Humanity space *International almanac* VOL. 8, No 2, 2019: 79-100

http://zoobank.org/urn:lsid:zoobank.org:pub:4526BF87-223F-40A1-A88F-71B80BB6DDA1

Taxonomy notes on Palaearctic Cerambycidae (Coleoptera) with descriptions of several new taxa

M.L. Danilevsky

A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences
Leninsky prospect 33, Moscow 119071 Russia
e-mail: danilevskyml@rambler.ru, danilevsky@cerambycidae.net

Key words: Coleoptera, Cerambycidae, taxonomy, new subspecies, new records, China, Greece, Kazakhstan, Kirgizia, Korea, Russia.
Abstract: Six new subspecies are described: *Stenocorus* (*Toxotochorus*) *validicornis shapovalovi,* **ssp. n.** from Fergansky Mountain Range in Kirgizia; *Vadonia bipunctata aralensis* **ssp. n.** from near Aral Sea in Kazakhstan; *Aromia moschata malukhini* **ssp. n.** from Astrakhan Region of Russia; *Purpuricenus kaehleri rossicus* **ssp. n.** from European Russia; *Morimus asper gazanchidisi* **ssp. n.** from South Greece (Mt. Ossa); *Morimus verecundus murzini* **ssp. n.** - from North Iran, Golestan province, mountains southwards Gorgan, 36°45'48"N, 54°28'57"E; *Psilotarsus hirticollis auliensis* Danilevsky, 2000 from Kirgizia was wrongly recorded before as *Psilotarsus brachypterus pubiventris* (Semenov, 1900). *Purpuricenus kaehleri boryi* Brullé, 1833, **stat. nov.** is accepted as a valid name for a subspecies from South Greece. *Eodorcadion egregium kabaki* Kadyrbekov, 2004, **stat. nov.** is accepted as a valid name for a subspecies from Boro-Horo and Bogdo-Ula Ranges in China. *Pseudocalamobius japonicus,* auct. (not Bates, 1873) from the mainland of Russia, Korea and China is identified as *Pseudocalamobius tsushimae* Breuning, 1961.

Several taxonomy news are proposed below on the base of recently collected materials.

Acronyms of collections:

AS - collection of A. Shapovalov (Sankt-Petersburg)
MD - collection of M. Danilevsky (Moscow)
MM - collection of M. Malukhin (Obninsk, Kaluga Region of Russia)
OH - collection of S.H. Oh (Myeongseong-ro, Cheorwon-gun, Republic of Korea)
SI - collection of S. Ivanov (Vladivostok)
SM - collection of S. Murzin (Moscow)
VG - collection of V.Gazanchidis (Moscow)
ZMK - collection of Zoological Museum of the Institute of Biology and Soil Sciences of the National Academy of Sciences of Kyrgyz Republic (Bishkek)
ZMM - collection of Zoological Museum of Moscow University

Psilotarsus hirticollis auliensis Danilevsky, 2000

Tab 1: figs 1-2

Psilotarsus hirticollis auliensis Danilevsky, 2000: 19 - "Taraz (earlier Aulie-Ata, then Dzhambul) environs in south Kazakhstan".

Psilotarsus brachypterus pubiventris, Danilevsky, 2000: 9, part. - "I preliminary regarded as *P. b. pubiventris* (Sem.) a Kirgizian population (which most probably represents a new subspecies) known after 3 specimens only (one male and two females). Females from Kirgizia are very similar to females from Kurdai pass, but the male is abnormally large (length-width: 40mm to 16mm) and some of its exceptional characters can be connected with its size"; "population from north Kirgizia distributed from about Kara-Balta to Bishkek most probably belongs to this subspecies".

Recently I received several more specimens of *Psilotarsus* from near Bishkek in Kirgizia including 5 males, which allowed improving the identification of the native population as *Psilotarsus hirticollis auliensis* Danilevsky, and better realizing its morphology. The taxon was provisionally wrongly identified (Danilevsky, 2000) as *P. brachypterus pubiventris* (Semenov, 1900).

Description. Body relatively narrower than in *P. b. pubiventris*; all males dark brown, nearly black; females similarly colored or with light-brown elytra (2 specimens), but not so pale-orange as in certain specimens from near Taraz; antennae in males reaching posterior elytral third, distinctly shorter, than in *P. b. pubiventris*; antennal lamellae of 3rd - 11th joints long and thick as in *P. h. auliensis* from near Taraz, never triangular and flat as in *P. b. pubiventris*, never concave internally as in *P. h. hirticollis* Motschulsky, 1860; female antennae also a little shorter, than in *P. b. pubiventris*, with longer and sharper lateral angles of joints; male pronotum densely or sparsely pubescent with long erect setae; metathorax covered by dense erect setae, abdomen with sparser pubescence; body length of available males: 26.8-33.5 mm, width: 10.8-13.2 mm; body length of available females back to the apex of the last abdominal tergite: 35-44 mm (to the elytral apices: 28-33 mm), width: 12-14 mm; body length of the biggest male published by Danilevsky (2000): 40 mm, width: 16 mm.

Materials. 1 male, 1 female, Kirgizia, Chon-Aryk (near Kara-Balta about 42°43'N, 74°1'E, 1050 m), 26.6.2000, S.V. Ovtchinnikov leg. - ZMK; 2 males, Kirgizia, 3 km E Besh-Kungey (south environs of Alma-Ata), 42°47'N, 74°41'E, 1070 m, 25.6.2017, A.Shapovalov leg.

- AS; 2 males and 3 females, about same locality, 42°46'N, 74°41'E, 1446 m, 4-5.7.2017, A.Shapovalov leg. - AS.

Distribution. The subspecies is distributed from Taraz environs in Kazakhstan to Kara-Balta environs in Kirgizia and further eastwards to Bishkek environs.

Stenocorus (*Toxotochorus*) *validicornis validicornis* Pic, 1900

Toxotus (*Minaderus*) *validicornis* Pic, 1900: 16 - "? Turkestan".

Toxotus validicornis Pic, 1906: 6 (no locality).

Toxotus validicornis var. *alaiensis* Pic, 1906: 6 - "monts Alai".

Stenochorus (*Toxotochorus*) *tataricus,* Reitter, 1914: 183 (not Gebler, 1841) - "Turkestan".

Stenocorus (*Toxotochorus*) *tataricus,* Plavilstshikov, 1936: 176, 513, part. (not Gebler, 1841) - from Ayaguz in Kazakhstan through Semirechye to Fergana and Alay Ridge.

Stenocorus (*Toxotochorus*) *validicornis validicornis,* Danilevsky, 2010: 135 (= *alaiensis* Pic) - Kirgizstan, Uzbekistan; Danilevsky, 2014: 104, part. - Kirgizia: south slope of Chatkal Ridge (Sary-Chelek, rivers: Kara-Su, Kassan-Say, Padsha-Ata), south-west slope of Fergansky Ridge (Arslan-Bob, Kara-Alma), Alay (southwards Osh).

The type locality of the taxon was not definitely mentioned in the original publication. The definition by Danilevsky (2014): mountains around Fergana valley (or from Chatkal Ridge along Fergana Ridge to Alay Mountains) was also too wide. It was based on the morphology of the taxon distributed inside that area (usually uniformly colored elytra with distinct pubescence and thick strongly serrate antennae). Unfortunately rather peculiar specimens from Fergansky ridge were poorly known, and most probably all populations from the region belong to a new subspecies described below. So, the area of the nominative subspecies looks to be divided in two portions (Chatkal and Alay). Very likely the type of *S. validicornis* Pic was collected in Chatkal area as far as Alay population was separated by M.Pic as another variation. The problem of the validity of *S. validicornis* var. *alaiensis* Pic as a subspecies name needs further investigation. It is close to the Chatkal population because of sick (that was mentioned in the original description), strongly serrate antennae. Only one male from Alay is known to me (North slope of Kitchik-Alai Rridge, Kirghiz-Ata env., 40°07'N, 72°35'E, 2150 m, 25.06.1996, S.Zonstein leg. - ZMK) with unicolored, brown elytra.

***Stenocorus* (*Toxotochorus*) *validicornis shapovalovi,* ssp. n.**
Tab 1: figs 3-5

Description. Body totally black in females and dark form of males (5 ex.), or (in pale form of males - 6ex) with uniformly brown elytra, antennae and legs, dark-brown abdomen and often brownish anterior and posterior margins of pronotum; 2 males are intermedially colored with black-brown elytra; male antennae never serrate, filiform, very similar to male antennae of *Stenocorus* (s. str.); 3rd - 10th antennal joints just a little widened apically never angulated; 4th joint narrow, very short, from 1.5 to 2.0 times longer than wide, much shorter than 1st joint, which is shorter than 3rd; 3rd joint equal to 5th, other male antennal joints much longer; female antennae also much more filiform than in *S. v. validicornis*; apical angles of 4th-6th joints not exposed; 4th joint also from 1.5 to 2.0 times longer than wide, narrower than 5th; 1st, 3rd and 5th joints in females about equal in length, as well as other joints; elytra in males strongly narrowed posteriorly, in females - widened posteriorly or parallelsided; elytral punctation very fine, in males totally covered by dense short recumbent pubescence arranged in longitudinal striae, without erect setae; elytral apices rounded; pygidium in males deeply emarginated, postpygidium slightly emarginated; last abdominal sternite also more or less emarginated; last abdominal tergite in females narrowly, but sometimes deeply emarginated; last abdominal sternite nearly truncated with very small central notch; body length in males: 16.5-24.2 mm, width: 4.8-7.5 mm; body length in females (to the elytral apex): 21.5-28.0 mm, width (at the elytral humeri): 6.5-9.2 mm.
Differential diagnosis. The taxon looks similar to the nominative subspecies because of similarly colored males and females with unicolored elytra without longitudinal stripes, but strongly differs by thin, filiform antennae.
Materials. Holotype, male with the label: “Kyrgyzstan, Jalal-Abad Prov. / Suzak Distr., Urumbash env. / SW Fergana Mt. Rhg. 1830 m / 41°12'N, 72°23'E, A. Shapovalov 27.06.2018” - ZIN; 76 paratypes: 69 males, 5 females with same label - AS, MD; 1 male, Dzhalal-Abad, Kara-Alma, 19.6.1952, Filimonov leg. - MD; 1 female, Kirgizia, Kara-Alma, 26.6.1945, K.Arnoldi - MD.
Distribution. Kirgizia, south slope of Fergana Ridge.

Etymology. The species is dedicated to Andrey Shapovalov (Sankt-Petersburg) who collected the type series.

Vadonia bipunctata aralensis ssp. n.

Tab 1: figs 6-7

Vadonia bipunctata urdensis Danilevsky, 2014: 244, part. - from European Kazakhstan (Urda environs) to northern Aral, Kapchagay environs, Zailiysky Alatau (Kastek).

Description. Body, antennae and legs black, but in the holotype antennae, legs and four visible first abdominal sternites red; elytra pale yellow, but in the holotype - orange-yellow; male antennae reaching posterior elytral third; female antennae reaching elytral middle; pronotum with fine dense punctation, covered by long dense pale erect setae; elytra finely punctated, with moderately long pale erect setae along anterior third; each elytron with central black spot and black apex; suture narrowly darkened, but in the holotype totally pale; posterior tibiae in males with a pair of spines; posterior femora in males and in females with numerous pale erect setae; ventral body side also with numerous erect pale setae; posterior margins of apical abdominal segments rounded, though posterior margin of last female tergite with very small cavity; body length in male: 11.5 mm, width: - 3.3 mm; body length in females: 11.8-12.3 mm, width: 3.8-3.9 mm.
Differential diagnosis. The taxon does not look similar to the geographically closest *V. b. urdensis* Danilevsky, 2014, though has about same pale elytral color, but body much smaller, and *V. b. urdensis* never has black elytral apex and never with red legs antennae and abdomen.

The subspecies rank of Kazakhstan populations from near Kapchagay and from Zailiysky Alatau is not clear.
Materials. Holotype, male with the label: “W Kazakhstan, Kyzylorda / Reg., Aral’sk Distr. Chumysh / env., Priaral’skie Karakumy / 46°30'N, 61°54'E 20.05.2018 / A.Shapovalov leg. h-56 m” - ZIN; 2 paratypes: 2 females with same label - AS, MD.

Only one male and two females available, but a big series was collected in the type locality by A.Abramov (Krasnodar Region), who observed many specimens colored similar to the females of the type series.

Distribution. West Kazakhstan, sands in about 40 km southwards Aralsk, 46°30'N, 61°54'E, 56 m.
Etymology. The name of the taxon is connected with the toponym - Aral.

Aromia moschata malukhini ssp. n.

Tab 2: figs 8-11

Aromia moschata (Linnaeus, 1758) with red (or partly red) pronotum was not known from European Russia up to now. The first male with red pronotum and narrow green central line was discovered in middle June, 2017 in lower Volga river near Dosang of Astrakhan Region by S. Shinkarenko. Next year M. Malukhin arranged a special collecting trip to the area and collected a good series of such specimens (19 ex.), which is described bellow as a new subspecies. It is very close to *A. m. ambrosiaca* (Steven, 1809) described from Kislovodsk ("Habitat in salice, Kislariae"); Georgievsk (Stavropol Region) was also mentioned in the original description. No specimens from the type locality are available in my disposal. I accept available specimens from Dagestan as the closest form to the typical *A. m. ambrosiaca* population. Series of *A. m. ambrosiaca* from Georgia, Armenia and Azerbaijan are also available in my collection.
Description. Body very big; antennae black with distinct blue luster; in the biggest males more than 2 times longer than elytra, reaching elytral apex by 7th joint; in smaller males antennae can surpass elytra by about half of their length, reaching elytral apex by 8th joint; in females antennae hardly surpassing elytral apex or a little shorter; prothorax with large and acute lateral spines; pronotum always red with more or less wide green stripe along middle, sometimes reduced anteriorly; with a pair of big posterior tubercles; anterior and posterior constrictions relatively smooth, shining, finely rugose and punctated; scutellum triangular, dark-green; elytra usually slightly attenuated posteriorly in males and in females, or about parallelsided; green with more or less pronounced bronze luster concentrated anteriorly and antero-laterally, with fine irregular sculpture; legs dark-blue; body length in males: 27-37 mm, width: 7-9.5 mm; body length in females: 35-38 mm, width: 9.7-10 mm.
Differential diagnosis. The new subspecies differs from typical

populations of *A. m. ambrosiaca* (Steven, 1809) from North Caucasus by generally very big size and distinctly rougher elytral sculpture; elytra usually bicolored being bronze anteriorly and anterolaterally. All Transcaucasian specimens are usually with unicolored elytra. Specimens from Georgia (Tzagveri) are also smaller, but always with green central line in pronotum. Specimens from Armenia (Erevan, Megri) and Azerbaijan (Baku, Talysh) can also be rather big but pronotum is usually about totally red (without central green line), with only anterior and posterior margins green.

Other 5 subspecies of *A. moschata* much more differ from *A. m. malukhini* **ssp. n.** The nearest one - *A. m. vetusta* Bogatchev, 1962 from Syr Darya basin in Kazakhstan is characterized by poorly developed red color of slightly reddish lateral pronotal areas, which can be nearly indistinct in certain specimens. *A. m. sumbarensis* Danilevsky, 2007b from Turkmenia (Kopet Dag Ridge) looks like nominative subspecies with totally green pronotum. *A. m. cruenta* Bogatchev, 1962 from Tadzhikistan and Kirgizia has red antennae, legs and pronotum. *A. m. jankovskyi* Danilevsky, 2007b from Kirgizia with red pronotum, but dark antennae and legs is very similar to *A. m. ambrosiaca* (and so, to *A. m. malukhini* **ssp. n.**).

Materials. Holotype, male with a label: "S Russia, Astrakhan Region. Dasang environs, about (46°54'N, 47°55'E), 4.7.2018, M. Malukhin leg. - MD; 19 paratypes: 2 males, 3 females with same label - MD; 6 males, 4 females with same label - MM; 1 male, 2 females with same label - VG; 1 male from same locality, 18-20.7.2017, S. Shinkarenko leg. - MM.

Etymology. The new subspecies is dedicated to Maxim Malukhin, who collected the most part of the type series.

Purpuricenus kaehleri (Linnaeus, 1758)

Tab 3

Purpuricenus kaehleri (Linnaeus, 1758) was described as (*Cerambyx*) from "Italya", most probably - North Italy. So, a series from Padua environs (Mt. Ricco about 20 km from SW Padua, 166-200m, 7.2016-2017, M.Massi leg. - Fig. 6) could be accepted as very close to the typical form. I also know similar series from Romagna and Lazio, as well as populations from South France (Alpes-de-

Haute-Provence, Alpes-Maritimes). Specimens from South Italy (Basilicata, Calabria, Sicily) are in general darker, and could be separated in several local subspecies.

Diagnosis. Pronotum usually totally black, sometimes with small antero-lateral red spots, or with lager red antero-lateral margins in palest specimens; elytral dark area moderately big, elongated, oval; usually attenuated anteriorly; in darkest specimens touching scutellum; often more or less reduced to small oval spot moved posteriorly; very rare elytra totally red without black spot; body length of available males: 10.5-20.0 mm, width: 3.5-6.2 mm; body length of available females: 11.8-19.3mm, width: 5.4-5.8 mm.

Purpuricenus kaehleri boryi Brullé, 1832, stat. nov.

Tab 4

Purpuricenus boryi Brullé, 1832: 251, Pl. 8, fig. 1 - Morée: “de Pétalidi, dans le golfe de Messénie”.

Diagnosis. Pronotum always totally black; elytral black spot very large, covering about total elytral surface from scutellum to about elytral apex (often touching it) with about parallel sides; elytra with only narrow red lateral band and wider red humeral area; body length of available males: 16.8-17.7 mm, width: 5.1-6.0 mm; body length of available females: 12.3-17.3 mm, width: 4.0-6.5 mm.

Distribution. South Greece (Peloponnese) and Central Greece northwards to at least Grevena municipality.

Materials. 4 males with a label: “Greece, Pelopponnes, Mistra, 7.1984” - MD; 1 female, “Greece, Mt. Ossa, Stomio, 28.8.2018, V.Gazanchidis leg.” - MD; 1 female, “Greece, Grevena, Anoixi, 39°53'33"N, 21°34'02"E, 28.8.2018, V.Gazanchidis leg.” - MD; 1 male, 5 females, “Greece, Anixis near Anthrakia, 6.1984, M. Slama leg.” - MD.

Purpuricenus kaehleri rossicus ssp. n.

Tab 5-6

Description. Antennae long or short, in males sometimes about two times longer than body surpassing elytral apex by 5 apical joints (antennae in males 12-jointed); the shortest antennae in males

surpass elytral apices by 3 apical joints (about half of elytral length); antennae in females can be rather shorter than body, or a little longer than body surpassing elytral apices by one apical (11th) joint; prothorax usually totally black, or sometimes with small lateral red spots before spines; elytral black area never small, usually moderately big, about always touching scutellum, more or less attenuated anteriorly, sometimes about regularly oval; specimens from southern populations usually a little darker, sometimes with narrow red elytral margin; one male with anterior margin of black elytral area widened around scutellum; body length of available males: 14.5-17.5 mm, width: 4.5-5.7 mm; body length of available females: 12.6-21.3 mm, width: 3.9-6.9 mm.

Differential diagnosis. The new subspecies differs from *P. k. kaehleri* by relatively big black elytral area, never strongly reduced, never moved backwards, but usually not so big as in *P. k. boryi* Brullé, 1833, **stat. nov.**

Materials. Holotype, male, Russia, Voronezh Reg., Gribanov Distr., 10 km E Listopadovka, 51°27'40"N, 41°35'32"E, 166 m, 28-27.7.2017, M.V. Malukhin leg. - MD; 73 paratypes: 3 males, 34 females with same label - MD, MM; 10 males and 17 females, Russia, Volgograd Region, Sredneakhtubinsky Distr., Gospitomnik, 21-27.7.2017, 48°42'8"N, 44°36'55"E, M.V. Malukhin leg. - MD, MM; 1 female, Moscow Region, Lesnoy Gorodok, 12.5.1976, Dolzhansky leg. - MD; 1 female, Volzhsky Distr. of Samara Reg., Novosemeykino, 6.7.1974, S.Pavlov leg. - MD; 1 female, Syzransly Distr. of Samara Reg., Racheyka, 12.7.2005, D.Magdeev leg. - MD; 1 female, Samara Reg., Zhiguli Natural Reserve, 19.7.1992 - MD; 1 female, Rostov Reg., Krymsky, 7.2006, Yu. Arzanov leg. - MD; 1 female, Ukraine, Donetsk Region, Tatyanovka near Svyatogorsk, 12.6.1938, Arnoldi leg. - MD; 1 female, Ukraine, Zmiev near Kharkov, 28.6.1919, Arnoldi leg. - MD; 1 female, Kazakhstan, Guryev environs (now Atyrau), 3.8.1952 - MD; 1 female, Ryazan Reg., Pogost, 23.6.2012, V. Gazanchidis leg. - VG.

Distribution. European Russia northwards surpassing 56°N (Plavilstshikov, 1940); eastwards the taxon does not penetrate to Siberia; all records of *P. kaehleri* for Sverdlovsk and Cheliabinsk regions were based on *P. globulicollis*; partly North Caucasus, North-East Kazakhstan, Belorussia, Ukraine; Moldavia, Central

Europe and partly South Europe, North Turkey.
Etymology. The name of the taxon is connected with the toponym - Rossiya.

Morimus asper gazanchidisi ssp. n.

Tab 7: figs 1-2

Decsriptions. Body moderately wide; male antennae very long, more than two times longer than elytra; scutellum with white pubescence; elytra pale, densely covered by recumbent pale pubescence, so black spots are rather contrast, without granules (as in *M. a. funereus* Mulsant, 1863); hind elytral spots wide, but never touching elytral margins; body length in males: 26-35 mm , width (at humeri): 10.0-11.8 mm; body length in females: 31-34mm, width (at humeri): 11-12 mm.
Differential diagnosis. Up to now two subspecies were known from Greece: *M. a. funereus* Mulsant, 1863 from North Greece with big black spots on pale elytra and short antennae (a series from nomos Kavala is available in author collection); *M. a. graecus* Danilevsky, 2016 from Peloponnesus with dark elytra (so black spots are not so distinct) and long antennae, besides body is rather wide.

The new taxon looks similar to *M. a. ganglbaueri* Reitter, 1894 (a series from Montenegro available in authors collection), which also has very long antennae and elytra with big black spots, but antennae in *M. a. ganglbaueri* usually longer, elytral pubescence distinctly denser, hind elytral spots usually wider, touching elytral margin and covered by granules.
Materials. Holotype, male, Greece, Mt. Ossa, Spilia, 39°49'10"N, 22°39'44"E, 2.6.2018, 1060 m, V. Gazanchidis leg. - MD; 9 paratypes: 1 male,3 females with same label - MD, VG; 1 male from same locality, 23.5.2017, V. Gazanchidis leg. - VG; 3 males, 1 female, from about same locality, 39°49'55"N, 22°40'58"E, 20.6.2017, V. Gazanchidis leg. - VG.
Distribution. Central Grrece.
Etymology. The new taxon is dedicated to Viktor Gazanchidis, who collected the type series.
Remark. A single available male from Parnassos Mt. (Leptokaria) has short antennae and looks like typical *M. a. funereus.* So, *M. a. funereus* seems to be able to penetrate far southwards to Central Greece.

***Morimus verecundus murzini* ssp. n.**

Tab 7: figs 3-4

Morimus sp., Sláma M. 2017: 60-61, Fig. 1C - "Iran - province Golestan".

Description. Body totally black and rather shining; pale fine pubescence on pronotum and between elytral granules nearly totally absent; small pale spots of thicker recumbent setae are spread over whole elytral surface more or less concentrated posteriorly, and can be partly joined at the areas of black spots of other subspecies forming more or less distinct pale blots with scattered granules. Antennae in males more than 2 times longer than body, in female - reaching elytral apex by 9th joints; elytral granules can be rather dense touching each other; thoracic spines short and sharp; pronotum with very rough rugose sculpture; body length in males: 17.8-23.3 mm, width at humeri: 6.0-7.0 mm; body length in female: 31 mm, width at humeri: 9.5 mm.

Differential diagnosis. The taxon can be easily distinguished from all *Morimus* of Europe and Near East by shining elytral surface with scattered pale elytral spots.

Materials. Holotype, male with a label: "Iran N, S of Gorgan / valle'asar Rd 500-900 m / 36.76335N, 54.48242E / 19-21.VI.2014 S. Murzin lg." - ZMM; 1 male, 1 female with same label - SM.

Distribution. Iran, Golestan province, mountains southwards Gorgan, 36°45'48"N, 54°28'57"E.

Etymology. The new taxon is dedicated to Sergey Murzin, who collected the type series.

***Eodorcadion egregium kabaki* Kadyrbekov, 2004, stat. nov.**

Eodorcadion kabaki Kadyrbekov, 2004: 93 - "Western China, Eastern Tien-Shan, Southern Slope of Bogdo-Ula range, Juldus-Terekbol river, H - 2400 m".

Eodorcadion (Ornatodorcadion) egregium, Danilevsky, 2007a: 134, part. (= *kabaki* Kadyrbekov) - North-West China - East Xinjiang from about 85°E and northwards to about 48°N - known from Ertex He (=Chernyj Irtysh) river valley from near Ulungur lake; South-East Mongolia - Kobd, Baian-Ulegei and Gobi-Altaj aimaks; 2010: 257, part. (= *kabaki* Kadyrbekov) - Mongolia, China (Xinjiang).

Type locality. China, East Xinjiang, Bogdo-Ula range, Iulgun-Terek-Gol ["Juldus-Terekbol" of original description was just wrong

spelling], 2400m - mountains north-eastwards Dabancheng, about 100 km eastwards Urumchi.

The taxon was described on the base of *E. egregiun* specimens with strongly reduced elytral white lines. Such glabrous form is known from different parts of the species area. For example in Guchen environs (north slope of Bogdo-Ula - about 60 km north-eastwards the type locality of *E. e. kabaki* Kadyrbekov, 2004, **stat. nov.**) most part of local population consists of normally striated specimens with distinct white elytral lines, but rare glabrous forms are also known here as well as in Mongolia (Kobd aimak, Central-Gobi aimak). That fact was the reason to publish *E. kabaki* as a synonym of *E. egregium*. But no typically striated specimens are known from south slope of Bogdo-Ula, neither from the east part of Boro-Horo Range. So, here glabrous form dominates in the populations, or probably striated form totally absent here, and local populations represent a very distinct subspecies.

Distribution. China, East Xinjiang, east part of Boro-Horo range and west part of Bogdo-Ula range; two localities are definitely known: Bogdo-Ula range, Iulgun-Terek-Gol ["Juldus-Terekbol" of original description was just wrong spelling], 2400m - mountains north-eastwards Dabancheng, about 100 km eastwards Urumchi and Boro-Horo range, Shawan environs, Niujuanzi (about 160 km westweards Urumchi).

Materials. 1 male, "East Tian-Shan, S Bogdo-Ula Mts., Iulgun-Terek-Gol, 2400 m, 13.7.1999, I. Belousov leg. - MD; 1 male, "China, Xinjiang, Sha-wan environs, Niujuanzi, 6.2001, coll. Li Jingke" - MD.

Pseudocalamobius tsushimae Breuning, 1961

Pseudocalamobius japonicus, Kraatz, 1879: 116, part. - "Japan", "Amur"; Ganglbauer, 1884: 539, part - "Japan, Amur"; Winkler, 1929: 1210, part - "Amur., Jap."; Plavilstshikov, 1932: 194 - Amur, Ussuri; Matsushita, 1933: 386, part. - "Amur, Japan, Formosa"; Gressitt, 1951: 542, 543, part. - "Amur; Japan; Formosa; E. China"; Lobanov et al., 1982: 268, part.; Tsherepanov, 1984: 154, part. - Amur, Ussuri-Land, Sakhalin, Kunashir. Japan, Korea, East China, including Taiwan; 1985: 246; 1996: 130 - south of Khabarovsk Region, Primorye Region, South Sakhaklin, Amur Region. - Japan, Korea, North-East China; Löbl & Smetana, 2010: 220 - Russia, Korea, Japan, China (including Taiwan); Jang et al., 2015: 279 - Korea.

Pseudocalamobius japonicus tsushimae Breuning, 1961a: 156 - Insel Tsushima;

1961b: 196; 1966c: 89 - "Insel Tsushima"; Kusama & Takakuwa, 1984: 400 - Is. Tsushima; Hayashi et al., 1984: 96; Ohbayashi et al., 1992: 563.

Pseudocalamobius tsushimae, Hasegawa & Ohbayashi, 2002: 400, 401, 408, Figs. 7, 11, 14 - Japan (Tsushima Is., Nagasaki Prefecture); Hasegawa, 2007: 553, pl. 48, fig. 14 - Japan; Löbl & Smetana, 2010: 220 - Japan.

The taxon was traditionally regarded as a subspecies of *P. japonicus* (Bates, 1873) from Tsushima Islands and was never recorded for the mainland. After publication by Hasegawa & Ohbayashi (2002) it was generally accepted as a species for Tsushima Islands only (Hasegawa, 2007; Löbl & Smetana, 2010).

Now a good series of specimens from Korea and Russia were studied. All of them fit the characters listed by Hasegawa & Ohbayashi (2002) for *P. tsushimae* and differ from Japan specimens. According to the original description the taxon differs by obliquely truncated elytral apex with pointed outer angle, but that character is individually variable. In fact (Hasegawa & Ohbayashi (2002) *P. tsushimae* is characterized by longer and denser elytral pubescence (elytra look paler) as well as by genital characters; the beetles are dark brown, nearly black or light brown, without longitudinal elytral lines; humeral areas are often reddish; 2nd and 3rd abdominal sternites in males with a pair of concavities at anterior margin; according to Hasegawa & Ohbayashi (2002) body length in males (after 4 ex.): 7.17-10.08 mm, width: 1.29-1.88 mm; body length in females (after 8 ex.): 7.75-11.29 mm, width: 1.33-2.04 mm. The length of available Russian and Korean males: 6.3-9.0 mm, females: 6.7-10.7 mm.

Materials. 1 female, *Japan*, Is. Tsushima, Mt. Oboshiyama, 6.V.1978, H.Makihara leg. - MD. *South Korea*: 9 males, 13 females; 1 male, 1 female, Korea, Kyongsangnam-Do, Ham young-Gun, Samjeong-Ri, 14.VI.1994 & 20.VI,1994, T.Ueno leg. - MD; 1 male, Korea, Chollabuk-Do, Namwon-Gun, Baemsagol vall., 19.VI.1994, T.Ueno leg. - MD; 1 male, "Mt. Chijae-san, Damyang-gun [JN] KOR., 35.455100, 127.004500, 16.V.2011, Coll. S.H. Oh" - OH; 1 male, "Mt. Unjang-san, Jinan-gun [JB] KOR., 35.900290, 127.416670, 13.V.2014, Coll. S.H. Oh" - OH; 1 male, "Myeonggae-ri, Hongcheon-gun [GW] KOR., 37.855900, 128.515400, 2.VII.2012, Coll. S.H. Oh" - OH; 1 male, "Mt. Bokju-san, Hwacheon-gun [GW] KOR., 38.157700, 127.526970, 5.VI.2014, Coll. S.H. Oh" - OH; 1 male, "Mt. Goryeong-san, Paju-si [GG]

KOR., 37.752600, 126.920500, 28.V.2010, Coll. S.H. Oh" - OH; 1 male, "Munhye-ri, Choerwon-gun [GW] KOR., 38.177500, 127.365700, 20.VI.2010, Coll. S.H. Oh" - OH; 2 females, "Mt. Hae-san, Hwacheon-gun, [GW] KOR., 38.189640, 127.799460, 20.VII.2010 & 14.VI.2012, Coll. S.H. Oh" - OH; 2 females, "Mt. Myeongseong-san, Choerwon-gun [GW] KOR., 38.120360, 127.356850, 18.V.2014, Coll. S.H. Oh" - OH; 4 females, "Mt. Bokju-san, Chervon-gun [GW] KOR., 38.166630, 127.476560, 27.V.2014 & 4.VII.2014, Coll. S.H. Oh" - OH; 1 female, "Mt. Gwangdeok-san, Cheorvon-gun [GW] KOR., 38.132000, 127.474000, 2.VI.2011, Coll. S.H. Oh" - OH; 1 female, Mt. Bokgye-san, Cheorvon-gun [GW] KOR., 38.198250, 127.520150, 25.V.2012, Coll. S.H. Oh" - OH; 1 female, "Munhye-ri, Choerwon-gun [GW] KOR., 38.155060, 127.331620, 24.V.2014 Coll. S.H. Oh" - OH. *Far East Russia*: 2 males & 8 females: 1 male, Primorye Reg., Sokolchi, 19.6.1979, A.Kompantzev leg. - MD; 1 female, Primorye Reg., Anisimovka, 10.7.2016, P.Romantzov leg. - MD; 1 male, 1 female, Primorye Reg., Gorno-Taezhnaya Station, 10-11.6.2014 & 29.6-7.7.2015, S.Ivanov leg. - SI; 6 females, Primorye Reg., Vityaz, 15-22.6.2017, S.Ivanov leg. - SI; 3 females from same locality and same date, A.Shamaev leg.; 1 male & 1 female, Primorye Reg., Anuchino Distr., 20 km N Chernyshevki, 18.6.2018, S.Ivanov leg. - AS.

Acknowledgements. I am very grateful to all friends and colleagues, who supplied me with specimens for study: Victor Gazanchidis (Moscow), Seung-Hwan Oh (Myeongseong-ro, Cheorwon-gun, Korean Republic), Sergey Ivanov (Vladivostok), Maxim Malukhin (Obninsk, Kaluga Region), Matteo Massi (Padua, Italy), Dmitriy Milko (Bishkek, Kirgizia), Sergey Murzin (Moscow), Pavel Romantzov (Sankt-Petersburg), Andrey Shapovalov (Sankt-Petersburg), Milan Sláma (Prague, Czech Republic), Teruhisa Ueno (Fukuoka, Japan).

REFERENCES

Breuning S. 1961a. Neue oder schlecht bekannte Cerambyciden (Col.). - Entomologische Arbeiten aus dem Museum G. Frey. 12: 140-160.

Breuning S. 1961b. 4. Lieferung, pp: 183-284. In: S.Breuning, 1958-1969. Catalogue des Lamiaires du Monde (Col. Céramb.). Tutzing bei München, Verlag des Museums G.Frey: 1069 pp.

Breuning S. 1966c. Revision der Agapanthiini der eurasiatisch-australischen Region

(Coleoptera, Cerambycidae).- Entomologische Abhandlungen und Berichte aus dem Staatlichen Museum für Tierkunde in Dresden. 34 (1): 1-144.

Brullé G.A. 1832. IVe Classe. Insectes. Pp. 1-288. - In: Bory de Saint-Vincent J.B.G.M.: Expédition scientifique de Morée. Section des sciences physiques. Tome III. - I. re Partie. Zoologie. Deuxième Section. - Des animaux articulés. Paris, Strasburg: F.L. Levrault, 400 pp., pls 27-53. [note: pp. 289-400 in 1833; plates in 1832-1836].

Danilevsky M.L. 2000. Review of genus Psilotarsus Motschulsky, 1860, stat. rest. (Coleoptera, Cerambycidae, Prioninae). - Les Cahiers Magellanes. 3: 1-34.

Danilevsky M.L. 2007a. Revision of the genus Eodorcadion Breuning, 1947 (Coleoptera, Cerambycidae). - Collection systématique, Magellanes. Vol. 16: 227 + [3] pp.

Danilevsky M.L. 2007b. New species of genus Cortodera Mulsant, 1863 from East Kazakhstan and two new subspecies of Aromia moschata (Linnaeus, 1758) from Central Asia (Coleoptera, Cerambycidae). - Caucasian Entomological Bulletin. 3: 47-49, 1 pl.

Danilevsky M.L., 2014. Longicorn beetles (Coleoptera, Cerambycoidea) of Russia and adjacent countries. Part 1. Moscow: HSC. 522 pp. [in Russian]

Ganglbauer L. 1884. Bestimmungstabellen europäischer Coleopteren: VIII. Cerambycidae. Schluss. Mit Berücksichtigung der Formen Algiers und des paläarktischen Asiens, exclusive jener von Japan. Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien. 33 [1883]: 437-586.

Gebler F. A. von. 1841. Charakteristik mehrerer neuen sibirischen Coleopteren. - Bulletin Scientifique del'Académie Impériale des Sciences de Saint-Pétersbourg. 8: 369-376.

Gressitt J. L. 1951. Longicorn beetles of China. - In: Lepesme P.: Longicornia, études et notes sur les longicornes. Volume 2. Paris: Paul Lechevalier. 667 pp., 22 pls.

Hasegawa M., Ohbayashi N. 2002. Taxonomic Notes on the Genus Pseudocalamobius (Coleoptera, Cerambycidae, Lamiinae) of Japan.- Special Bulletin of the Japanese Society of Coleopterology. 5: 397-408.

Hayashi M., Morimoto K., Kimoto Sh. 1984. The Coleoptera of Japan in Color. Vol. IV. Osaka: Hoikusha Publishing. 438 pp.

Jang H.K., Lee S.H., Choi W. 2015. Cerambycidae of Korea. Seoul: Geobook. 399 pp. [in Korean]

Kadyrbekov R. Kh. 2004. New taxa of longicorn beetles of Dorcadionini tribe (Coleoptera, Cerambycidae) from Kazakhstan and China. - Tethys Entomological Research. 10: 93-96.

Kraatz G. 1879. Ueber die Bockkäfer Ost-Sibiriens, namentlich die von Christoph am Amur gesammelten. - Deutsche Entomologische Zeitschrift. 23: 77-117, 1 pl.

Kusama K., Takakuwa M. 1984. Parandrinae. Prioninae. Spondylinae. Aseminae. Lepturinae (part). Cerambycinae. Lamiinae (part). In: The longicorn-beetles of Japan in color. Tokyo: Kodansha Co. Ltd. 549 pp.

Lobanov A.L., Danilevsky M.L., Murzin S.V. 1982. Systematic list of longicorn beetles (Coleoptera, Cerambycidae) of the USSR. 2. - Revue d'Entomologie. 61 (2): 252-277.

Matsushita M. 1933. Beitrag zur Kenntnis der Cerambyciden des japanischen Reichs.- Journal of the Faculty of Agriculture of the Hokkaido Imperial University, 34: 157-445, 5 pls., i-v pp.

Ohbayashi N., Sato M., Kojima K. 1992. An Illustrated Guide to Identification of Longicorn Beetles of Japan. Tokio, Tokai University Press. 697 pp.

Pic M. 1900. Catalogue bibliographique et synonymique d'Europe et des régions avoisinantes comprenant les régions suivantes: Région circaméditerranéenne. Région caucasique. Région transcaspienne. La Perse, le Turkestan, la Sibérie. - Matériaux pour servir à l'étude des longicornes 3ème cahier, 2ème partie. Lyon: Imprimerie Jacquet Frères. 66 pp.

Pic M. 1906. Notes sur diverses genres ou espèces avec diagnoses. Pp. 4-13. - Matériaux pour servir à l'étude des longicornes. 6ème cahier, 1ère partie. Saint-Amand (Cher): Imprimerie Bussière. 36 pp.

Plavilstshikov N.N. 1932. Timber-beetles - Timber Pests. Moscow, Leningrad: Gosudarstvennoe Lesnoe Tekhnicheskoe Izdalelstvo. 200 pp. [in Russian]

Plavilstshikov N.N. 1936. Cerambycidae (P.1). - Faune de l'URSS. Insects Coléptères. V.21. Moscou, Leningrad: Éditions de L'Académie des Scieces de L'URSS. 612 pp. [in Russian].

Plavilstshikov N. N. 1940. Cerambycidae (P.2). - Faune de l'URSS. Insects Coléoptères. V.22. Moscou, Leningrad: Éditions de L'Académie des Scieces de L'URSS. 785 pp. [in Russian]

Reitter E. 1914. Beiträge zur Kenntnis der Coleopteren-Gattung Stenochorus Fbr. (Toxotus Serv.). - Berliner Entomologische Zeitschrift. 58 [1913-1914]: 177-183.

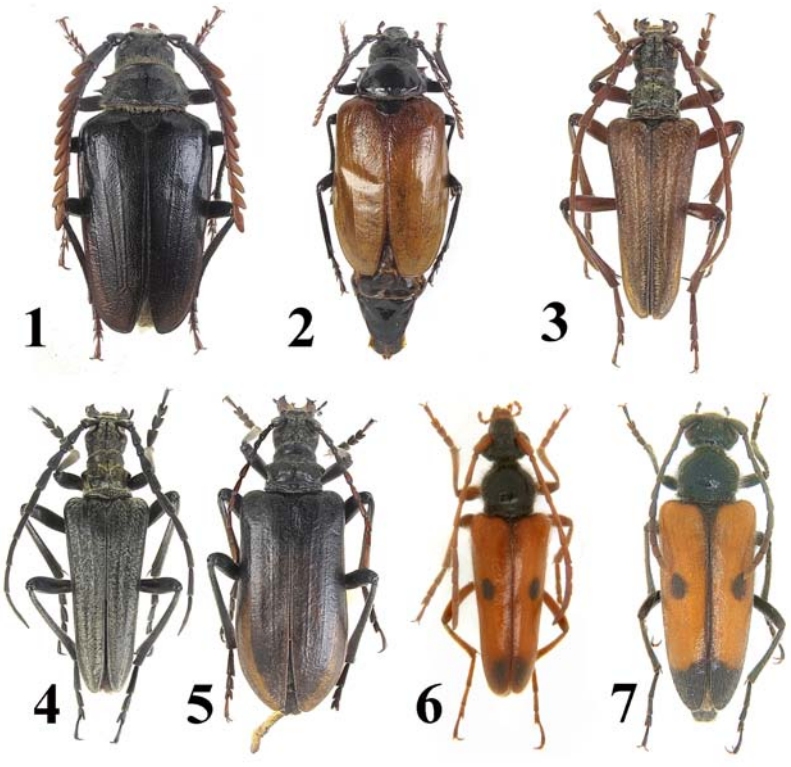
Sláma M. 2017. Poznámky k výskytu čtyř druhů tesaříků ve Střední Evropě.- Entomofauna carpathica. 29(2): 58-62.

Tsherepanov A.I. 1984. Longicorn Beetles of North Asia (Lamiinae: Pterycoptini - Agapanthiini). Novosibirsk: Nauka. 214 pp. [in Russian]

Tsherepanov A.I. 1985. Longicorn Beetles of North Asia (Lamiinae: Saperdini-Tetraopini). Novosibirsk: Nauka. 256 pp. [in Russian]

Tsherepanov A.I. 1996. 104. Fam. Cerambycidae - Longicorn or Timber beetles. - In: Key to the insects of Russian Far East. Vol.III. Coleoptera. Pt. 3. Vladivostok: Dal'nauka: 56-140.] [in Russian; the text was arranged by G.O. Krivolutzkaya and A.L. Lobanov on the base of a manuscript by Tsherepanov]

Winkler A. 1929. Cerambycidae. - In: Catalogus Coleopterorum regionis palaearcticae. Wien, Winkler et Wagner.: 1135-1226.

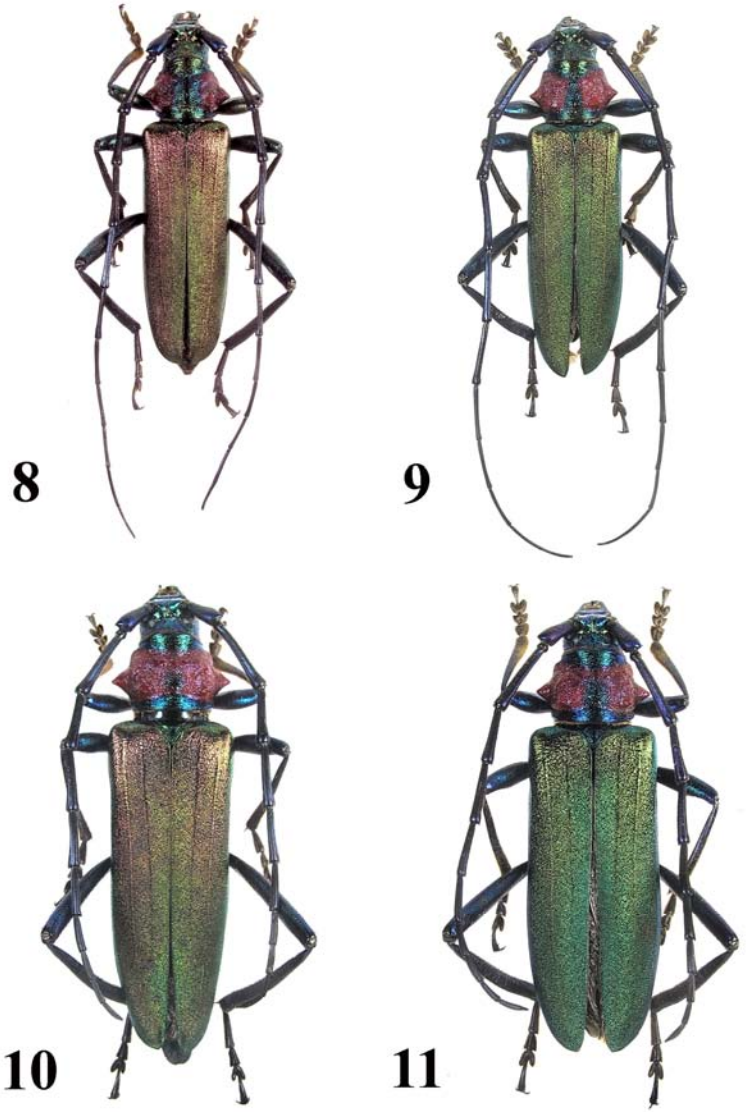


Tab. 1.

Figs 1-2. *Psilotarsus hirticollis auliensis* Danilevsky, 2000 - Kirgizia, 3 km E Besh-Kungey 25.6.2017, A. Shapovalov leg.: 1 - male, 2 - female.

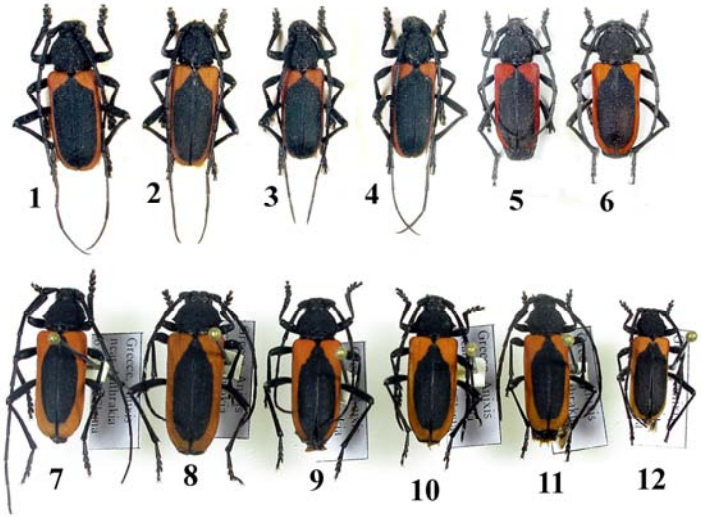
Figs 3-5. *Stenocorus* (*Toxotochorus*) *validicornis shapovalovi,* **ssp. n.** Kyrgyzstan, Urumbash env., 27.06.2018, A.Shapovalov: 3 - holotype, male, 4 - paratype, male, 5 - paratype, female.

Figs 6-7. *Vadonia bipunctata aralensis* **ssp. n.** - W Kazakhstan, Priaral'skie Karakumy, 46°30'N, 61°54'E, 20.05.2018, A.Shapovalov leg.: 6 - holotype. male, 7 - paratype, female.

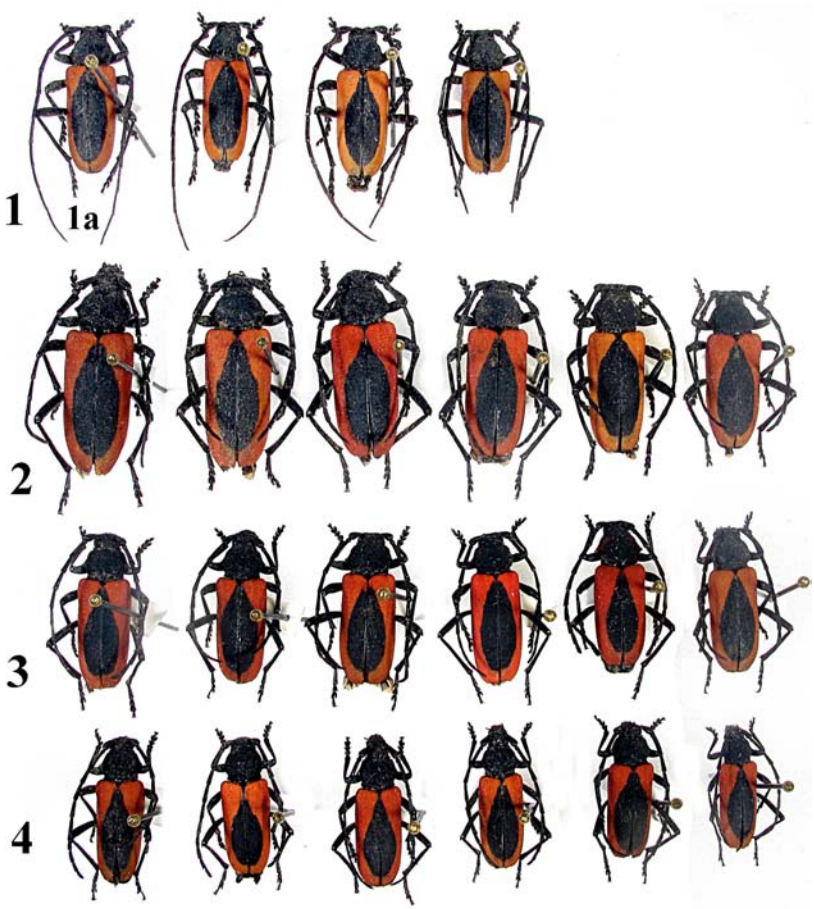


Tab. 2. *Aromia moschata malukhini* **ssp. n.**
Figs 8-9. Males, 8 - holotype, 9 - paratype.
Figs 10-11. Females, paratypes.

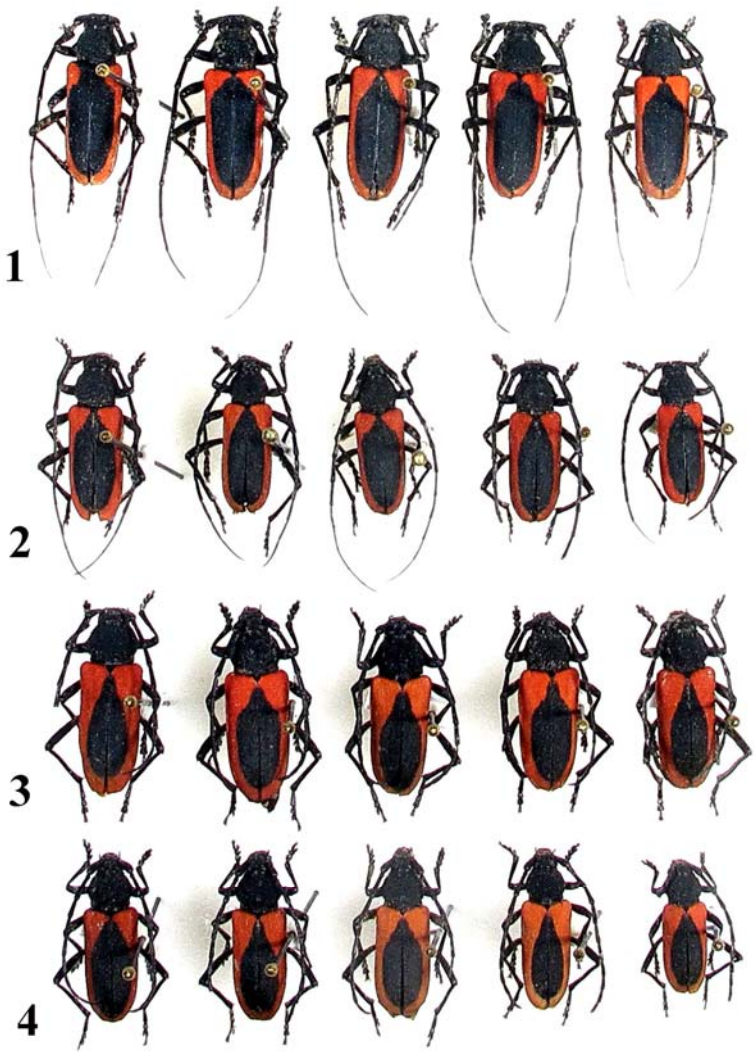
Tab. 3. *Purpuricenus kaehleri kaehleri*, North Italy, Mt. Ricco, about 20 km SW Padua, 166-200 m, 7.2016-2017, M.Massi leg.
Figs 1. Males; **Figs 2-3.** Females.



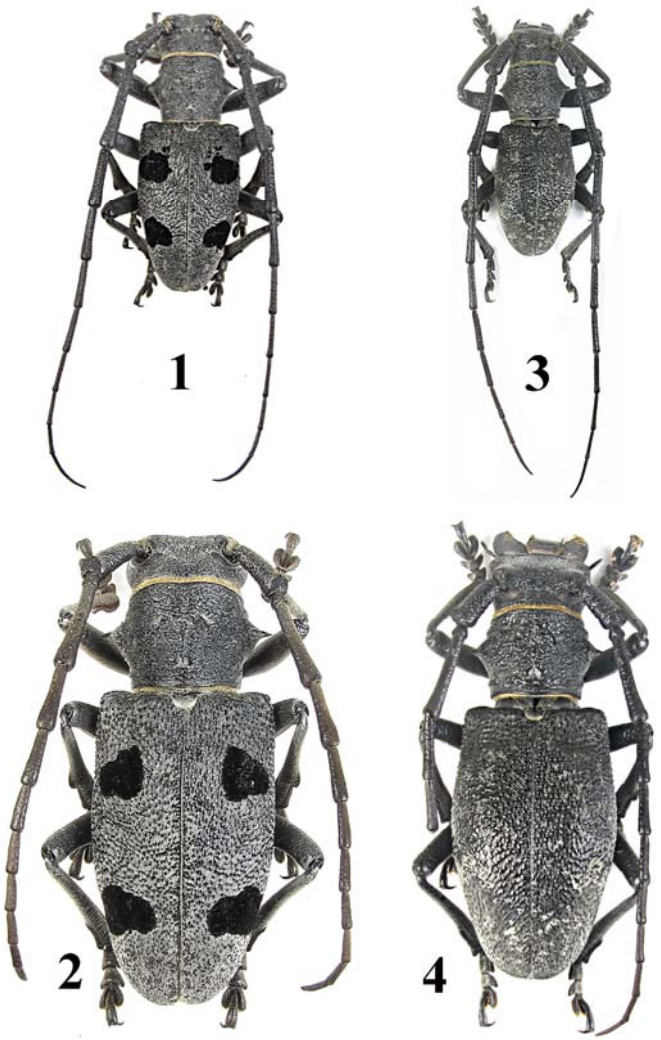
Tab. 4. *Purpuricenus kaehleri boryi*, **stat. nov.**
Figs 1-4. Males, Greece, Pelopponnes, Mistra, 7.1984. **Fig. 5**. Female, Greece, Mt. Ossa, Stomio, 28.8.2018, V. Gazanchidis leg. **Fig. 6.** Female, Greece, Grevena, Anoixi, 39°53'33"N, 21°34'02"E, 28.8.2018, V.Gazanchidis leg. **Figs 7** (male), **8-12** (females): Greece, Anixis near Anthrakia, 6.1984, M. Slama leg.



Tab. 5. *Purpuricenus kaehleri rossicus*, **ssp. nov.**
Russia, Voronezh Reg., Gribanov Distr., 10 km E Listopadovka, 51°27'40"N, 41°35'32"E, 166 m, 28-27.7.2017, M.V. Malukhin leg.
Figs 1. Males (1a- holotype and paratypes).
Figs 2-4. Females, paratypes.



Tab. 6. *Purpuricenus kaehleri rossicus*, **ssp. nov.**:
Russia, Volgograd Region, Sredneakhtubinsky Distr., Gospitomnik, 21-27.7.2017, 48°42'8"N, 44°36'55"E, M.V. Malukhin leg.
Figs 1-2. Males (paratypes). **Figs** 3-4. Females (paratypes).



Tab. 7.

Figs 1-2. *Morimus asper gazanchidisi* **ssp. n.**: Greece, Mt. Ossa, Spilia, 2.6.2018, V. Gazanchidis leg.: 1- holotype, male; 2 - paratype, female.

Figs 3-4. *Morimus verecundus murzini* **ssp. n.**: Iran, Golestan province, mountains southwards Gorgan, 36°45'48"N, 54°28'57"E, 19-21.VI.2014 S.Murzin leg.: 3 - holotype, male; 4 - paratype, female.

Received: 04.01.2019
Accepted: 10.01.2019