Review of the subgenus *Rhinobarus* Reitter, 1906 (Coleoptera: Tenebrionidae: Alleculinae: Cteniopodini: *Cteniopus*) with descriptions of two new species from the Palaearctic Region

Vladimír NOVÁK

Nepasické náměstí 796, CZ-190 14 Prague 9 - Klánovice, Czech Republic
e-mail: alleculinae.vn@centrum.cz

Taxonomy, new species, description, Coleoptera, Tenebrionidae, Alleculinae, Cteniopodini, *Cteniopus*, *Rhinobarus*, Palaearctic region

Abstract. Two new species of Alleculinae Laporte, 1840 (tribe Cteniopodini Solier, 1835) are described as *Cteniopus* (*Rhinobarus*) *kalambakaensis* sp. nov. from Greece and *Cteniopus* (*Rhinobarus*) *sveci* sp. nov. from Bulgaria. All species belonging to the subgenus *Rhinobarus* Reitter, 1906 are illustrated including male genitalia and keyed together. A redescription of *Cteniopus* (*Rhinobarus*) *sulphuripes* (Germar, 1824) is added.

INTRODUCTION

Solier (1835) described the Palaearctic genus *Cteniopus* in 1835 with the type species *Chrysomela sulphurea* Linnaeus, 1758. This genus belongs to the tribe Cteniopodini Solier, 1835.

Borchmann (1910) knew 20 species, Mader (1928) 18 species, and Novák & Pettersson (2008) listed 22 species in three subgenera. Subgenus *Rhinobarus* Reitter, 1906 was introduced by Reitter (1906) with the type species *Cteniopus sulphuripes* (Germar, 1824), earlier described as *Cistela*. Species of this subgenus have clypeus very long, distinctly longer than wide. We know only three species of this subgenus - *Cteniopus elegans* (Faldermann, 1837) from Armenia, Georgia and „Caucasus", *Cteniopus punctatissimus* Baudi di Selve, 1877 from Greece and the species *C. sulphuripes* mentioned above, known from many countries in Europe, Asian Turkey and Russian Far East.

The species are very similar but differ one from another mainly by their wider or narrower bodies and colouring of the dorsal surface. The new species *Cteniopus* (*Rhinobarus*) *kalambakaensis* sp. nov. from Greece and *Cteniopus* (*Rhinobarus*) *sveci* sp. nov. from Bulgaria (Pirin mts.) are described, illustrated and keyed with other known species of the subgenus *Rhinobarus*. Male genitalia of all species belonging to the subgenus *Rhinobarus* are shown.

MATERIAL AND METHODS

Two important morphometric characteristics used for the descriptions of species of the subfamily Alleculinae, the 'ocular index' dorsally (Campbell & Marshall 1964) and 'pronotal index' (Campbell 1965), are used in the present paper as well. The ocular index equals (100 × minimum dorsal distance between eyes) / (maximum width of head across eyes). The pronotal index is calculated as (100 × length of pronotum along midline) / (width across basal angles of pronotum).

In the list of type or examined material, a slash (/) separates data in separate rows, a double slash (//) separates different labels.

The following collection codens are used:

OKZC private collection of Ondřej Konvička, Zlín, Czech Republic;
VNPC private collection of Vladimír Novák, Praha, Czech Republic;

ZSPC private collection of Zdeněk Švec, Praha, Czech Republic.

Measurements of body parts and corresponding abbreviations used in the text are as follows: AL - total antennae length, BL - maximum body length, EL - maximum elytral length, EW - maximum elytral width, HL - maximum length of head (visible part), HW - maximum width of head, OI - ocular index dorsally, PI - pronotal index dorsally, PL - maximum pronotal length, PW - pronotal width at base, RLA - ratios of relative lengths of antennomeres 1-11 from base to apex (3=1.00), RL/WA - ratios of length / maximum width of antennomeres 1-11 from base to apex, RLT - ratios of relative lengths of tarsomeres 1-5 respectively 1-4 from base to apex (1=1.00).

Measurements were made with the Olympus SZ 40 stereoscopic microscope with continuous magnification and with the Soft Imaging System AnalySIS.

TAXONOMY

Genus *Cteniopus* Solier, 1835

Cteniopus Solier, 1835: 246 type species *Chrysomela sulphurea* Linnaeus, 1758.

Subgenus *Rhinobarus* Reitter, 1906

subgenus *Rhinobarus* Reitter, 1906: 131 type species *Cistela sulphuripes* Germar, 1824.

Cteniopus elegans (Faldermann, 1837)

(Figs. 1-5)

Cistela elegans Faldermann, 1837: 104.

Type locality. Caucasus.

Material examined. (5 ♂♂, 2 ♀♀): S Armenia, 2.vii.2016 / GORAVAN sands / 39°54´N 44°43´E, 910 m / Vladimír Novák lgt., (VNPC); (2 ♂♂, 2 ♀♀): same data, but 11.vii.2016, (VNPC); (2 ♂♂): S Armenia, GORAVAN / sands env., 39°53´N / 44°42´E, 20.vi.2017 / V. Novák lgt., (VNPC); (2 ♂♂): USSR, Armenia / VEDI 800 m / 20.6.1979 / V.Kubáň lgt. (VNPC). (4 ♀♀): ARMENIA Ararat prov. / 2 km ESE Yeraskh 8.vi. / 2006, M. Kalashian lgt., (VNPC).

Male. Habitus (Fig. 1) relatively narrow, dorsal surface yellow. Head and pronotum as in Fig. 2, pronotum narrow, distinctly narrower than elytra at base. Aedeagus as in Figs. 4 and 5. Anterior tarsal claws with 16 or 17 visible teeth.

Measurements of body. BL 7.05 mm; HL 1.26 mm; HW 1.23 mm; OI equal to 60.16; PL 1.19 mm; PW 1.58 mm; PI equal to 75.32; EL 4.60 mm; EW 2.20 mm; AL 4.64 mm; AL/BL 0.66; HW/PW 0.78; BL/EW 3.21; EL/EW 2.09; AED 1: 4.22.

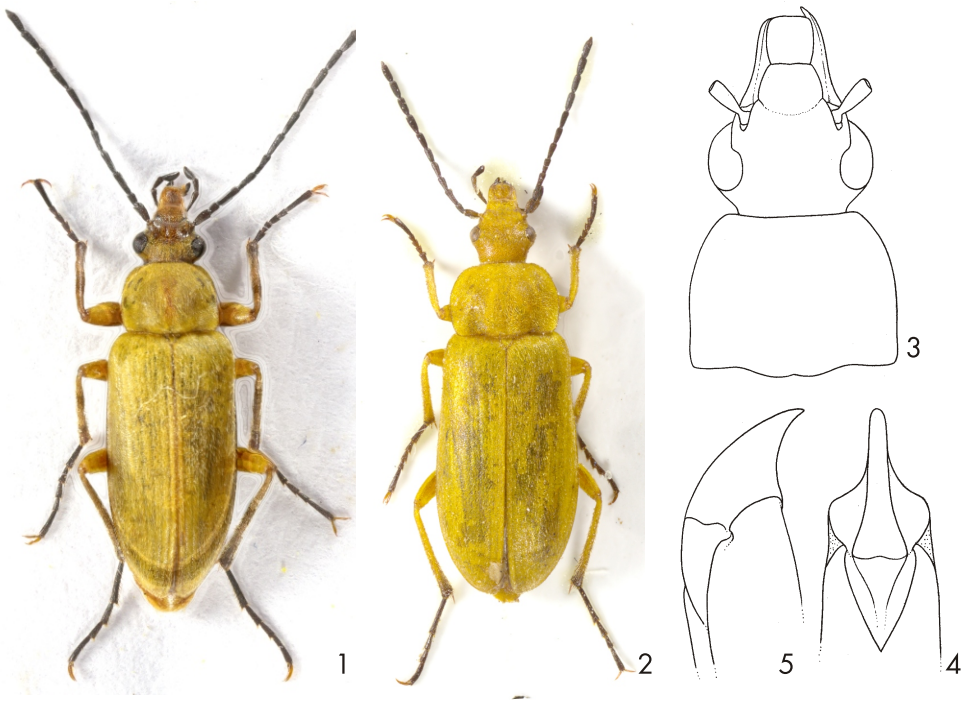
RLA (1-11): 0.74 : 0.44 : 1.00 : 0.92 : 0.95 : 0.97 : 0.95 : 0.97 : 0.86 : 0.89 : 1.01.

RL/WA (1-11): 2.55 : 2.00 : 4.17 : 3.68 : 4.13 : 4.41 : 4.52 : 4.41 : 3.91 : 3.56 : 4.21.

RLT: 1.00 : 0.75 : 0.71 : 0.60 : 1.91 (protarsus), 1.00 : 0.58 : 0.51 : 0.41 : 0.93 (mesotarsus), 1.00 : 0.47 : 0.38 : 0.61 (metatarsus).

Female. Habitus as in Fig. 2; dorsal surface yellow, body more robust. Antenna shorter than in male. Pronotum with large impressions on both sides near posterior angles. Anterior tarsal claws with 6 visible teeth.

Distribution. Armenia, Gruzia, "Caucasus".



Figs. 1-5: *Cteniopus elegans* (Faldermann, 1837): 1- Habitus of male; 2- habitus of female; 3- head and pronotum of male; 4- aedeagus, dorsal view; 5- aedeagus, lateral view.

***Cteniopus kalambakaensis* sp. nov.**

(Figs. 6-10)

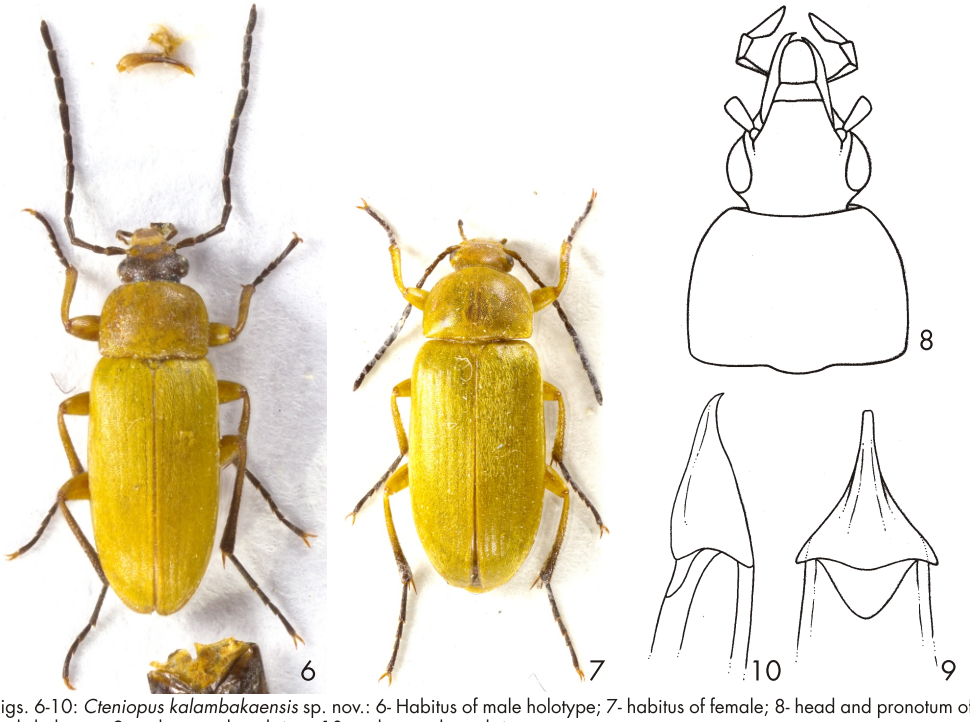
Type locality. Greece, Kalambaka.

Type material. Holotype: (♂): GR, 8.vii.1996 / Kalambaka / lgt. Morozinski [hb], (VNPC). Paratypes: (1 ♂, 3 ♀♀): same data as holotype, (OKZC, VNPC). The types are provided with a printed red label: 'Cteniopus (Rhinobarus) kalambakaensis sp. nov. HOLOTYPUS [or PARATYPUS] V. Novák det. 2017'.

Description of holotype. Habitus as in Fig. 6, body elongate, slightly convex, dorsal surface from yellow to brown, slightly shiny, with short adjacent setation, microgranulation and punctuation. BL 7.20 mm. Widest near half elytral length; BL/EW 3.31.

Head (Fig. 8) relatively narrow, long, with microgranulation, slightly shiny. Posterior part behind and between eyes brown with dense, shallow punctuation, punctures small-sized. Part between antennae ochre yellow, anterior part yellow with sparse and shallow punctures, clypeus ochre yellow, with a few long, pale setae and sparse punctures. Mandibles yellow. HL (visible part) 1.60 mm; HW 1.21 mm; HW/PW 0.67. Eyes relatively large, distinctly, but slightly excised, space between eyes wide; wider than diameter of one eye, distinctly wider than clypeus wide; OI equal to 54.43.

Antennae. Long, narrow, filiform, black, with punctuation and microgranulation, short setation, rather matte, AL 4.21 mm; AL/BL 0.58. Antennomeres 4-11 slightly longer than antennomere 3, antennomeres 4-10 slightly widest at apex. Antennomere 2 shortest.



Figs. 6-10: *Cteniopus kalambakaensis* sp. nov.: 6- Habitus of male holotype; 7- habitus of female; 8- head and pronotum of male holotype; 9- aedeagus, dorsal view; 10- aedeagus, lateral view.

RLA (1-11): 0.81 : 0.46 : 1.00 : 1.02 : 1.10 : 1.15 : 1.14 : 1.16 : 1.06 : 1.08 : 1.20.

RL/WA (1-11): 2.56 : 2.00 : 3.60 : 3.79 : 4.17 : 3.76 : 3.51 : 3.47 : 3.17 : 3.55 : 4.06.

Maxillary palpus with distinct punctuation, microgranulation and setation. Palpomeres 2 and 3 brown, slightly paler than blackish brown ultimate palpomere, slightly shiny, distinctly narrowest at base and widest at apex. Ultimate palpomere knife-shaped, with paler setation.

Pronotum (Fig. 8). Ochre yellow, square, widest near half of lateral margins, with adjacent, dark setation and very dense punctuation. Punctures small-sized, interspaces between punctures very narrow and shiny, distinctly narrower than diameter of punctures. PL 1.25 mm; PW 1.82 mm; PI equal to 68.68. Border lines thin, narrow, not clearly distinct in the middle of base and anterior margin, lateral margins slightly arcuate, base almost straight, anterior margin slightly excised. Posterior and anterior angles roundly obtuse.

Ventral side of body. Prosternum ochre yellow with dark setation, mesosternum ochre yellow with yellow setation, metasternum blackish brown with pale setation. Abdomen dark brown with pale adjacent setation and microgranulation. Ultimate ventrite roundly excised in middle.

Elytron. Yellow, narrow, elongate, parallel, widest near half elytra length, dorsal surface with adjacent, yellow setation. Elytral striae distinct with rows of very small punctures, elytral interspaces with microgranulation and microrugosities. Suture narrowly darker. EL 4.35 mm; EW 2.18 mm. EL/EW 2.00.

Scutellum. Yellow with darker margins, roundly triangular, with microgranulation and yellow setation.

Elytral epipleura. Well developed, yellow with yellow setation, slightly narrowing in whole length.

Legs ochre yellow, with microgranulation, metatibia distinctly darker, brown, tarsi black, claws ochre yellow. Meso- and metatibiae with ochre setation and short stronger and darker setae. Tibiae with short and long apical thorn. RLT: 1.00 : 0.75 : 0.71 : 0.60 : 1.91 (protarsus), 1.00 : 0.58 : 0.51 : 0.41 : 0.93 (mesotarsus), 1.00 : 0.47 : 0.38 : 0.61 (metatarsus).

Anterior tarsal claws with 13 visible teeth.

Aedeagus (Figs. 9, 10). Pale brown, slightly shiny. Basal piece slightly rounded laterally and slightly narrowing dorsally. Apical piece beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 5.21.

Female. Habitus as in Fig. 7, more robust than in male. Dorsal surface yellow, antenna distinctly shorter than in male. Anterior tarsal claws with 5 visible teeth.
Measurements of female body: BL 7.47 mm; HL 1.32 mm; HW 1.26 mm; OI 70.46; PL 1.37 mm; PW 2.04 mm; PI 67.16; EL 4.78 mm; EW 2.61 mm; AL 3.64 mm; AL/BL 0.53; HW/PW 0.62; BL/EW 2.86; EL/EW 1.83.
RLA (1-11): 0.78 : 0.61 : 1.00 : 0.90 : 0.96 : 0.88 : 0.90 : 1.04 : 0.90 : 0.84 : 1.16.
RL/WA (1-11): 2.67 : 2.58 : 3.64 : 3.29 : 3.50 : 2.65 : 2.56 : 3.12 : 2.56 : 2.26 : 3.19.
RLT: 1.00 : 1.00: 1.04 : 0.78 : 2.52 (protarsus); 1.00 : 0.55 : 0.58 : 0.36 : 1.16 (mesotarsus); 1.00 : 0.43 : 0.28 : 0.65 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=2). BL 7.47 mm (7.39-7.54 mm); HL 1.62 mm (1.61-1.63 mm); HW 1.21 mm (1.20-1.21 mm); OI 57.13 (54.43-59.82), PL 1.26 mm (1.25-1.27 mm); PW 1.69 mm (1.56-1.82 mm); PI 69.28 (68.68-69.87); EL 4.27 mm (4.19-4.35 mm); EW 2.16 mm (2.14-2.18 mm). Females (n=3). BL 7.84 mm (7.63-8.13 mm); HL 1.65 mm (1.62-1.69 mm); HW 1.27 mm (1.25-1.29 mm); OI 71.42 (70.46-72.38), PL 1.44 mm (1.37-1.53 mm); PW 2.06 mm (1.99-2.16 mm); PI 69.61 (67.16-70.85); EL 4.76 mm (4.78-4.91 mm); EW 2.63 mm (2.54-2.74 mm).

Differential diagnosis. *Cteniopus* (*Rh.*) *kalambakaensis* sp. nov. distinctly differs from the species *Cteniopus* (*Rh.*) *punctatissimus* Baudi di Selve, 1877, *Cteniopus* (*Rh.*) *sulphuripes* (Germar, 1824) and *Cteniopus* (*Rh.*) *sveci* sp. nov. mainly by both genders with dorsal surface of body yellow; while males of *C. punctatissimus*, *C. sulphuripes* and *C. sveci* have dorsal surface black. *C. kalambakaensis* is clearly different from the species *Cteniopus* (*Rh.*) *elegans* (Faldermann, 1837) by wider pronotum approximately as wide in base as base of elytra, by smaller punctures of pronotum, by brown abdomen and by pronotum of female without large impressions on both sides near posterior angles; while *C. elegans* has pronotum narrow, distinctly narrower at base than base of elytra, punctures of pronotum are larger and abdomen is yellow. Female of *C. elegans* has large impressions on both sides near posterior angles.

Etymology. Toponymic, named after the type locality Kalambaka in Greece.

Distribution. Greece.

Cteniopus punctatissimus Baudi di Selve, 1877

(Figs. 11-15)

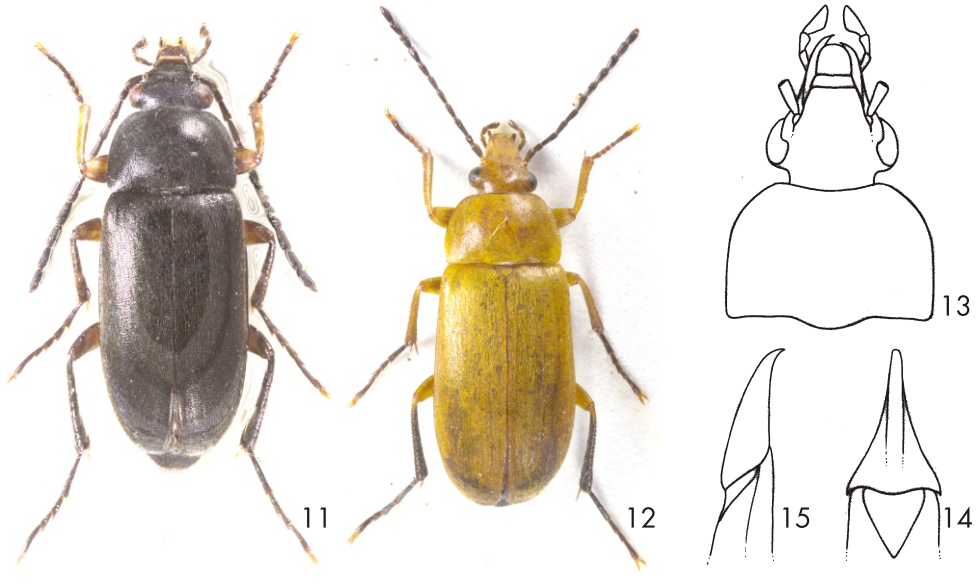
Cteniopus punctatissimus Baudi di Selve, 1877: 29.
= *Cteniopus graecus* Heyden, 1883: 312.

Type locality. Greece, Parnasos.

Material examined. (1 ♂♂, 2 ♀♀): Greichenland 1996 / District Larissa / Ossa-Geb. 1000m / leg. W. Apfel 3.6., (VNPC); (1 ♂): GREECE / Ossa Oros mts. / Spilia vill. 1.-2.6.2007 / Tomáš Sitek lgt., (VNPC); (1 ♀): GREECE .c. / OSSA ÓROS / Spilia env. / 15.-16.VI.2008 / Plecháč Jiří lgt., (VNPC).

Male. Habitus (Fig. 11) relatively wide, dorsal surface black. Head and pronotum as in Fig. 13, pronotum wider, approximately as wide as elytra at base. Aedeagus as in Figs. 14 and 15. Anterior tarsal claws with 13 visible teeth.
Measurements of body. BL 6.64 mm; HL 1.52 mm; HW 1.26 mm; OI equal to 56.87; PL 1.22 mm; PW 1.89 mm; PI equal to 64.55; EL 3.90 mm; EW 2.18 mm; AL 3.78 mm; AL/BL 0.57; HW/PW 0.67; BL/EW 2.82; EL/EW 1.79; AED 1: 4.90.
RLA (1-11): 0.80 : 0.55 : 1.00 : 0.94 : 0.99 : 1.01 : 1.00 : 1.03 : 0.87 : 0.89 : 1.05.
RL/WA (1-11): 2.21 : 2.05 : 3.25 : 2.92 : 3.08 : 3.04 : 3.12 : 2.96 : 2.62 : 2.76 : 3.73.
RLT: 1.00 : 0.63 : 0.63 : 0.66 : 2.20 (protarsus), 1.00 : 0.48 : 0.48 : 0.40 : 0.88 (mesotarsus), 1.00 : 0.47 : 0.34 : 0.72 (metatarsus).

Female. Habitus as in Fig. 12, more robust than in male. Dorsal surface yellow, antenna distinctly shorter than in male. Anterior tarsal claws with 4 visible teeth.



Figs. 11-15: *Cteniopus punctatissimus* Baudi di Selve, 1877: 11- Habitus of male; 12- habitus of female; 13- head and pronotum of male; 14- aedeagus, dorsal view; 15- aedeagus, lateral view.

Distribution. Greece.

Cteniopus sulphuripes (Germar, 1824)

(Figs. 16-20)

Cistela sulphuripes Germar, 1824: 162.
Cistela sulfuripes W. Redtenbacher, 1842: 18.
Cistela collaris Küster, 1850: 75.
Cteniopus notatus Pic, 1925: 2.

Type locality. Hungary.

Material examined. (13 ♂♂, 7 ♀♀): Moravia mer., / DYJÁKOVIČKY env., / EVL Ječmeniště / 26.vi.2015; V. Novák lgt, (VNPC).

Redescription. Habitus as in Fig. 16, body narrow, elongate, relatively flat, dorsal surface black, slightly shiny, with short, grey setation, punctuation and microgranulation. BL 6.32 mm. Widest near half elytral length; BL/EW 3.16. Head (Fig. 18) black, relatively narrow, longer than wide, slightly shiny, with dense punctuation and fine microgranulation. Punctures small-sized, interspaces between punctures narrow and shiny. Clypeus brown, distinctly paler, with a few long setae, fine microgranulation and punctures, more shiny. HL (visible part) 1.35 mm; HW 1.13 mm; HW/PW 0.70. Eyes relatively large, slightly but distinctly excised, space between eyes wide; wider than diameter of one eye; OI equal to 66.42. Antennae black, long, narrow, filiform, with short setation, punctuation and fine microgranulation, matte, AL 4.11 mm; AL/BL 0.65. Antennomeres 4-11 distinctly longer than antennomere 3, antennomeres 4-10 distinctly widest at apex. Antennomere 2 shortest. RLA (1-11): 0.78 : 0.75 : 1.00 : 1.06 : 1.14 : 1.15 : 1.23 : 1.23 : 1.06 : 1.08 : 1.20. RL/WA (1-11): 2.13 : 2.32 : 3.48 : 3.41 : 3.87 : 4.00 : 3.69 : 3.15 : 3.07 : 3.03 : 3.85. Maxillary palpus dark brown, with pale setation and microgranulation, slightly shiny, distinctly narrowest at base and widest at apex. Ultimate palpomere widest near middle, broadly knife-shaped, with rounded apex. Pronotum (Fig. 18) black, square, transverse, widest near half of lateral margins, with dense pale setation, dense punctuation and fine microgranulation. Punctures small-sized, interspaces between punctures very narrow, distinctly narrower than diameter of punctures. PL 1.07 mm; PW 1.61 mm; PI equal to 66.45. Border lines thin, narrow, not clearly conspicuous in the middle of anterior margin, lateral margins arcuate, base finely bisinuate, distinctly narrower than base of elytra. Anterior margin approximately very slightly excised. Posterior and anterior angles finely obtuse. Ventral side of body black, with short setation and small punctures. Abdomen black, matte, with pale setation and fine microgranulation. Ultimate ventrite roundly excised in the middle. Elytron black, narrow, widest near half elytral length, dorsal surface with dense, grey setation, fine microgranulation and punctuation. Elytral striae indistinct. EL 3.90 mm; EW 2.00 mm. EL/EW 1.95. Scutellum black, roundly triangular, with fine microgranulation and setation. Elytral epipleura well developed, relatively narrow, black with dense pale setation and punctuation, punctures small, widest near base, regularly narrowing to apex. Legs ochre yellow, narrow, reddish brown, with short setation and fine punctuation. Tarsi and metatibiae blackish brown, claws paler. Tibiae and tarsi with strong short setae, apex of tibiae with long and short thorns. RLT: 1.00 : 0.61 : 0.61 : 0.53 : 1.59 (protarsus), 1.00 : 0.59 : 0.50 : 0.68 : 0.92 (mesotarsus), 1.00 : 0.50 : 0.40 : 0.66 (metatarsus). Anterior tarsal claws with 15 visible teeth. Aedeagus (Figs. 19, 20) ochre yellow, shiny. Basal piece slightly rounded laterally and narrowing dorsally. Apical piece widely triangular dorsally and beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 4.36.

Figs. 16-20: *Cteniopus sulphuripes* (Germar, 1824): 16- Habitus of male; 17- habitus of female; 18- head and pronotum of male; 19- aedeagus, dorsal view; 20- aedeagus, lateral view.

Female (Fig. 17) more robust, pronotum orange or reddish brown with darker spots, rarely black. Antennae shorter. Anterior tarsal claws with 4 and 6 visible teeth.

Distribution. Europe: Azerbaijan, Austria, Bulgaria, Croatia, Czech Republic, France, Greece, Hungary, Italy, Macedonia, Moldavia, Poland, Romania, Russia, Slovakia, South European Territory of Russia, Ukraine, Serbia and Montenegro. Asia: East Siberia in Russia, Turkey.

Cteniopus sveci sp. nov.

(Figs. 21-25)

Type locality. Bulgaria mer., Pirin mts., Lilianovo.

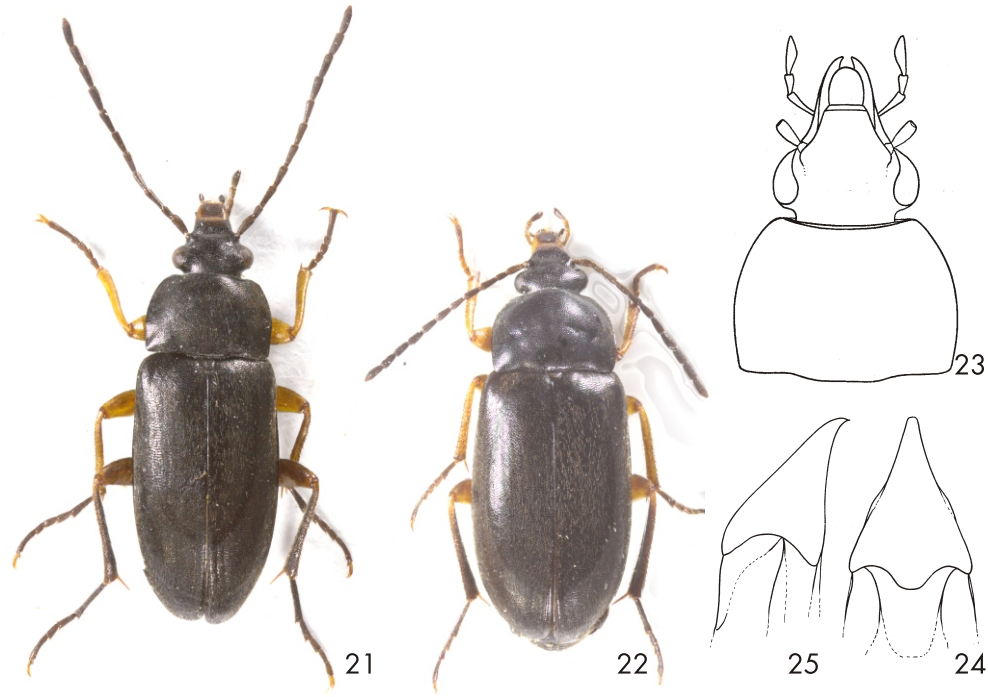
Type material. Holotype (♂): Bulg. m. Pirin mts. / Lilianovo 9.7.2010 / Švec lgt., (VNPC). Paratypes: (1 ♂ 6 ♀♀): same data as holotype, (VNPC, ZSPC); (3 ♂♂, 11 ♀♀): same data as holotype, but 7.7.2010, (VNPC, ZSPC); (4 ♀♀): same data as holotype, but 5.7.2010, (VNPC, ZSPC); (1 ♀): same data as holotype, but 8.7.2010, (ZSPC). The types are provided with a printed red label: 'Cteniopus (Rhinobarus) sveci sp. nov. HOLOTYPUS [or PARATYPUS] V. Novák det. 2017'.

Description of holotype. Habitus as in Fig. 21, body elongate, slightly oval, slightly convex, dorsal surface black, slightly shiny, with short, adjacent, pale setation and punctuation. BL 6.16 mm. Widest near two thirds elytral length; BL/EW 2.88.

Head (Fig. 23) relatively narrow, long, slightly shiny. Posterior part black with dense punctuation, punctures small-sized, interspaces between punctures very narrow, narrower than diameter of punctures. Apex of anterior part slightly paler, brown, clypeus pale brown, with a few

long, pale setae. Mandibles pale brown. HL (visible part) 1.31 mm; HW 1.17 mm; HW/PW 0.68. Eyes relatively large, distinctly, but slightly excised, space between eyes wide; wider than diameter of one eye, distinctly wider than wide of clypeus; OI equal to 59.09.

Antennae. Long, narrow, filiform, black, with punctuation, dark and pale, short setation, slightly shiny, AL 3.38 mm; AL/BL 0.55. Antennomeres 4-11 slightly longer than antennomere 3, antennomeres 4-10 distinctly widest at apex. Antennomere 2 shortest.



Figs. 21-25: *Cteniopus sveci* sp. nov.: 21- Habitus of male holotype; 22- habitus of female; 23- head and pronotum of male holotype; 24- aedeagus, dorsal view; 25- aedeagus, lateral view.

RLA (1-11): 0.93 : 0.75 : 1.00 : 1.07 : 1.07 : 1.11 : 1.12 : 1.23 : 1.08 : 1.08 : 1.12.

RL/WA (1-11): 2.88 : 2.64 : 3.10 : 3.61 : 3.26 : 3.44 : 3.00 : 3.07 : 2.71 : 2.71 : 2.72.

Maxillary palpus with distinct punctuation. Palpomeres 2 and 3 pale brown, slightly paler than black ultimate palpomere, with dark setation, slightly shiny, distinctly narrowest at base and widest at apex. Ultimate palpomere black with paler setation, longly tringular, broadest near middle.

Pronotum (Fig. 23). Black, square, widest near half lateral margins, with adjacent grey setation and very dense punctuation. Punctures small-sized, interspaces between punctures very narrow, distinctly narrower than diameter of punctures. PL 1.13 mm; PW 1.71 mm; PI equal to 65.78. Border lines thin, narrow, distinct, lateral margins arcuate, base almost straight, anterior margin slightly excised. Posterior and anterior angles slightly obtuse.

Ventral side of body blackish brown with short, pale setation and small punctures. Abdomen black with grey adjacent setation and fine microgranulation, slightly shiny. Ultimate ventrite roundly excised in middle.

Elytron. Black, widest near two thirds of elytral length, dorsal surface with adjacent, pale setation, fine microgranulation and punctuation, punctures small-sized. Elytral striae indistinct. EL 3.72 mm; EW 2.14 mm. EL/EW 1.74.

Scutellum. Black, roundly triangular, with fine microgranulation, punctuation and pale setation.

Elytral epipleura. Well developed, black with pale setation and dense punctuation, punctures small, widest near base, regularly narrowing in whole length.

Legs relatively strong, with punctuation. Profemora, protibiae and claws of all ultimate tarsomeres ochre yellow, mesofemora, mesotibia and metafemora dark reddish brown, metatibia and all tarsomeres black. Meso- and metatibiae with short dark setae. Tibiae with short and long thorn in apex. RLT: 1.00 : 0.65 : 0.61 : 0.61 : 2.11 (protarsus), 1.00 : 0.53 : 0.45 : 0.35 : 1.04 (mesotarsus), 1.00 : 0.47 : 0.57 : 1.18 (metatarsus).

Anterior tarsal claws with 11 and 13 visible teeth.

Aedeagus (Figs. 24, 25). Ochre yellow, slightly shiny. Basal piece narrowing dorsally. Apical piece widely triangular dorsally and beak-shaped dorsally and laterally. Ratio of length of apical piece to length of basal piece 1: 6.30.

Female. Dorsal surface black, habitus as in Fig. 22. Body more robust, antennae shorter than those in male. Anterior tarsal claws with 4 and 5 visible teeth.

Measurements of female body. BL 6.87 mm; HL 1.26 mm; HW 1.20 mm; OI equal to 63.10; PL 1.32 mm; PW 1.88 mm; PI equal to 70.21; EL 4.29 mm; EW 2.51 mm; AL 3.22 mm; AL/BL 0.47; HW/PW 0.64; BL/EW 2.74; EL/EW 1.71.

RLA: 1.03 : 0.64 : 1.00 : 0.97 : 0.97 : 0.84 : 0.84 : 1.02 : 0.86 : 0.94 : 1.14.

RL/WA: 3.25 : 2.33 : 3.26 : 2.83 : 2.83 : 2.85 : 2.31 : 2.25 : 2.17 : 2.13 : 2.94.

RLT: 1.00 : 0.75 : 0.55 : 0.60 : 2.58 (protarsus); 1.00 : 0.50 : 0.39 : 0.39 : 1.04 (mesotarsus); 1.00 : 0.40 : 0.36 : 0.77 (metatarsus).

Variability. The type specimens somewhat vary in size; each character is given as its mean value, with full range in parentheses. Males (n=5). BL 6.27 mm (6.08-6.49 mm); HL 1.19 mm (1.16-1.25 mm); HW 1.15 mm (1.11-1.17 mm); OI 63.72 (59.09-66.03), PL 1.13 mm (1.11-1.16 mm); PW 1.69 mm (1.61-1.74 mm); PI 66.95 (66.08-68.95); EL 3.89 mm (3.72-4.13 mm); EW 2.10 mm (2.03-2.14 mm). Females (n=22). BL 7.05 mm (6.87-7.28 mm); HL 1.27 mm (1.25-1.29 mm); HW 1.23 mm (1.20-1.28 mm); OI 65.47 (62.57-68.61), PL 1.28 mm (1.23-1.32 mm); PW 1.91 mm (1.82-1.98 mm); PI 67.18 (63.08-72.53); EL 4.49 mm (4.29-4.76 mm); EW 2.61 mm (2.51-2.70 mm).

Differential diagnosis. *Cteniopus* (*Rh.*) *sveci* sp. nov. distinctly differs from the species *Cteniopus* (*Rh.*) *elegans* (Faldermann, 1837) and *Cteniopus* (*Rh.*) *kalambakaensis* sp. nov. mainly by black dorsal surface; while *C. elegans* and *C. kalambakaensis* have dorsal surface yellow. *C. sveci* is clearly different from the species *Cteniopus* (*Rh.*) *sulphuripes* (Germar, 1824) mainly by elytra wider and shorter (EL/EW 1.85) and by black pronotum of female; while *C. sulphuripes* has elytra narrower and longer (EL/EW 1.95) and pronotum of female is whole or partly reddish orange or reddish brown (very rarely black). *C. sveci* distinctly differs from the species *Cteniopus* (*Rh.*) *punctatissimus* Baudi di Selve, 1877 by base of pronotum as wide as base of elytra, by ultimate palpomere narrower in middle and by black dorsal surface of female; while *C. punctatissimus* has base of pronotum slightly wider than base of elytra, ultimate palpomere in middle wider, and female has dorsal surface yellow.

Etymology. Named after the collector of type series - Zdeněk Švec (Prague, Czech Republic), my friend and well-known specialist in beetle families Leiodidae and Phalacridae.

Distribution. Bulgaria.

KEY TO THE SPECIES OF SUBGENUS *RHINOBARUS*

A	(B)	Clypeus as long as wide or shorter than wide. .... subgenera *Cteniopus* Solier, 1835 or *Ctenioposomus* Reitter, 1906
B	(A)	Clypeus distinctly longer than wide. ..... subgenus *Rhinobarus* Reitter, 1906 1
1	(2)	Dorsal surface of both genders yellow. 2
2	(1)	Dorsal surface of male black. 5
3	(4)	Pronotum narrower, punctures of pronotum larger, abdomen ochre yellow, pronotum of female with distinct impression on both sides near basal angles. Habitus of male as in Fig. 1, habitus of female (Fig. 2), head and pronotum of male (Fig. 3), aedeagus as in Figs. 4 and 5. Armenia, Georgia, Caucasus. *Cteniopus* (*Rhinobarus*) *elegans* (Faldermann, 1837)
4	(3)	Pronotum wider, punctures of pronotum smaller, abdomen brown, pronotum of female without impressions. Habitus of male as in Fig. 6, habitus of female (Fig. 7), head and pronotum of male (Fig. 8), aedeagus as in Figs. 9 and 10. *Cteniopus* (*Rhinobarus*) *kalambakaensis* sp. nov.
5	(6)	Dorsal surface black in both genders. Habitus of male as in Fig. 21, habitus of female (Fig. 22), head and pronotum of male (Fig. 23), aedeagus as in Figs. 24 and 25. Bulgaria. *Cteniopus* (*Rhinobarus*) *sveci* sp. nov.
6	(5)	Elytra of female yellow or pronotum of female at least partly orange red or reddish brown. 7
7	(8)	Elytra narrower and longer (EL/EW 1.95), pronotum of female at least partly orange red or reddish brown. Habitus of male as in Fig. 16, habitus of female (Fig. 17), head and pronotum of male (Fig. 18), aedeagus as in Figs. 19 and 20. Europe: Azerbaijan, Austria, Bulgaria, Croatia, Czech Republic, France, Greece, Hungary, Italy, Macedonia, Moldavia, Poland, Romania, Russia, Slovakia, South European Territory of Russia, Ukraine, Serbia and Montenegro. Asia: East Siberia in Russia, Turkey. *Cteniopus* (*Rhinobarus*) *sulphuripes* (Germar, 1824)
8	(7)	Elytra wider and shorter (EL/EW 1.79), dorsal surface of female yellow. Habitus of male as in Fig. 11, habitus of female (Fig. 12), head and pronotum of male (Fig. 13), aedeagus as in Figs. 14 and 15. Greece. *Cteniopus* (*Rhinobarus*) *punctatissimus* Baudi di Selve, 1877

ACKNOWLEDGEMENTS. Sincere thanks are due to Ondřej Konvička (Zlín, Czech Republic) and Zdeněk Švec (Praha, Czech Republic) for bringing me new material. Special thanks are due to Zuzana Čadová (Liberec, Czech Republic) for excellent drawings.

REFERENCES

BAUDI DI SELVE F. 1877: *Eteromeri delle famiglie sussequenti a quella dei tenebrioniti nei limiti de la fauna europea e circummediterranea. Famiglia XLVIII. Cistelidi. In: Coleotteri eteromeri esistenti nelle collezioni del R. Museo Zoologico di Torino ed in altre italiane*. Torino (Stamperia Reale). Pp. 1-163.

BORCHMANN F. 1910: Pars 3: *Alleculidae*. In: JUNK W. & SCHENKLING S. (eds.): *Coleopterorum Catalogus*. Berlin: W. Junk, 80 pp.

CAMPBELL J. M. 1965: A revision of the genus *Charisius* (Coleoptera: Alleculidae). *The Coleopterist's Bulletin* 19: 41-56.

CAMPBELL J. M. & MARSHALL J. D. 1964: The ocular index and its applications to the taxonomy of the Alleculidae (Coleoptera). *The Coleopterist's Bulletin* 18: 42.

FALDERMANN F. 1837: Fauna entomologica transcaucasica. Coleoptera. Pars II. *Nouvelles Mémoires de la Société des Naturalistes de Moscou* 5: 1-433.

GERMAR E. F. 1824: *Insectorum species novae aut minus cognitae, descriptionibus illustratae*. Halae: Impensis J. C. Hendelii et Filii, xxiv + 624 pp., 2 pls.

HEYDEN L. F. J. D. VON 1883: [new taxa]. In: HEYDEN L. F. J. D. VON & WEISE J.: Neue südost-europäische und klein-asiatische

Käfer. *Deutsche Entomologische Zeitschrift* 27: 310-314.
Küster H. C. 1850: *Die Käfer Europa's. Nach der Natur beschrieben. 20. Heft.* Nürnberg: von Bauer & Raspe (J. Merz), [4 pp.] + 100 sheets + 2 pls.
Laporte F. L. N. [comte de Castelnau] 1840: *Histoire naturelle de insectes Coléoptères; avec une introduction renfernant l'anatomie et la physiologie de animaux articulés, par M. Brullé. Tome deuxième.* Paris: P. Duménil, 563 + [1] pp., pls. 20-37.
Linnaeus C. 1758: *Systema Naturae per Regna Tria Naturae, secundum Classes, Ordines, Genera, Species, cum Characteribus, Differentiis. Synonymis, Locis. Tomus I. Editio Decima, Reformata.* Holmiae, iv + 824 + [1] pp.
Mader L. 1928: Alleculidae. Columns 901-913. In: Winkler A. (ed.) 1924-1932: Catalogus coleopterorum regionis palaearcticae. Wien: Winkler & Wagner, 1698 pp.
Novák V. & Pettersson R. 2008: *Alleculinae*. Pp. 319-339. In: Löbl I. & A. Smetana (eds.): *Catalogue of Palaearctic Coleoptera, Vol. 5. Tenebrionoidea*. Stenstrup: Apollo Books, 670 pp.
Redtenbacher W. 1842: *Quedam genera et species Coleopterorum Archiducatus Austriae nondum descriptorum*. Vindobonae: C. Ueherreuter, 31 pp.
Pic M. 1925: Notes diverses, descriptions et diagnoses. *L'Échange, Revue Linnéenne* 41: 1-3.
Reitter E. 1906: Uebersicht der Coleopteren-Unterfamilie: Omophlini der Alleculidae aus Europa und den angrenzenden Ländern. *Verhandlungen des Naturforschenden Vereins in Brünn* 44: 115-175.
Solier M. 1835: Prodrome de la famille des Xystropides. *Annales de la Société Entomologiqué de France* 4: 229-248.

Published: 27.12.2017