

***Cidnopus platiai* sp. n. (Coleoptera: Elateridae) from Slovakia**

***Cidnopus platiai* sp. n. (Coleoptera: Elateridae) ze Slovenska**

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Abstract. *Cidnopus platiai* sp. n. from East Slovakia is described, illustrated and compared with *C. aeruginosus* (Olivier, 1790) and *C. rusenae* (Laibner, 1977). *Cidnopus rusenae* is compared with *C. aeruginosus* f. *limbatus* (Stiller, 1926). A key to the known European species of the genus *Cidnopus* Thomson, 1859 is given. The key is based on Cate & Platia (1989).

INTRODUCTION

Six European species are included in the genus *Cidnopus* Thomson, 1859; the sixth being added by Cate & Platia (1989). The seventh species has been discovered in the Eastern Slovakia and is described below.

***Cidnopus platiai* sp. n. (Figs 1-2,7,10,13,16)**

Description. Male: Body length 11.0 mm, width 2.8 mm. Colour black with bronze lustre. Epipleuron partly, lateral margin of elytra, joint of shin and claws rusty brown. Pubescence white, dense, long. Pubescence of pronotum basis and sides is inclined towards the pronotal disc, the pubescence of the disc is inclined forward. Lateral margin and fifth interstrium of the elytra with pubescence inclined posteriorly, pubescence of inner interstriae inclined laterally, pubescence of outer interstriae inclined medially.

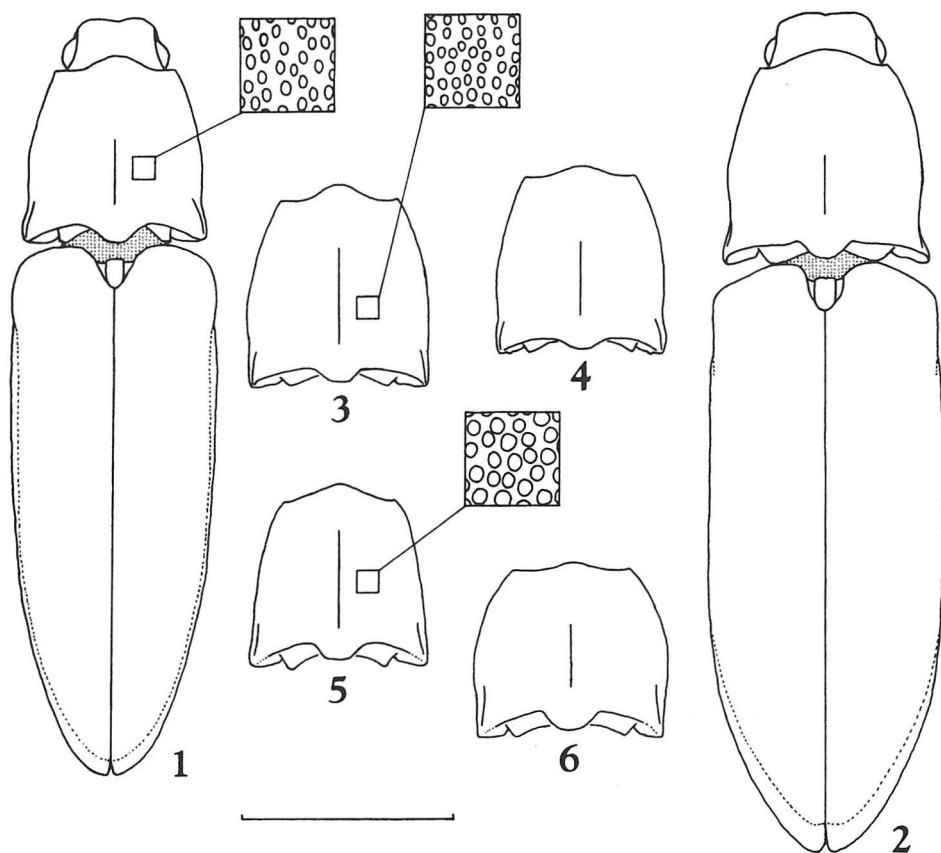
Head densely and coarsely punctured, frontal margin weakly convex and shiny, depressed in the medial part, with clypeus almost fuse.

Antennae (Fig. 7) black, the last two segments of the antenna exceeding hind angles of the pronotum. Basal segment robust, convex, distinctly shorter than the second and third segments combined. Second segment short, almost round; third segment 1.2 times longer than the second, conical; fourth to tenth segments approximately of the same length, fourth to sixth segment as wide as long, seventh to tenth segments progressively longer. The last segments 1.5 times longer than the fore-last one, 2.8 times longer than wide.

Pronotum (Fig. 1) as wide as long, widest on the basis, very convex declining abruptly at basis and at sides, narrower than elytra (ratio of the width of pronotum to elytra is 1.0 : 1.1), with the shallow longitudinal median furrow in the posterior half. Hind angles marked, directed outwards, lateral carine short, distinct, shiny, extending approximately 1/5 of the length of the pronotum. Margins in posterior third almost parallel, in the anterior half evenly narrowed, lateral margin straight, marked, shiny, invisible in dorsal view. Punctuation moderately dense, rough,

pronotal disc with spaces between punctures 0.5-1.0 times as large as puncture's diameter. Punctural density increasing towards the lateral margin. Prosternal sutures expanded apically for 0.5 of their length. Prosternum and propleuron moderately densely and roughly punctured. Prosternal lobe short, truncated, deflected anteroventrad, with transverse impression at the base of the lobe. Prosternal processus (Fig. 10) straight approximately to 1/3 of its length, then deflected and tapering crooked to apex.

Scutellum (Fig. 13) longer than wide (ratio of the length to width is 1.6:1.0), slightly convex, dull. Punctuation dense, small, pubescence dense, white, in the middle with parting.



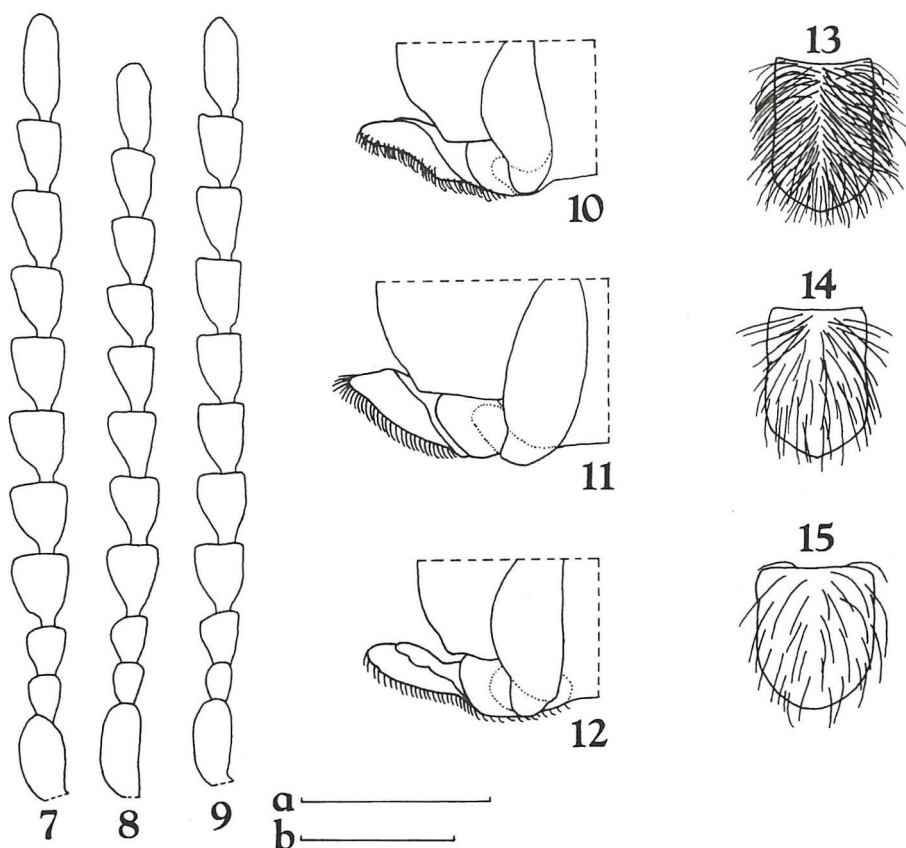
Figs 1-6. 1-2: *Cindopus platiai* sp. n., habitus, dorsal view: 1 - holotype (male), 2 - allotype (female); 3-4: *C. rusenae* (Laibner, 1977), pronotum, dorsal view: 3 - male, 4 - female; 5-6: *C. aeruginosus* (Olivier, 1790), pronotum, dorsal view: 5 - male, 6 - female. Scale 3 mm.

Obr. 1-6. 1-2: *Cindopus platiai* sp. n., habitus, dorsální pohled: 1 - holotypus (samec); 2 - alotypus (samice); 3-4: *C. rusenae* (Laibner, 1977), štít, dorsální pohled: 3 - samec, 4 - samice; 5-6: *C. aeruginosus* (Olivier, 1790), štít, dorsální pohled: 5 - samec, 6 - samice. Měřítko 3 mm.

Elytra (Fig. 1) 2.5 times longer than wide, parallel-sided in approximately 1/2 of their length, tapering gradually to rounded apices. Interneura striatiopunctate, all furrowed deeply. Interstriae slightly convex, densely and roughly punctured, punctures only of half size than those of interneurs.

Male genitalia (Fig. 16) with median lobe of moderate size, evenly narrowed, evenly rounded apically, protruding beyond parameres slightly less than the length of apical hooks. Parameres long, tapering evenly to base of apical hooks. Apical hooks with sharp, stout points, rounded at apex. Basal plate as wide as long, evenly arcuate laterally.

Female (Fig. 2): Body length 12.0 mm, width 3.5 mm. Body stouter than in male, strongly convex. Colour, punctation and pubescence of the body similar to male. Elytra 2.5 times longer than wide, parallel-sided for approximately 2/3 of their length, tapering gradually to rounded api-

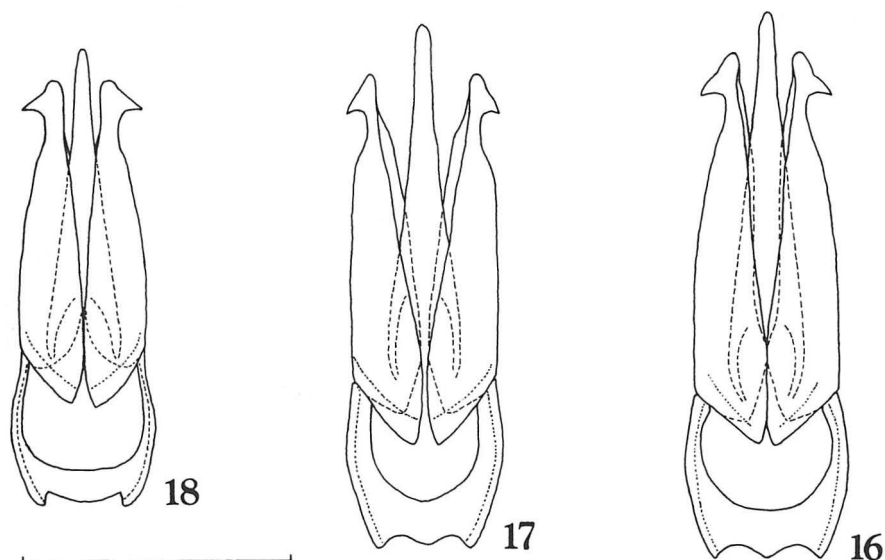


Figs 7-15. 7,10,13 - *Cidnopus platiai* sp. n.; 8,11,14 - *C. rusenae* (Laibner, 1977); 9,12,15 - *C. aeruginosus* (Olivier, 1790). 7-9 - antenna, dorsal view; 10-12 - prosternal process, lateral view; 13-15 - scutellum, dorsal view. Scale: 1 mm for Figs 7-12 (a) and 0.4 mm for Figs 13-15 (b).

Obr. 7-15. 7,10,13 - *Cidnopus platiai* sp. n.; 8,11,14 - *C. rusenae* (Laibner, 1977); 9,12,15 - *C. aeruginosus* (Olivier, 1790). 7-9 - tykadlo, dorsální pohled; 10-12 - prosternální výběžek, laterální pohled; 13-15 - štítek, dorsální pohled. Měřítka: 1 mm pro obr. 7-12 (a) a 0,4 mm pro obr. 13-15 (b).

ces. Prosternal processus stouder than in male. Antennae almost reaching hind angles of the pronotum.

Variability. Size and coloration of the body are variable. Body length in males is 8.0-11.5 mm, width 2-3 mm; body length in females is 9-13 mm, width 2.4-4.0 mm. Body colour is preciously with slightly greenish lustre.



Figs 16-18. Male genitalia, ventral view: 16 - *Cidnopus platiai* sp. n., 17 - *C. rusenae* (Laibner, 1977), 18 - *C. aeruginosus* (Olivier, 1790). Scale 1 mm.

Obr. 16-18. Samčí genitálie, ventrální pohled: 16 - *Cidnopus platiai* sp. n., 17 - *C. rusenae* (Laibner, 1977), 18 - *C. aeruginosus* (Olivier, 1790). Měřítko 1 mm.

Type material. Holotype ♂: Slovakia or., Malé Trakany env., Tisa river, 18.5.1990, Josef Mertlik lgt. Allotypus ♀: the same data. Paratypes: 59 ♂♂, 112 ♀♀ thereform 17 ♂♂ and 31 ♀♀ the same data as in holotype; 2 ♂♂ and 1 ♀, ditto, only 23.5.1989; 19 ♂♂ and 13 ♀♀, ditto, only 12.5.1991; 4 ♂♂ and 13 ♀♀, ditto, only 18.5.1993; 1 ♂ and 9 ♀♀, ditto, only 16.5.1994; 3 ♂♂ and 24 ♀♀, ditto, only 20.5.1996; 6 ♂♂ and 15 ♀♀, ditto, only 20.5.1996, Václav Dušánek lgt.; Slovakia or., Ulič env., Ulička river, 25.5.1989, 2 ♀♀, Josef Mertlik lgt.; Slovakia or., Somotor, 23.4.1994, 5 ♂♂ and 1 ♀, Tomáš Lackner lgt.; 2 ♂♂ and 3 ♀♀, ditto, only 7.5.1994. Holotypus and allotypus deposited in the collection of Josef Mertlik, Hradec Králové. Paratypes deposited in coll. Václav Dušánek (Hradec Králové), coll. Tomáš Lackner (Košice) and in author's collection.

Name derivation. Dedicated to Dr. Giuseppe Platia (Gatteo, Italy), the prominent expert in the family of Elateridae.

Differential diagnosis. *Cidnopus platiai* sp. n. is closely related to *C. aeruginosus* (Olivier, 1790) and *C. rusenae* (Laibner, 1977). This group has elytra clearly wider at base than pronotum and lateral margin of pronotum invisible in dorsal view. *C. platiai* sp. n. differs from *C. aeruginosus*

primarily by smaller punctation of the pronotum, from *C. rusenae* by distinct lateral margin of the pronotum. From both species it differs by shape of pronotum and form of prosternal processus. All distinguishing characters are stated in the key.

Ecology. The species has been found on the sandy bank of a river, on shrubs (*Salix* sp., *Alnus* sp.), on the blades of grasses and under the alluvium. Imago with diurnal activity, found in May. Larva unknown.

KEY TO THE KNOWN SPECIES OF *CIDNOPUS* FROM EUROPE

- 1 Pronotum very convex, sharply sloping on sides, with lateral margin invisible or only partially visible in dorsal view 2
- Pronotum slightly convex, gradually sloping on sides, with all lateral margin visible in dorsal view 6
- 2 Elytra clearly wider at base than pronotum 3
- Elytra about as wide at base as pronotum 5
- 3 Punctures of pronotum (Fig. 5) larger, nearly contiguous on disc, interspaces with dull appearance, sometimes rugose. Scutellum (Fig. 15) longer than wide (ratio of length to width 1.2 : 1.0). Europe; Siberia *C. aeruginosus* (Olivier, 1790)
- Punctures of pronotum (Figs 1, 3) smaller, separat by a less distance than half of their own diameters on disc, interspaces smooth and shiny or micro-reticulate. Scutellum (Figs 13, 14) more longer (ratio of length to width 1.6 : 1.0) 4
- 4 Antennae of males exceeding hind angles of pronotum by one segment, of females not reaching hind angles of pronotum. Pronotum (Figs 3, 4) longer than wide, hind angles not marked, parallel-sided. Lateral margin not marked, shiny, in the middle and along lateral carine of hind angles ceases. Prosternal processus (Fig. 11) very stout. Pronotum micro-reticulate, weakly shiny. Dark-brown with dull, bronze lustre, epipleuron, lateral margin and seam of elytra, legs rustly brown. Pubescence dense, long, white-and-yellow. Slovakia; Hungary (first record - see note); Bulgaria (see Penev & Tarnawski 1987) *C. rusenae* (Laibner, 1977)
- Antennae of males exceeding hind angles of pronotum by two segment, of females almost reaching hind angles of pronotum. Pronotum (Figs 1, 2) as wide as long, hind angles marked, directed distinct outwards. Lateral margin marked, straight, shiny, visible in lateral view. Prosternal processus (Fig. 10) weaker, crooked. Pronotum shiny; this create appearance of bicolored body. Black with bronze or slightly greenish lustre, epipleuron partly, lateral margin of elytra, joint of shin and claws rustly brown. Pubescence dense, long, white. Slovakia *C. platiai* sp. n.
- 5 Third segment of antenna with sides subparallel in both sexes. Italy; Spain; Jugoslavia (see Cate & Platia 1989) *C. pseudopilosus* Platia & Gudenzi, 1983
- Third segment of antenna triangular in the male (female unknown). North Greece *C. macedonicus* Cate & Platia, 1989
- 6 Second segment of antenna just longer than wide. Elytra clearly wider at base than pronotum. European and Asiatic parts of Turkey. *C. crassipes* (Schwarz, 1900)
- Second segment of antenna clearly longer than wide. Elytra about as wide at base as pronotum. Europe; Asia Minor; Caucasus *C. pilosus* (Leske, 1785)

Note. Stiller (1926) described from Hungary a new colour variety of *Limoniuss aeruginosus*: f. *limbatus*. Type material is deposited in the Természettudományi múzeum, Budapest. Holotypus ♂ is labelled: Hungaria mer., Szeged, 8. IV. 1920, Stiller lgt. Paratypus ♂: ditto, only 10. IV. 1926. Laibner (1977) described from Slovakia a new species: *L. rusenae*. Study upon the types of both species (now included in the genus *Cidnopus*) show that both taxa are identical. According to the International Code of Zoological Nomenclature (1988) prescribed *Cidnopus aeruginosus* f. *limbatus* (Stiller, 1926) is an infrasubspecific name.

ACKNOWLEDGEMENTS. My particular thanks are due to Dr. Otto Merkl (Természettudományi múzeum Budapest), for presented type material of *Cidnopus aeruginosus* f. *limbatus* (Stiller, 1926), Stanislav Laibner (Choceň) for the type of *C. rusenae* (Laibner, 1977), and Ing. Roman Borovec (Nechanice) for reviewing the manuscript, valuable suggestions and correction of the English text.

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SOUHRN

Do rodu *Cidnopus* Thomson, 1859 je zařazeno šest evropských druhů, šestý popsali recentně Cate & Platia (1989). Sedmý druh byl objeven na východním Slovensku u řeky Tisy nedaleko Malých Trakan, u řeky Uličky u Uliče a v Somotoru.

Cidnopus platiai sp. n. je popsán, zobrazen a porovnán s příbuznými druhy *C. aeruginosus* (Olivier, 1790) a *C. ruseanae* (Laibner, 1977). U této tříčlenné skupiny jsou krovky na basi zřetelně širší než štít a laterální hrana štítu není viditelná při dorsálním pohledu. *C. platiai* sp. n. se od *C. aeruginosus* liší především menší velikostí teček na štítu a tvarem štítku, od *C. ruseanae* zřetelnou, rovnou, uprostřed délky nepřerušenou laterální hranou štítu a větší délkou tykadel. Od obou druhů se liší tvarem štítu a prosternálního výběžku.

Imaga byla sklepána z keřů *Salix* sp. a *Alnus* sp., smýkána ze stébel travin a sbírána pod naplaveným detritem na břehu řeky.

Druh je pojmenován k počtě Dr. G. Platii (Gatteo, Itálie).

Cidnopus ruseanae (Laibner, 1977) je porovnán s *Cidnopus aeruginosus* f. *limbatus* (Stiller, 1926). Tato barevná aberace byla popsána z jižního Maďarska a podle Mezinárodních pravidel zoologické nomenklatury (1988) se u druhého taxonu jedná o nepoužitelné infrasubspecifické jméno.

K popisu je připojen klíč známých evropských druhů rodu *Cidnopus* Thomson.