

**A new species of *Ceutorhynchus***  
**(Coleoptera: Curculionidae: Ceutorhynchinae)**  
**from the Tatra Mountains in Slovakia**

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**Abstract.** A new species of the genus *Ceutorhynchus* Germar, 1824 from the Tatra Mountains in northern Slovakia is described as *C. tatricus* sp. nov. and compared with closely related and similar European species of the genus. Key to all central European species related to *C. ignitus* Germar, 1824 is given.

**Key words.** Coleoptera, Curculionidae, Ceutorhynchinae, *Ceutorhynchus*, new species, key, Tatra Mts., Slovakia

### Introduction

Subfamily Ceutorhynchinae has worldwide distribution and it has been recently catalogued in detail (COLONNELLI 2004). Currently, more than 1400 species are known in this subfamily, and *Ceutorhynchus* Germar, 1824 is by far the most speciose genus, with species associated with the closely related plant families Brassicaceae and Resedaceae. Among *Ceutorhynchus* there are several montane endemics restricted in their distribution to particular mountain ranges, like the Alps, Pyrenees or Caucasus (COLONNELLI 2004). An undescribed species, apparently representing another local montane endemic of this genus, was recently discovered in the Tatra Mountains in Slovakia. The new species is here described based on seven specimens. Six of them, all females, were collected as early as in 1950s by A. Hoffer in the Belianské Tatry mountain range, and soon properly identified as representing a new species by J. Štaif, who gave it the manuscript name *Ceutorhynchus tatricus* in his unpublished study of *Ceutorhynchus*. However, the description was not published then since the male had remained unknown. Later on, the Belianské Tatry range was inaccessible to the public for a few decades, which prevented search for further material of this enigmatic species until recent years. Finally, in 2009 the first male was collected by Marion Mantič in the area of Belianské Tatry. Examination of this specimen definitely confirmed that the whole series represents an unnamed species closely related to *C. ignitus* Germar, 1824 and *C. merkli* Korotyaev, 2001.

## Material and methods

Measurements of the specimens were taken as follows: total length (from the base of rostrum to the apex of elytra); rostral length (a straight line going from the base of the curved rostrum to the rostral apex); pronotal length (from the anterior margin of pronotum to the tip of its base before scutellum); elytral length (from the middle of a line tangent to shoulders to the elytral apex). Measurements were taken using the trinocular microscope Novex RZ with original scale under magnification 30×. Male aedeagus was glued to the same card as the respective specimen. The locality data are in original spelling as written on labels; additional comments and explanations are given in square brackets. A double slash (//) separates data on different labels. The respective field codes given in parentheses for each locality follow the faunistic mapping of the Czech Republic and Slovakia by PRUNER & MIKA (1996).

Abbreviations of the type depositories:

- RBSC Roman Borovec collection, Sloupno, Czech Republic;  
 JFHC Jan Fremuth collection, Hradec Králové, Czech Republic;  
 JKHC Jiří Krátký collection, Hradec Králové, Czech Republic;  
 MMOC Marion Mantič collection, Ostrava, Czech Republic;  
 NMPC Národní muzeum, Praha, Czech Republic;  
 ZMPC Západočeské muzeum, Plzeň (coll. J. Štaif), Czech Republic.

## Taxonomy

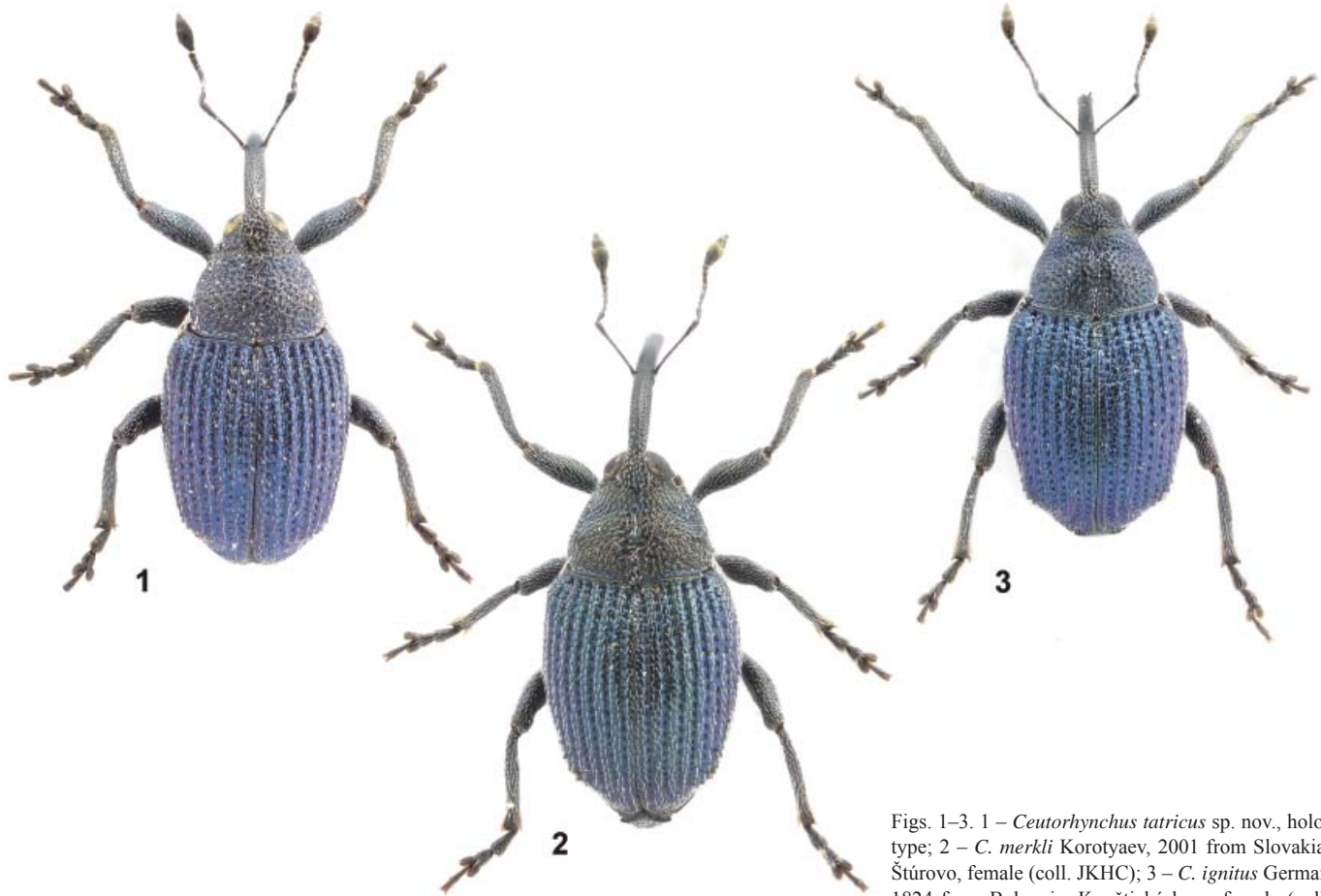
### *Ceutorhynchus tatricus* sp. nov.

**Type locality.** Slovakia, Belianské Tatry Mts., Tatranská Kotlina env., Skalné vráta Nature Reserve, 49°13'42"N 20°16'43"E, 1560 m a.s.l.

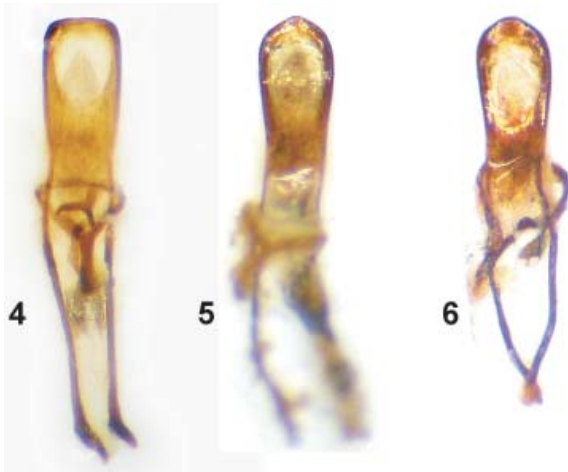
**Type material.** HOLOTYPE: ♂, "Slovakia bor. (6787) /5/ - Tatranská Kotlina env - Skalné vráta, 20.vi.2009 // M. Mantič lgt., alpinní louka - prosev [= alpine meadow - sifting], 49.13.42N 20.16.43E [white and printed cardboard] // HOLOTYPE, *Ceutorhynchus TATRICUS*, n. sp., J. Krátký des. 2011 [printed on red cardboard]" (NMPC). PARATYPES: "Slovakia bor., Belanské Tatry [= Belianské Tatry Mts.]: Holubyho dolina [= Dolina Siedmich Prameňov valley (6787d)]": 1 ♀, 31.viii.1956, Dr. A. Hoffer leg. // stanoviště: [= locality:] 1300 m // Ing. J. Štaif det. (as "*ignitus*") // S. Smreczynski det. 1964 (as "*Ceutorhynchus* n. sp.?" // "*tatricus*" [handwritten label on newsprint, probably later attached by J. Štaif when he prepared description of this species] (RBSC); 1 ♀, 1.ix.1956, Dr. A. Hoffer leg. // stanoviště: [= locality:] 1800-1850 m // Ing. J. Štaif det. (as "*tatricus* sp. nov.") // "Paratypus" [printed label on red paper with black frame, probably designed by J. Štaif when he prepared description of this species] (JFHC); 1 ♀, 3.ix.1956, Dr. A. Hoffer leg. // stanoviště: [= locality:] 1800-1850 m // Ing. J. Štaif det. (as "sp. nova?") (ZMPC); 1 ♀, 7.ix.1958, Dr. A. Hoffer leg. // stanoviště: [= locality:] 1500 m // E. Colonnelli det. 1999 (as "*Ceutorhynchus suturellus* (Gyll.)") (MMOC); 1 ♀, 3.ix.1956, Dr. A. Hoffer leg. // stanoviště: [= locality:] 1800-1850 m // Ing. J. Štaif det. (as "sp. nova?") (ZMPC); 1 ♀, 16.ix.1958, Dr. A. Hoffer leg. // stanoviště: [= locality:] 1700-1800 m (JKHC); 1 ♀, Bujačí vrch hill (6787c), 2.ix.1956, Dr. A. Hoffer leg. // stanoviště: [= locality:] 1900-2000 m // J. Štaif det. (as "sp. nova?") (ZMPC). All paratypes are provided with the following label: "PARATYPE, *Ceutorhynchus TATRICUS* n. sp., J. Krátký des. 2011 [printed on red paper]".

**Description.** Body length: 2.22–2.49 mm.

Integument and vestiture. Coloration dorsally dark blue, pronotum sometimes blackish blue, only moderately shiny, head and pronotum rather coarsely punctured, interspaces of punctures microreticulate, matt; ventral side black, shiny, sparsely punctured; legs black with cobalt luster, tarsi black-brown, lightening apically. Rostrum black, strongly shiny,



Figs. 1–3. 1 – *Ceutorhynchus tatricus* sp. nov., holotype; 2 – *C. merkli* Korotyaev, 2001 from Slovakia, Štúrovo, female (coll. JKHC); 3 – *C. ignitus* Germar, 1824 from Bohemia, Kunětická hora, female (coll. JKHC).



Figs. 4–6. Aedeagus. 4 – *Ceutorhynchus tatricus* sp. nov., holotype; 5 – *C. merkli* Korotyaev, 2001 from Slovakia, Štúrovo (coll. JKHC); 6 – *C. ignitus* Germar, 1824 from Bohemia, Kunětická hora (coll. JKHC).

ultimate apex brown; antennae black, brownish apically. Dorsal vestiture sparse, consisting of fine golden-brown hairs; elytral intervals with 1–2 irregular rows of hairs, which are not longer than interval's width; vestiture of head and pronotum very sparse, hairs on sides directed towards the middle, the central ones directed forward. Ventral side with sparse, white, lanceolate scales, sometimes slightly condensed at sides of thoracic meso- and metaventricle.

Head. Rostrum 1.3 times as long as pronotum in male, 1.5 times in females, regularly curved to the apex; from base to antennal insertion finely corrugated and punctured, lacking median carina, onwards to the apex smooth and strongly shiny. Antennae inserted in middle of rostrum in females and slightly closer to the apex in male; scape nearly straight, gently clubbed; funicle 7-segmented, its segments 1 and 2 elongate, 3 and 4 twice as long as wide, 5–7 rounded; club fusiform, elongate, half as long as the funicle. Frons flat, rather strongly punctured, eyes slightly rounded, not protruding from the head outline.

Pronotum 0.7× as long as wide, widest in basal third, narrowed towards apex, base bisinuous, sides slightly rounded; disc with shallow antero-lateral impressions, dorsal sulcus interrupted in the middle, lateral tubercles very small.

Elytra 1.25–1.3 times as long as wide, widest in basal third, slightly convex in both directions, sides regularly rounded from humeral calli to very fine preapical tubercles on intervals 5–7. Striae deep, without sharp edges, serrate, with microscopic whitish scales. Intervals 1.5–2.0 times as wide as striae, moderately convex, with transverse wrinkles.

Legs fairly short and robust. Femora fusiform in the middle, finely dentate, profemur nearly edentate. Tibiae nearly straight, protibia slightly curved laterally at the apex, weakly expanded from base to the apex, in male with a mucro at apex of inner margin of meso- and metatibia, in female without mucro. Tarsi 0.75× as long as tibiae, claws toothed.

Abdomen. Ventrites 1–2 flat, ventrite 5 in male with distinct preapical impression, in female at most with barely visible elongate impression; apical edge with a ring of white scales.

Aedeagus rectangular, truncate apically (Fig. 4).

**Variability.** Here described specimens do not show significant differences. Small variability is only in coloration of pronotum, which can be from dark blue to blackish blue, as mentioned above.

**Differential diagnosis.** *Ceutorhynchus tatricus* sp. nov. is most similar to two species occurring in central Europe: *C. ignitus* (Fig. 3) and *C. merkli* (Fig. 2). It differs from both these relatives particularly in the shape of aedeagus (Figs. 4–6), distinctly more matt surface of the upper side of body, slightly more convex elytral intervals, rostrum lacking fine median carina in basal half, antennae inserted in male apicad of the midpoint of rostrum, and head punctured as coarsely as pronotum. *Ceutorhynchus merkli* has longer and whitish dorsal vestiture of elytra (brownish in *C. tatricus* sp. nov.), while *C. ignitus* has slightly but distinctly wider elytra.

The new species can hardly be confused with other species placed near *C. ignitus* and occurring in central and eastern Europe: *C. barbareae* Suffrian, 1847 is distinctly larger, *C. suturellus* Gyllenhal, 1837 and *C. pervicax* Weise, 1883 have pronotum more coarsely punctured and elytra with post-scutellar spot of white scales, and *C. pandellei* C. Brisout, 1869 is distinctly slimmer, elongate and its pronotum lacks lateral tubercles. The recently described *C. coeruleus* Colonnelli, 2005 from Turkey is also very similar, especially in the shape of aedeagus, but has elytra distinctly more shiny with more saturated blue colour; *C. coeruleus* is also distinctly smaller (COLONNELLI 2005). The also recently described *C. cyaneotinctus* Colonnelli, 2005 from the Pyrenees differs distinctly in the shape of aedeagus, black disc of pronotum and greenish colour of elytra. Its body outline is similar to that of *C. ignitus* (COLONNELLI 2005). The key to all central European species related to *C. ignitus*, having bluish elytra with intervals lacking raised setae and striae devoid of scales, and toothed tarsal claws, is given below.

**Etymology.** The species is named after its area of distribution, the Tatra Mountains in Slovakia.

**Bionomics.** The host plant of *C. tatricus* is unknown. The females collected by Dr. Hoffer in the 1950s were most likely swept during his exploration of the Belianské Tatry in search for Hymenoptera: Chalcidoidea. Later Ing. J. Štaif made a few attempts to find more specimens, but without success. The only known male was collected by sifting in the alpine meadow under stones in the Skalné vráta Nature Reserve. I visited the locality several times and found just a few potential host plants for *Ceutorhynchus* species. I carefully screened all potential host plants and even reared weevil larvae found on them, but I did not find *C. tatricus* among them, and thus its host plant remains unknown. Potential host plants are summarized as follows.

*Erysimum hungaricum* Zapal. (= *E. wahlenbergii* Asch. et Engl.) is quite abundant throughout the southern part of the Belianské Tatry from 1300 to 2000 m a.s.l. The plant is dominant and forms almost monoculture stand at the locality, where the male holotype of *C. tatricus* sp. nov. was collected. Another potential host plant could be *Arabis alpina* L., but on this plant I discovered only abundant population of distantly related *C. hutchinsiae* Tempère, 1945, which was a new finding of this species in the Carpathians and a newly observed host association (BENEDIKT et al. 2010). Most of the Hoffer's sites of *C. tatricus* sp. nov. in the Tatras are occupied by *Biscutella laevigata* ssp. *austriaca* (Jord.) Mach.-Laur., which was found by me to be infested with the larvae of another, still unidentified and probably unnamed species very close to *C. hutchinsiae*. Among other crucifer plants present in

the type locality, which could eventually host *C. tatricus*, there are some *Arabis*, *Cardamine* and *Cardaminopsis* species, though I did not ever find any weevil on them. The other plants examined in the locality are either too fine to host the larvae of the weevil like *C. tatricus*, or they occur at higher or lower elevations than the localities of *C. tatricus*; therefore, they are not considered here as its potential host plants.

**Distribution.** The species is known only from the southern part of the Belianské Tatry in northern Slovakia.

### Key to central European species similar to *C. ignitus* Germar, 1824

1. Pronotum with visible, sometimes very small but distinct, lateral tubercles. Body broadly oval. .... 2
  - Pronotum without lateral tubercles. Body slender. On *Cardamine*. .... *C. pandellei* C. Brisout, 1869
2. Punctures on pronotum fine, on average less than twice as large as on head. Middle and hind femora with distinct tooth. .... 3
  - Punctures on pronotum very coarse, mostly 2–3 times as large as on head. Middle and hind femora with minute or obsolescent tooth. On *Cardamine* and *Dentaria*. .... *C. pervicax* Weise, 1883
3. Large species, body length 2.7–3.2 mm. White scales on sides of thoracic meta- and mesoventrite much denser and larger than those on prosternum and abdomen. Profemora with a distinct tooth. On *Barbarea*. .... *C. barbareae* Suffrian, 1847
  - Smaller species, body length up to 2.6 mm. White scales on thoracic meta- and mesoventrite at most slightly denser than those on prosternum and abdomen. Profemora finely toothed or not. .... 4
- 4 Interspaces of punctures on head and pronotum microreticulate, matt. Elytral intervals slightly convex. Aedeagus rectangular in outline (Fig. 4). High montane species. .... *C. tatricus* sp. nov.
  - Interspaces of punctures on head and pronotum shiny, without microreticulation. Elytral intervals flat. Aedeagus rounded or sharpened apically (Figs. 5, 6). Lowland species. .. 5
5. Body a little wider (Fig. 3). Fine hairs on elytral interspaces shorter than width of one interspace, brownish. Ultimate apex of aedeagus rounded (Fig. 6). On *Berberoa incana*. .... *C. ignitus* Germar, 1824
  - Body a little slenderer (Fig. 2). Fine hairs on dorsal elytral interspaces as long as or longer than width of one interspace, whitish. Ultimate apex of aedeagus pointed (Fig. 5). On *Cardaria draba*. .... *C. merkli* Korotyaev, 2001

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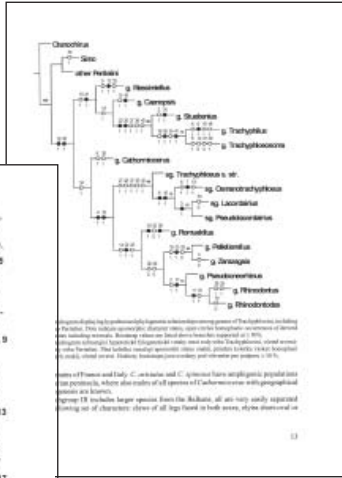
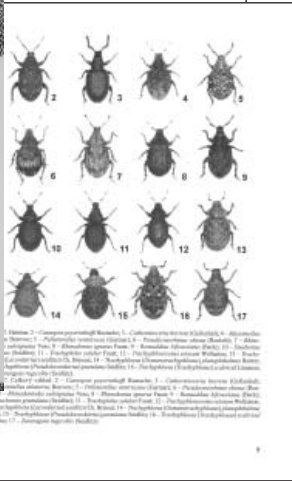
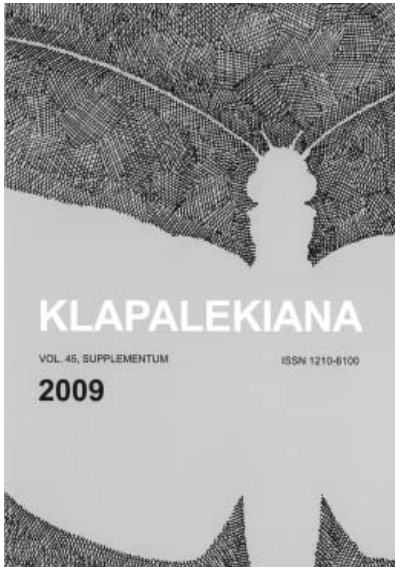
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BOOK ANNOUNCEMENT

Revision of the Palaearctic supraspecific taxa of the tribe Trachyploeini (Coleoptera: Curculionidae: Entiminae)



BOROVEC R. 2009: Revision of the Palaearctic supraspecific taxa of the tribe Trachyploeini (Coleoptera: Curculionidae: Entiminae). Klapalekiana 45 (supplementum): 1–97.

The Palaearctic genera and subgenera of the curculionid tribe Trachyploeini are revised, (re)described, keyed and illustrated. A new generic classification is proposed based on a phylogenetic analysis of 42 morphological characters: the tribe is redefined, five new genera and one new subgenus are described and the generic assignments of all species are verified.

The volume can be ordered at the following address: Czech Entomological Society, Viničná 7, CZ-128 44 Praha 2, Czech Republic (e-mail: klapagenda@centrum.cz).

