declivity sulcate between interstriae 3, the base of declivity with small equal sized granules, interstriae 3 bear a major, pointed, conical spine at about 1/2 of declivity length from anterior margin, apical third of interstriae 3 armed by 1–3 smaller pointed teeth, interstriae 4 on apical margin armed by 2–3 pointed teeth (Fig. 10). Surface of declivity glabrous, shining; punctured by confused, numerous deep punctures. Metepisternum, metasternum and abdomen reddish brown, ventrites 1–5 with numerous punctures, covered by sparse long erect pale setae, apical margin of ventrite 5 with tuft of yellow setae. Legs as in female.

DIAGNOSIS. The new species is closely related to *Taurodemus sanguinicollis* (Blandford, 1898) but can be distinguished by the larger size of the pointed tubercles on interstriae 1 on the base of the declivity, and transverse shallow wrinkles on interstriae 1. The new species is distinguished from *T. sharpi* (Blandford, 1898), *T. varians* (F., 1801), *T. varulus* (Wood, 1974) by the much lower position of the major spine on the elytral declivity. The male can be distinguished by the major compound spine, positioned in middle of declivity, and coarse transverse wrinkles on interstriae 1.2.

BIOLOGY. The species was collected in foothill forest (Bosque basimontano de Yunga), or rarely in tropical rain forest (Bosque de colina baja). Females buried in wood of branches and stems of *Inga edulis* (Fabaceae) and *Protium* sp. (Burseraeae). The tunnel runs radially into the wood for about 1.3–3.5 cm, and does not bifurcate (Fig 13). Eggs were deposited loose in the tunnel. The larvae fed communally on the ambrosia mycelium and on the wood as they expanded the tunnel into an elongate

area of 2.5–3.5 cm² in the longitudinal plane. Each gallery system included 15–35 young females and 1 male.

ETYMOLOGY. The species name reflects the stout body with two large pointed processes on the declivity. “Militaris” means martial (pertaining to war) in Latin.

Taurodemus peruanus Petrov, **sp.n.**

Figs 5–8, 12, 13.

MATERIAL. Holotype, ♀ (ZMM): Peru: **Junin** region: Satipo province, 15 km NW from Satipo, near Rio Venado village, S11°11'35.2" W74°46'07.0", h~1300 m, FIT, 14.X.2015, leg. A.V Petrov. Paratype (1♀ in CDFA, 1♀ in MSUC, 1♀ in NHMUK, 1♀ in NHNW, 1♀ in NMNH, 1♀ in RABC, 1♀ in ZIN, 30♀♀ and 2♂♂ in APP): same place and date, ex. *Protium* sp., (20♀♀ and 2♂♂ males), same place, FIT, 17–28.X.2013, leg. A.V Sokolov (2♀♀), S11°11'58.2" W74°46'15.0", h~1150 m, ex. *Inga edulis*, 26.III.2014 (5♀♀), S11°11'32.2" W74°46'03.8", h~1300 m, 21–23.IX.2017, leg. A.V Petrov (2♀♀), S11°11'39.8" W74°46'08.2", h~1200 m, 6–15.II.2019, leg. A.V Petrov (2♀♀); 44 km NNE from Satipo, left river bank of Perene, near Canan Eden village, S11°04'30.5" W74°16'50.9", h~1100 m, ex. *Protium* sp., 15.II.2006, leg. A.V Petrov (2♀♀); **Loreto** region: 58 km SW from Iquitos, Itaya river, 04°15'23.3" S 73°27'59.1" W, h~120 m, FIT, 2.II.2006, leg. A.V Petrov (1♀), same place but 8.III.2008, (1♀), 8.V.2009, leg. A.V Petrov (1♀).

Description. **Female.** Body stout, length 4.4 mm, 1.95 times as long as wide, body dark brown to black with reddish brown antennae and legs (Figs 7–8).

Head dark brown to black, weakly shining. Frons broadly convex, central part with median roundish callus at the level of upper half of eyes; frontal surface minutely reticulate, evenly punctured by shallow sparse points (except callus zone), in upper part of the frons with sparse, longitudinal shallow wrinkles; vertex minutely reticulate without punctures; vestiture of fine sparse pale hairs, epistoma with transverse row of abundant short pale setae. Eyes shallowly emarginate, 2.5 as long as widely, flat, eyes widely separated above by 3.5 times their width. Antennomeres reddish brown, funicle 5-segmented, pedicel scaphoid, club obliquely truncate, segment 1 on anterior face corneous.

Pronotum black, shining in the base half, 0.88 as long as wide; the base straight, with rounded basal angles; lateral margins, subparallel in basal half of pronotal length, broadly rounded in front, anterior margin armed by eight coarse median serrations; summit at middle of anterior slope closely asperate; the base half of the pronotal disc minutely reticulate, with numerous shallow small punctures. Vestiture of fine sparse pale hairs, longer on anterior half and lateral margins of pronotum, minute on the basal half of the pronotal disc.

Scutellum black, glabrous, triangular.

Elytra black, shining on base and lateral margins; almost as long as wide, 1.16 times as long as pronotum; lateral margins subparallel, disc occupying 30 percent of elytral length; surface glabrous, with transversal shallow wrinkles; striae not impressed, punctures small, shallow, distinct; interstriae about eight times as wide as striae, smooth, shining, punctures minute, half as large as those of striae. Declivity abrupt at base, the base of declivity on interstriae 1, 2 ornamented by three pointed small tubercles, of equal size (on each elytron) and two minute tubercles (Fig. 11); interstriae 3 on the base of declivity with two small pointed tubercles and two minute granules; interstriae 4 armed by four pointed tubercles; interstriae 5 ornamented by a rounded row of 12 pointed tubercles; interstriae 6 and 7 armed by 4–5 granules. Interstriae 3 armed by a major, pointed, conical spine at about 1/3 of declivity length from anterior margin. Strial rows of puncture on declivity straight, visible, but minute. Surface of declivity reticulate, dull. Vestiture of fine short erect setae on base of declivity and lateral margins of elytra.

Metepisternum and metasternite dark brown, with deep numerous punctures, covered by erect short setae. Abdomen dark brown, ventrites 1–5 with numerous punctures, covered by long erect pale setae.

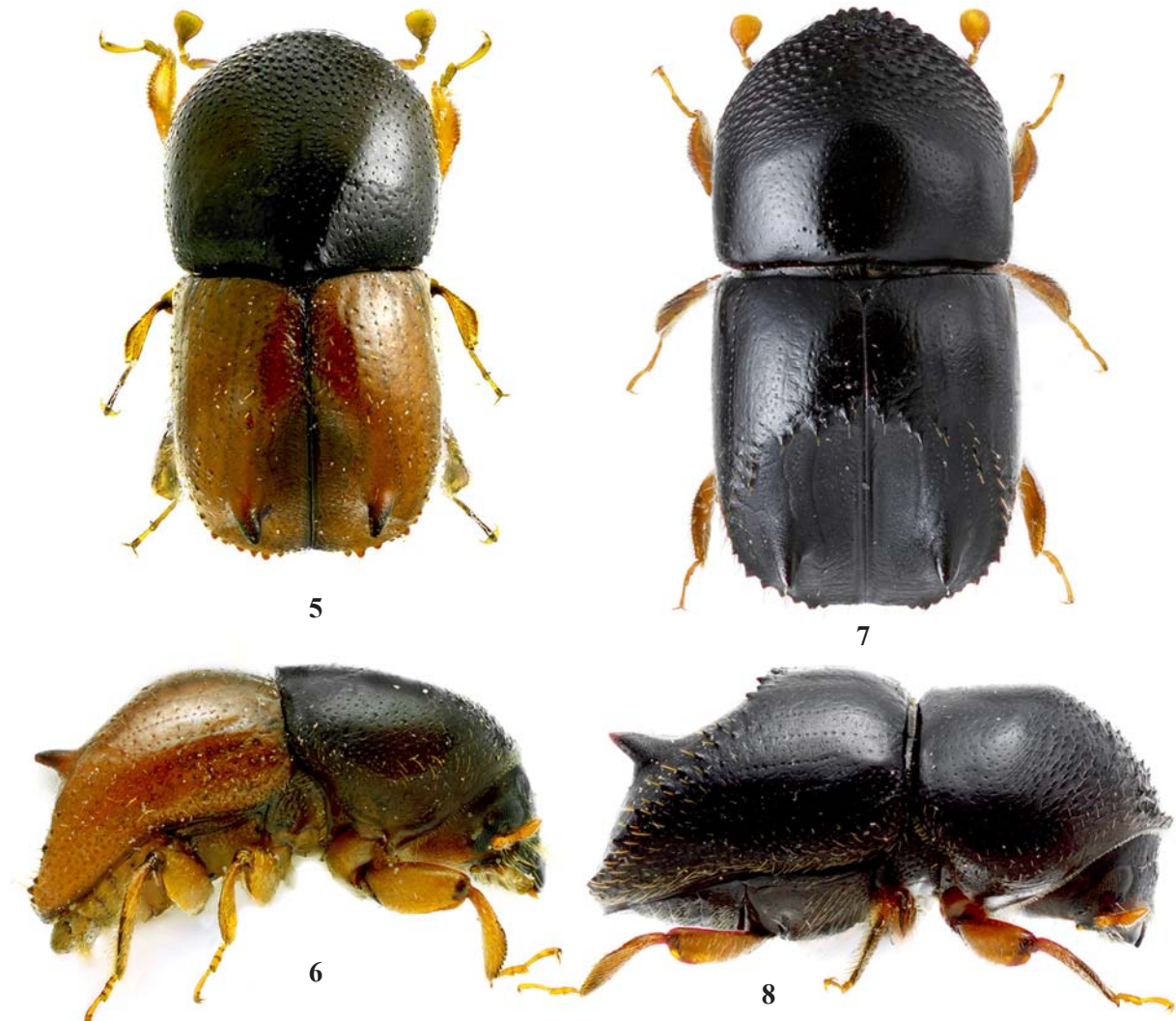
Procoxa separated. Legs unicolored reddish brown, tibiae with abundant short erect pale setae, protibia with twelve small lateral socketed teeth on distal half.

MEASUREMENTS. Paratypes (females): Mature color almost dark brown to black, length 4.1–4.4 mm, 1.9–2.0 times as long as wide; anterior margin of pronotum armed by 6–8 coarse median serrations, elytra 1.1–1.2 times as long as wide.

Male: body stout, bicoloured, frons and pronotum dark brown, elytra, abdomen, legs and antennae reddish brown (Figs 5–6); length 3.5–3.7 mm, 2.0 times as long as wide. Frons dark brown, vertex and ventral part of the head reddish brown. Frons similar to female, except median fovea in vertex and longer setae on epistoma over mandibles; eye half as large as in female. Pronotum dark brown to black; as long as wide, median part bicornate and ebenus pronotal base with triangular projection directed towards scutellum, lateral margins weakly rounded, pronotum widest in anterior third; apical margin broadly rounded, unarmed. Anterior slope flat, median part on middle third of pronotal length flattened, summit at middle anterior slope to basal half, weakly asperate, basal third punctured by minute points. Surface of base and lateral third glabrous. Vestiture of sparse minute setae on anterior part of pronotum. Scutellum small, dark brown, triangular.

Elytra reddish brown, 1.0–1.1 as long as wide, 1.1–1.16 as long as pronotum. Lateral margins weakly rounded, elytra widest in the middle part of the length. Disc occupying 30 percent of elytra length; striae not impressed, punctures small, distinct; interstriae about five times as wide as striae, smooth, weakly shining, punctures as large as those of striae. Each interstitial puncture with a short erect pale seta. Declivity sulcate, abrupt at base. The base of declivity ornamented with pointed small tubercles of equal size; interstriae 3 with a large single process in central part lateral margin of declivity (Fig. 12). Surface of declivity reticulate, dull, punctured by confused, numerous punctures. Metepisternum, metasternum and abdomen reddish brown, ventrites 1–5 with numerous punctures, covered by long erect pale setae. Legs as in female.

DIAGNOSIS. The new species is distinguished from *Taurodemus lenis* Wood, *T. varians* (F., 1801), *T. varulus* (Wood, 1974) by the major spine on lower half of declivity. The new species is closely related to *T. bicornatus* (Wood, 1974) and *T. ebenus* (Wood, 1971), but can be distinguished by the larger body size of the female; the equal size of the pointed tubercles on the base of elytral declivity; the reticulate and dull surface of declivity. The male is closely related to male of *T. ebenus* but can be distinguished by the dull surface of the declivity, and larger body



Figs 5–8. Habitus of *Taurodemus peruanus* sp.n.: 5–6 — male; 7–8 — female; 5, 7 — dorsal view; 6, 8 — lateral view.
Рис. 5–8. Габитус *Taurodemus peruanus* sp.n.: 5–6 — самец; 7–8 — самка; 5, 7 — сверху; 6, 8 — сбоку.

size; distinguished from *T. bicornatus* and *T. militaris sp.n.* by absence of minor tubercles on ventrolateral margin of declivity.

BIOLOGY. The species was collected in tropical rain forest (Bosque de colina baja) and foothill forest (Bosque basimontano de Yunga). Females boring in wood of branches and stems of *Inga edulis* (Fabáceae) and *Protium sp.* (Burseraceae). Gallery system as in *Taurodemus bicornatus* and *T. ebenus* (Wood, 2007). Gallery system as in *T. militaris*, but larger size. The tunnel runs radial into the wood for about 1.0–3.8 cm. Eggs were deposited in tunnel. The larvae fed communally on the ambrosia mycelium and on the wood as they expanded the tunnel on an elongate area of 3.0–6.5 cm² along vessel. Each gallery system included 6–14 young females and 1 males. Rarely, galleries and eggs were attacked by mycocleptist *Sampsonius giganteus* Schönherr, 1994 (Fig. 14).

ETYMOLOGY. The species is named after the country of its origin, where the types were collected.

Theoborus amazonicus Petrov, **sp.n.**

Figs 15–18.

MATERIAL. Holotype, ♀ (ZMM): Peru: Loreto province, 58 km SW Iquitos, Itaya river, h~120m, 04°15'23.3"S 73°27'59.1"W, 12.03.2007, leg. A.V Petrov. Paratype (1 ♀ in APP): same place and date.

DESCRIPTION. Female. Length 2.8 mm, 2.37 times as long as wide, reddish brown, body covered by abundant erect setae (Figs 15–16).

Head light reddish brown, dull, with dark brown eyes and mandibles. Frons weakly convex, in epistoma weakly transversely flattened with transversal row of abundant long yellow setae (Fig. 17); surface of the frons reticulate, with sparse long setae. Vertex, upper and lateral parts of the frons shagreened. Eyes shallowly emarginate, 1.87 as long as wide, flat, eyes widely separated above by 2.6 times their width. Antennal fossa



9



11

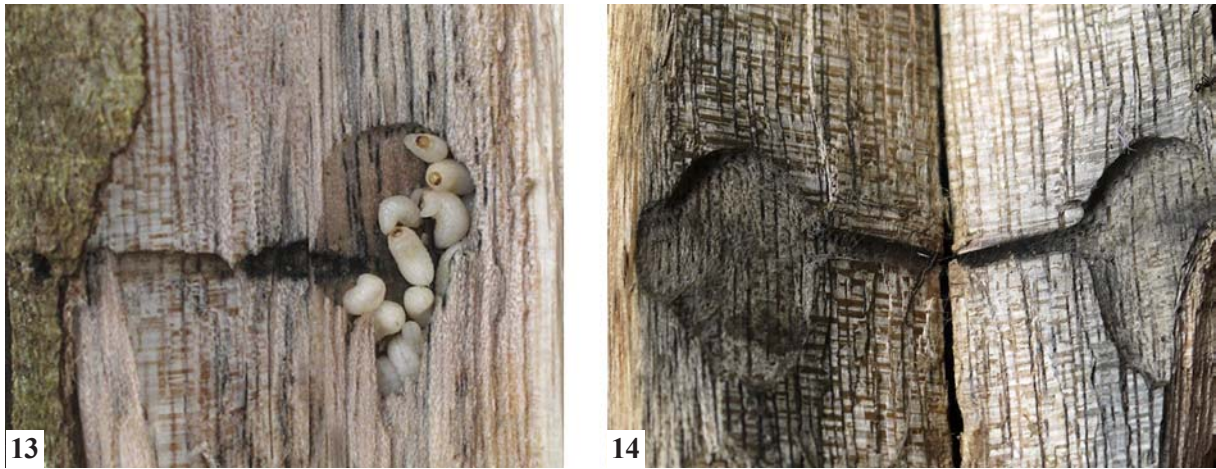


10



12

Figs 9–12. Elytral declivity: 9–10 — *Taurodemus militaris sp.n.*; 11, 12 — *Taurodemus peruanus sp.n.*; 9, 11 — female; 10–12 — male.
Рис. 9–12. Скат надкрылий: 9–10 — *Taurodemus militaris sp.n.*; 11–12 — *Taurodemus peruanus sp.n.*; 9, 11 — самки; 10, 12 — самцы.

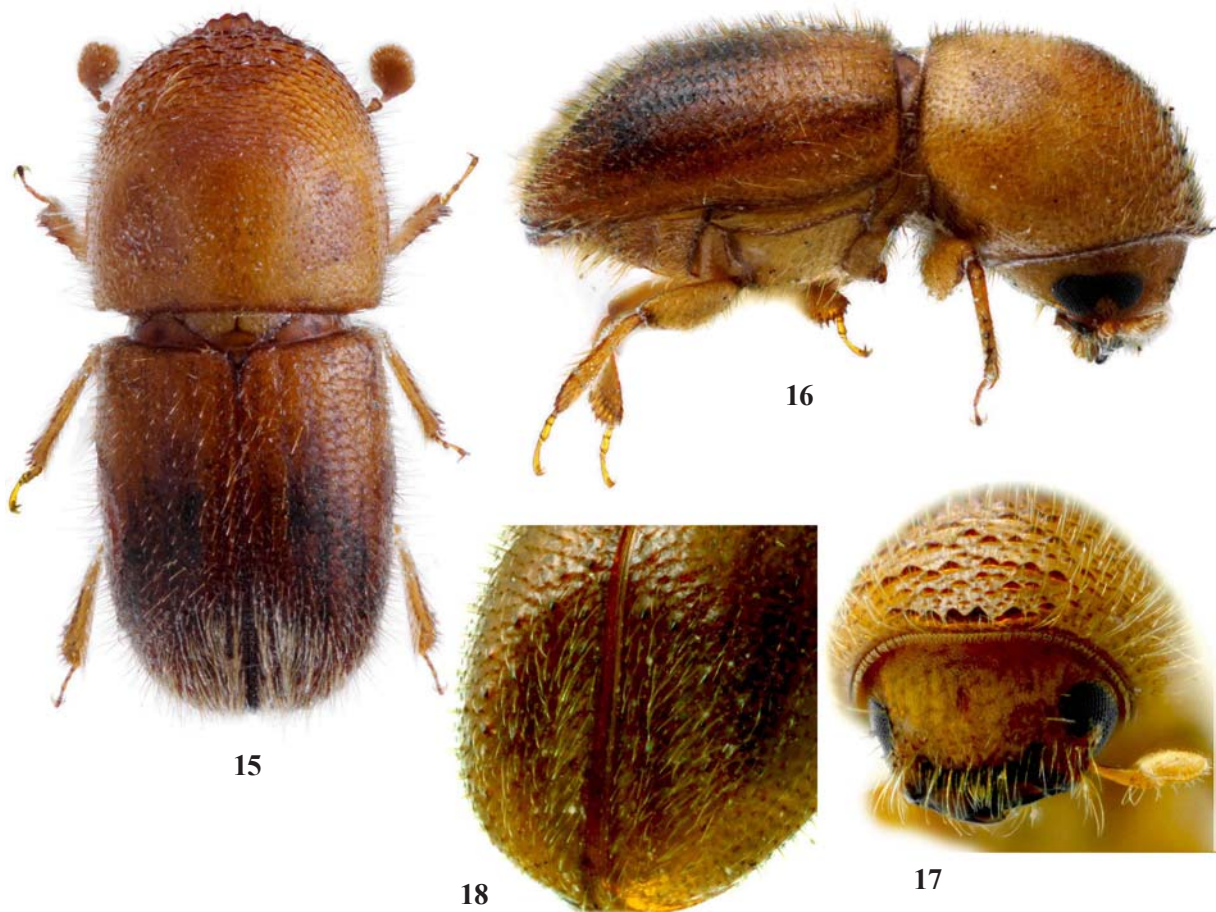


Figs 13–14. Galleries of *Taurodemus*: 13 — *Taurodemus militaris* sp.n.; 14 — *Taurodemus peruanus* sp.n.; 14 — galleries were attacked by mycocleptist *Sampsonius giganteus*.

Рис. 13–14. Ходы *Taurodemus*: 13 — *Taurodemus militaris* sp.n.; 14 — *Taurodemus peruanus* sp.n.; 14 — ходы были атакованы микоклептистом *Sampsonius giganteus*.

very short, near middle of eye, antennal insertion not deep, without sclerotized ring. Antennomeres reddish brown, scape as long as wide as club, funicle 5-segmented, pedicel scyphoid,

club subcircular, moderately flattened, thickened basally, anterior face with two separate sutures, both of which are continued on the posterior face of club, sutures ornamented by pale short setae.



Figs 15–18. Habitus and details of *Theoborus amazonicus* sp.n., female: 15 — habitus, dorsal view; 16 — habitus, lateral view; 17 — head; 18 — elytral declivity.

Рис. 15–18. Габитус и детали строения *Theoborus amazonicus* sp.n., самка: 15 — габитус, сверху; 16 — габитус, сбоку; 17 — голова; 18 — скат надкрылий.

Pronotum reddish brown, weakly shining, subsquare, 1.08 times as long as wide; the base straight, anterior part rounded from third of pronotal length; anterior margin irregularly armed by two large (in the middle) and four smaller (laterally) rounded serrations; anterior slope coarsely asperate, armed by rounded serrations, posterior area weakly shining, surface with numerous punctures; vestiture on pronotal disc of abundant erect reddish brown setae

Scutellum visible, triangular, dark brown, shining.

Elytra bicoloured, darker on posterior half of elytral length, while light reddish-brown elsewhere, weakly shining, 1.3 times as long as wide, 1.42 as long as pronotum. Disc occupying 65 percent of elytral length; striae not impressed, punctures small, distinct, uniseriate; interstriae about two times wide as striae, shagreened, weakly shining, interstitial punctures half as large as those of striae, moderately confused. Disc covered by sparse long erect setae. Declivity flat, weakly impressed in central part from striae 1 to striae 4, base of declivity armed by rounded single tubercles, interstriae 1–2 with two and interstriae 3 with three tubercles at the base of declivity; interstriae 1–3 on the disc of declivity with minute granules (Fig. 18); striae 1–4 not visible on declivity. Vestiture of long abundant erect setae covering surface of elytral declivity, interstriae on elytral disc with short sparse setae, interstriae with long erect setae; erect yellow setae on declivity longer and more abundant.

Metepisternum and metasternite reddish brown with sparse erect yellow setae. Abdomen unicoloured reddish brown, ventrite 1 with short uniformly adjacent setae, ventrites 2–5 with long abundant erect setae. Legs unicoloured reddish brown, with erect yellow setae, pro- and metatibiae with six lateral socketed teeth on distal half and one-third.

Male: unknown.

DIAGNOSIS. The new species is closely related to *Theoborus crinitulus* (Wood, 1974), but can be distinguished by microscopic granules on interstriae 3 of declivity disc, rounded posterolateral margin of declivity unarmed by a carina, and larger body size of female; from *T. magnus* **sp.n.** can be distinguished by flat declivity, long erect setae on elytral disc, and smaller body size.

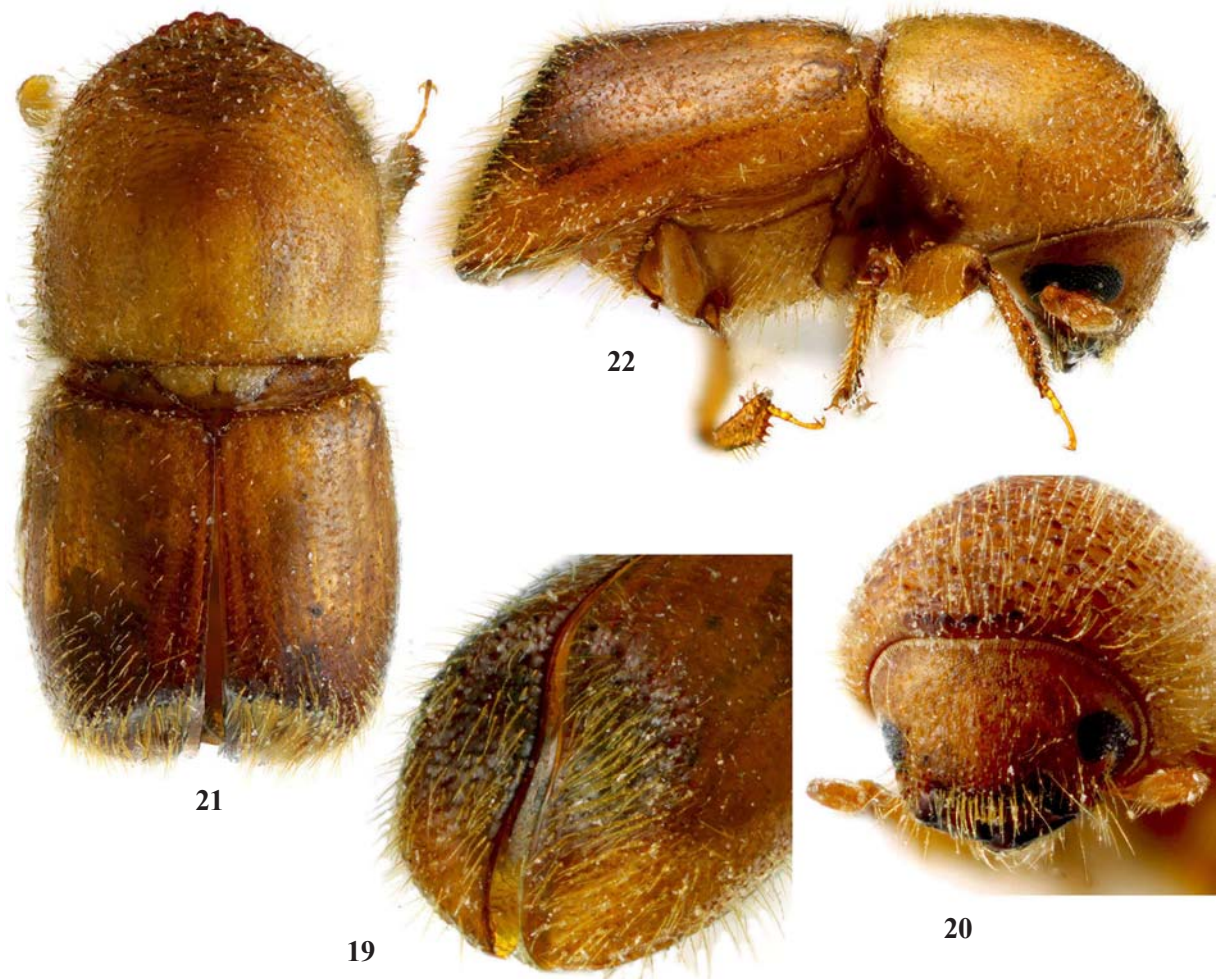
BIOLOGY. The species was collected in rain tropical forest (Bosque de colina baja).

ETYMOLOGY. The name of the species refers to its type locality.

Theoborus magnus Petrov, **sp.n.**

Figs 19–22.

MATERIAL. Holotype, ♀ (ZMM): Peru: Loreto province, 18 km NNW from Iquitos, Momon river, near Gen Gen village, 03°37'52.8"S 73°19'53.2"W, h~110m, 5–7.II.2007, FIT, leg. A.V Petrov. Paratype (1 ♀ in APP): 70 km SW Iquitos, h~130m, 04°20'35.6"S 73°30'17.2"W, FIT, 27.II.2008, leg. A.V Petrov.



Figs 19–22. Habitus and details of *Theoborus magnus* **sp.n.**, female: 19 — elytral declivity; 20 — head; 21 — habitus, dorsal view; 22 — habitus, lateral view.

Рис. 19–22. Габитус и детали строения *Theoborus magnus* **sp.n.**, самка: 19 — скат надкрылий; 20 — голова; 21 — сверху; 22 — габитус, сбоку.

DESCRIPTION. Female. Length 3.1 mm, 2.17 times as long as wide, reddish brown, body covered by abundant erect yellow setae (Figs 21–22).

Head reddish brown, dull, with dark brown eyes and mandibles. Frons weakly convex; surface of the frons reticulate, with sparse long setae; in epistoma with transversal row of abundant long yellow setae (Fig. 20) Vertex, upper and lateral parts of the frons shagreened. Eyes shallowly emarginate, 1.87 as long as wide, flat, eyes widely separated above by 3.5 times their width. Antennal fossa very short, near middle of eye, antennal insertion not deep, without sclerotized ring. Antennomeres reddish brown, scape as long as wide as club, funicle 5-segmented, pedicel scaphoid, club subcircular, moderately flattened, thickened basally, anterior face with two separate sutures, both of which are continued on the posterior face of club, sutures ornamented by pale short setae.

Pronotum reddish brown, weakly shining, 1.03 times as long as wide; the base straight, anterior part rounded from third of pronotal length; anterior margin irregularly armed by two large (in the middle) and four smaller (laterally) rounded serrations; anterior slope coarsely asperate, armed by rounded serrations, posterior area weakly shining, surface with numerous minute punctures; vestiture on pronotal disc of abundant erect reddish brown setae.

Scutellum visible, very small, triangular, dark brown, dull.

Elytra bicoloured, reddish brown on disc, dark brown on declivity, dull, 1.25 times as long as wide, 1.16 as long as pronotum. Disc occupying 79.5 percent of elytral length; striae not impressed, punctures very small, distinct, uniseriate; interstriae about five times wide as striae, shagreened, dull. Disc covered by sparse short setae, striae with row microscopic hairs, interstriae with sparse confused erect setae. Declivity obliquely truncate; base of declivity armed by single minute tubercles, interstriae 1–4 with one minute tubercle and 1–2 microscopic granules (Fig. 19); striae 1–4 not visible on declivity, interstriae 1–4 with very small granules. Vestiture of short sparse setae covering surface of disc interstriae; erect yellow setae on declivity longer and more abundant.

Metepisternum and metasternite reddish brown with sparse erect yellow setae. Abdomen unicoloured reddish brown, ventrite 1 with short uniformly adjacent setae, ventrites 2–5 with long abundant erect setae. Legs unicoloured reddish brown, with erect yellow setae, pro- and metatibiae with six lateral socketed teeth on distal half and one-third.

Male: unknown.

DIAGNOSIS. The new species is closely related to *Theoborus amazonicus* sp.n., but can be distinguished by obliquely truncate declivity, short setae on elytral disc, and larger body size.

BIOLOGY. The species was collected in rain tropical forest (Bosque de colina baja).

ETYMOLOGY. The species name relates to the large body form of female, “magnus” means a large form in Latin.

New records

Sampsonius sexdentatus Eggers 1933

MATERIAL. Peru: Junin region, Satipo province, 15 km NW from Satipo, near Rio Venado village, S11°11'35.2''W74°46'07.0'', h~1300 m, FIT, 14.X.2017, leg. A.V Petrov (1 ♀)

NOTE. The species was previously known from French Guiana only.

Taurodemus salvinii (Blandford 1898)

MATERIAL. Peru: Huanuco region: 20 km S from Tingo Maria, Cayumba village, S9°29'46.0''W75°57'13.9'', h~780 m, 22–24.XII.2018, leg. A.V Petrov (3 ♀♀ and 1 ♂); 7 km SSW from Tingo Maria, near Las Pavas village, 9°21'71.7''W75°58'57.5'', h~670 m, 12.IV.2014, leg. A.V Petrov (1 ♀); Junin region, Satipo province, 15 km NW from Satipo,

near Rio Venado village, S11°11'93.5''W74°46'22.7'', h~1060 m, ex. *Inga edulis*, 18–22.V.2012, leg. A.V Petrov (3 ♀♀), S11°11'35.2''W74°46'06.0'', h~1300 m, 1–3.X.2015, leg. A.V Petrov (2 ♀♀), S11°11'39.8''W74°46'08.2'', h~1195 m, 6–12.II.2019, leg. A.V Petrov (2 ♀♀); Ene River, 5 km NNE Pichiquia Village, 520 m a.s.l., 11°23.3'S 74°06.4'W, FIT, 25–26.IX.2017, leg. A.V Petrov (2 ♀♀); Pasco region: 13 km NNE from Pozuzo, near Sta Roza village, S09°41'36.6''W76°05'05.2'', h~1150 m, FIT, 6–11.X.2017, leg. A.V Petrov (2 ♀♀).

NOTE. The species was previously known from Costa Rica.

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References

- Atkinson T.H., Petrov A.V., Flechtmann C.A.H. 2018. New records and combinations in Neotropical *Premnobius* Eichhoff (Coleoptera: Curculionidae: Scolytinae: Ipini) with an illustrated key to New World species // *Insecta Mundi*. Vol.0658. P.1–11.
- Bright D.E. 2019. A taxonomic Monograph of the bark and ambrosia beetles of the West Indies (Coleoptera: Curculionidae: Scolytidae) // *Occasional Papers of the Florida State Collection of Arthropods*. Vol.12. 491 pp.
- Cognato A.I. 2018. *Callibora* Cognato, a new genus of xyleborine ambrosia beetle (Curculionidae: Scolytinae: Xyleborini) from Ecuador // *The Coleopterists Bulletin*. Vol.72. P.801–804. doi.org/10.1649/0010-065X-72.4.801
- Dole S.A., Cognato A.I. 2007. A New Genus and Species of Bothrostermina (Coleoptera; Curculionidae: Scolytinae) from Ecuador // *The Coleopterists' Bulletin*. Vol.61. P.318–325. doi.org/10.1649/0010-065X(2007)61[318:ANGASO]2.0.CO;2
- Jordal B.H., Smith S.M. 2020. *Scolytodes* Ferrari (Coleoptera, Scolytinae) from Ecuador: 41 new species, and a molecular phylogenetic guide to infer species boundaries // *Zootaxa*. Vol.4813. No.1. P.1–67. doi.org/10.11646/zootaxa.4813.1.1
- Petrov A.V. 2017. New data on Scolytini Latreille, 1804 mainly from Peru, with description of two new species of *Cnemomyx* Tichhoff, 1868 (Coleoptera: Curculionidae: Scolytinae) // *Koleopterologische Rundschau*. Vol.87. P.325–334.
- Petrov A.V. 2020. Description of a new species of *Scolytopsis* Blandford, 1896 (Coleoptera, Curculionidae: Scolytinae) from Peru // *Entomological Review*. Vol.100. No.3. P.430–433.
- Petrov A.V., Flechtmann C.A.H. 2013. New data on ambrosia beetles of the genus *Sampsonius* Eggers, 1935 with descriptions of three new species from South America (Coleoptera: Curculionidae: Scolytinae) // *Koleopterologische Rundschau*. Vol.83. P.173–184.
- Petrov A.V., Flechtmann C.A.H. 2020. Description of four new species of *Chramesus* LeConte 1868 from South America (Coleoptera: Curculionidae: Scolytinae) // *Koleopterologische Rundschau*. Vol.90. P.331–342.
- Petrov A.V., Mandelshtam M.Yu. 2016. Three new species of the genus *Dendrocranulus* Schedl, 1937 from Peru (Coleoptera: Curculionidae: Scolytinae) // *Koleopterologische Rundschau*. Vol.86. P.281–288.
- Petrov A.V., Mandelshtam M.Yu. 2018. Description of a new species of *Cnestus* Sampson, 1911, and notes on other species from South America (Coleoptera: Curculionidae: Scolytinae) // *Koleopterologische Rundschau*. Vol.88. P.269–274.
- Smith S.M. Cognato A.I. 2010. A revision of *Campocerus* Dejean (Coleoptera: Curculionidae: Scolytinae) // *Insecta Mundi*. Vol.148. P.1–88.
- Smith S.M., Petrov A.V., Cognato A.I. 2017. Beetles (Coleoptera) of Peru: A survey of the Families. Curculionidae: Scolytinae // *The Coleopterists Bulletin*. Vol.71. P.77–94.
- Wood S.L. 2007. Bark and Ambrosia Beetles (Coleoptera: Scolytidae) of South America: a taxonomic monograph. Monte Bean Life Sciences Museum, Brigham Young University, Provo, United States. 900 pp. + 230 plates.