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Redescription and new records of *Ranunculiphilus pseudinclemens* (DIECKMANN, 1969), with a key to the species of the genus (Coleoptera: Curculionidae: Ceutorhynchinae)

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ABSTRACT. *Ranunculiphilus pseudinclemens* (DIECKMANN, 1969) is recorded for the first time from Poland and Slovakia. Short notes on taxonomy, ecology and distribution of this species, as well as a key to all members of the genus *Ranunculiphilus* DIECKMANN, 1969 are also given.

Key words: entomology, taxonomy, Coleoptera, Curculionidae, Ceutorhynchinae, *Ranunculiphilus*, key to species, new records, Poland, Slovakia, Czech Republic.

INTRODUCTION

The name *Ranunculiphilus* was first proposed by WAGNER (1944) as a subgenus of *Ceutorhynchus* GERMAR, 1824 to include three species: *C. lycoctoni* HUSTACHE, 1917, *C. obscurus* C. BRISOUT, 1869 and *C. faeculentus* GYLLENHAL, 1837, all living on Ranunculaceae. Since WAGNER did not designate a type species, the above name is a *nomen nudum* according to the article 13.3 of the Code (ICZN 1999). DIECKMANN (1969) became the author of the name for he selected *C. faeculentus* as the type species while keying the features that distinguish the subgenus *Ranunculiphilus* from other close Ceutorhynchini. DIECKMANN and BEHNE (1994) formally raised *Ranunculiphilus* DIECKMANN, 1969 to generic level, although already STREJČEK (1993) had implicitly considered it a genus. These author's opinion was followed by many others (COLONNELLI 1994, 1998, 2003, 2004; ABBAZZI et al. 1995; BURAKOWSKI, MROCZKOWSKI & STEFAŃSKA 1997; PODLUSSÁNY

2001; POIRAS 1998; SCHOTT 2000). Meanwhile KOROTYAEV (1980) had described *Austroceutorhynchus* KOROTYAEV, 1980 as a subgenus of *Ceutorhynchus* for the single type species *C. italicus* C. BRISOUT, 1869, and ABBAZZI et al. (1995) raised it also to generic level. Two years later KOROTYAEV (1997) downgraded both *Ranunculiphilus* and *Austroceutorhynchus* to subgenera of *Prisistus* REITTER, 1916 on the base of supposed homologous structures. In the same article he (KOROTYAEV 1997) predicted also that the host plant of the single member of *Austroceutorhynchus* would most probably be a member of Ranunculaceae, since this weevil was collected on *Consolida* (KOROTYAEV & CHOLOKAVA 1989), and indeed COLONNELLI (2004) indicated the finding of this species on *Consolida arvensis* OPIZ. However, the few species of *Prisistus* for which we have biological data live on members of Liliaceae, and this, in addition to the differences from *Prisistus* firstly mentioned in COLONNELLI (1998) and then keyed by him (COLONNELLI 2004), forced this author to give again generic rank to *Ranunculiphilus* (COLONNELLI 1998). The six members of *Ranunculiphilus* were assigned by COLONNELLI (2004) to the two subgenera *R.* (*Ranunculiphilus*) and *R.* (*Austroceutorhynchus*). Thus at present the nominotypical subgenus contains five species and the subgenus *Austroceutorhynchus* includes only one species.

The recent finding of *R. pseudinclemens* in Poland and in Slovakia gives us the opportunity of discussing the position of this taxon and of providing some biological and distributional notes.

Ranunculiphilus (*Ranunculiphilus*) *pseudinclemens* (DIECKMANN, 1969)

MATERIAL EXAMINED

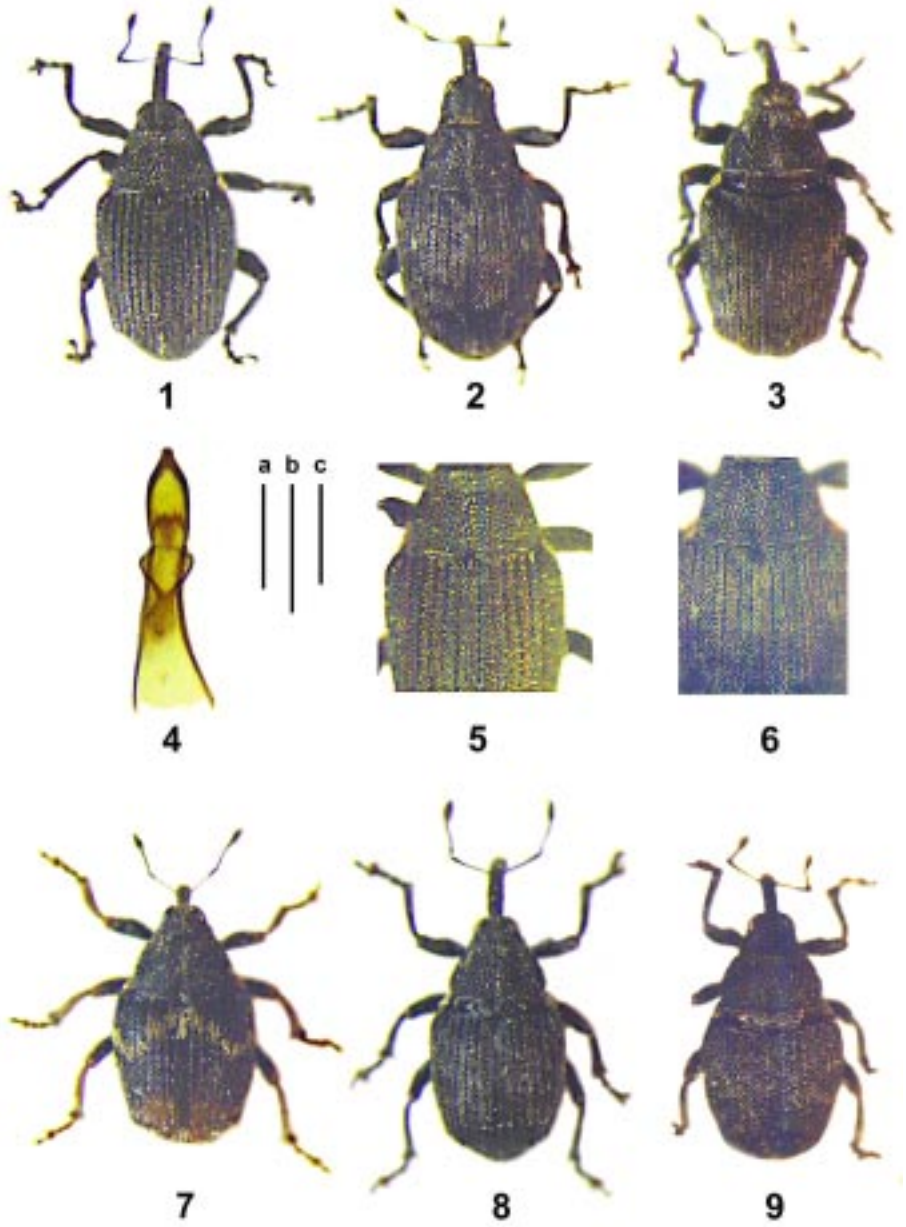
Poland: Tatra National Park, Western Tatra Mountains (7 km SW Zakopane), Wantule, 49°15'08N,9"N 19°53'43,6"E, 1650 m above sea level, 4.VIII.2004, 78 specimens collected by P. Białooki, E. Colonnelli, S. Knutelski, P. Sprick, R. Stejskal. New record for the Polish fauna.

Slovakia: "Slovakia s. e., Jihoslovenský kras, Plešivecká planina, Ing. J. Fremuth lgt., 5 Km N Plešivec, (7488) 680 m, 48.36N 20.25E, 28.V.1998", six specimens. New record for the Slovakian fauna.

Czech Republic: "Moravia bor., Hrubý Jeseník, V. Kotlina, B. Malec leg., 1.VIII.1981" and "Moravia bor., Hrubý Jeseník Mts., 35 Km NW Bruntal, Ing. B. Malec leg., Karlov p. Prad. (5969), 50 05N 17 12E, Velká Kotlina, 10.IX.1996".

DESCRIPTION

Body blackish, rather dull, coarsely punctured; extreme base of tibiae, lateral and under sides of anterior margin of prothorax and claws dark ferrous-red. Dorsal vestiture on head and pronotum consisting of almost recumbent brownish and dirty-whitish hairs pointing backward on head and toward the midline of pronotum. Elytral intervals each with three irregular rows of hairs, a little thinner than those on pronotum. Under side covered with sparse recumbent narrowly



1-9. Dorsal view of: *Ranunculiphilus pseudinclemens* (DIECK.) male from Poland: Western Tatra-Wantule (1); *R. inclemens* (FAUST) female from Kazakhstan: Taldi-Kulgan (2); *R. faeculentus* (GYLL.) male from Hungaria: Szeged (3); *R. italicus* (C. BRIS.) male from Armenia: Jerevan (7); *R. lycoctoni* (HUST.) male from Germany: Guldenfingen bei Ulm (8); *R. obscurus* (C. BRIS.) male from Greece: Kavos Ishtmías (9). Aedeagus of *R. pseudinclemens* from Slovakia: Plešivecká planina (4). Pronotum and base of elytra of: *R. pseudinclemens* female from Poland: Western Tatra-Wantule (5); *R. inclemens* (FAUST) female from Kazakhstan: Taldi-Kulgan (6). Scale bars: a = mm 1 (figs 1, 2, 3, 7, 8, 9); b = mm 0.5 (fig 4); c = mm 0.7 (figs 5, 6)

triangular and hair like milk-white scales that are more condensed on mesepimera. Legs with half-lifted sparse hair-like brownish and light grayish scales that are thicker on femoral teeth. Rostrum of males not clearly shorter than that of females, its length varying from 1.06 to 1.13 the length of pronotum, thick, strongly and regularly curved, very slightly tapering at apex in side view and slightly widened apically in dorsal view, coarsely and finely punctured to very near the apex in males and only less strong so apicad of antennal insertion in females, faintly bisulcate laterally basad of antennal insertion in both sexes; dorsum of rostrum slightly angulated at the level of antennal insertion. Antenna quite robust, inserted 0.41-0.44 times the rostral length apicad of antennal insertion in males and 0.36-0.40 times in females; scape almost straight, gently clubbed; funiculus 7-jointed; joints 1 and 2 elongate, the first thicker; desmomeres 3 to 6 slightly diminishing in length and longer than wide; desmomere 7 rounded and usually not transverse; club large, elongate fusiform, somewhat longer than joints 4-7 together. Front slightly impressed. Eyes lateral, transversely oval, a little convex. Pronotum 0.80-0.83 as long as wide, widest just apicad of mesepimera near base, more or less triangularly constricted at apex, base very faintly bisinuate and marginate, sides slightly to moderately curved. Disc flattened, punctures very coarse, large, antero-lateral depressions evident, fore margin moderately elevated, dorsal sulcus fairly deep and complete, lateral tubercles quite strong. Elytra 0.85-0.9 as long as wide, rather flat on disc and moderately convex elsewhere, widest just basad of middle, sides slightly and uniformly curved up to preapical tubercles, humeral calli moderate, preapical ones formed by series of small rasp-like tubercles. Striae nearly straight at base, deeply sulciform, punctures of the bottom with excessively thin hairs difficult to see. Intervals about 1.5 times wider than striae, faintly convex, with spaced transverse wrinkles and flat granules. Legs robust; femora somewhat clubbed, all with minute tooth; tibiae slightly bisinuate, a little widening toward apex. Tarsi short, claws appendiculate. Length: 2.31-2.60 mm. Aedeagus: Fig. 4. See also Figs 1 and 5.

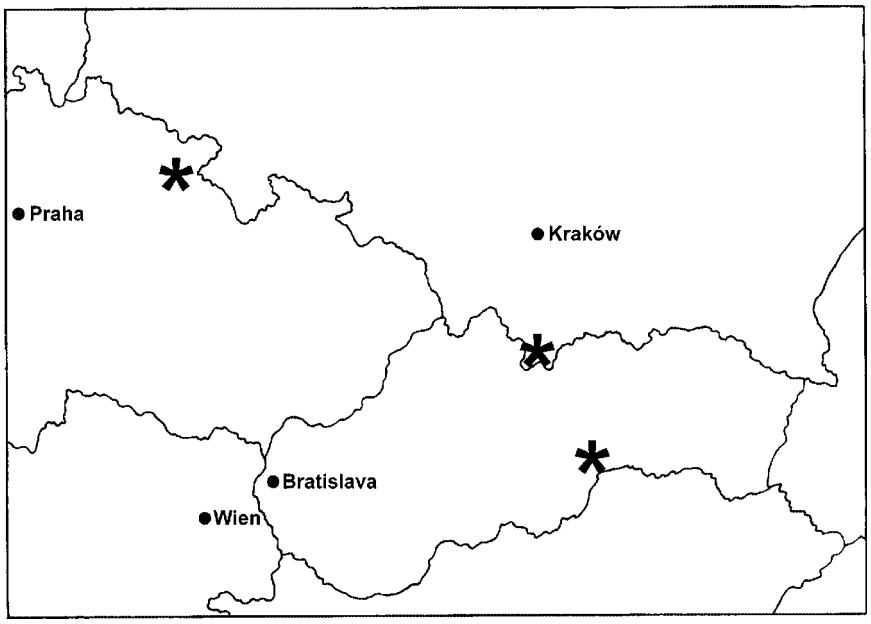
DISTRIBUTION

Ranunculiphilus pseudinclemens was described upon a male and a female. The male holotype (examined in 1995 by the first author) was labeled "Altv.", and Dieckmann - although suspecting that this was the abbreviated name of "Altvatergebirge" in Moravia - was induced to believe that the specimen came instead from a supposed locality of "Alty" somewhere in Central Asia because the female paratype was labeled "Aulie-ata" (presently Dzhambul) in Kazakhstan (DIECKMANN 1969: 49). STREJČEK (1976), however, published the finding of *R. pseudinclemens* exactly in Moravia (Hrubý Jeseník, the present name of Altvatergebirge). None of the subsequent authors (BAJTENOV 1974; KOROTYAEV 1980, LOHSE 1983, STREJČEK 1993) added any new findings, except COLONNELLI (2004) who reported the species also from Turkmenistan on the basis of a female example collected in the untraced locality of "Transcaspia: Saramsakli", and

preserved in the Naturhistorisches Museum in Vienna. Therefore *R. pseudinclemens* should have disjunctive distribution, being known from the central European regions of Moravia, Slovakia and Polish Western Tatra, and from the central Asian countries of Turkmenistan and south-eastern Kazakhstan. It appears, however, extremely doubtful that *R. pseudinclemens* was actually collected in Asia, since the main characters given by DIECKMANN (1969: 34) to separate it from the close *R. inclemens* (FAUST, 1888) are the shape of pronotum and that of elytra, both of which are somewhat variable and cannot be safely used for a correct identification of single females. This is the reason for which we conditionally refer the Asian localities to *R. inclemens* with a question mark in the key below. The distribution of *R. pseudinclemens* is shown on Fig. 10.

ECOLOGY

Specimens from Wantule were apparently beaten off *Aconitum napellus* L. subsp. *firmum* (RCHB.) GÁYER. That Ranunculaceae grew in a narrow strip of the West-Carpathian vegetation of calcareous scree below a vertical SW facing cliff. *Aconitum napellus* subsp. *firmum* was associated, among other plants, with a much less common member of the same family, *Delphinium oxysepalum* BORBÁS & PAX – Western Carpathians Endemic, on which plant possibly at least some adults were also collected. Note that STREJČEK (1976) reported the finding of *R. pseudinclemens* on *Delphinium elatum* L., surely the subspecies *elatum* L. that only grows in Hrubý Jeseník area, according to DOSTÁL (1989).

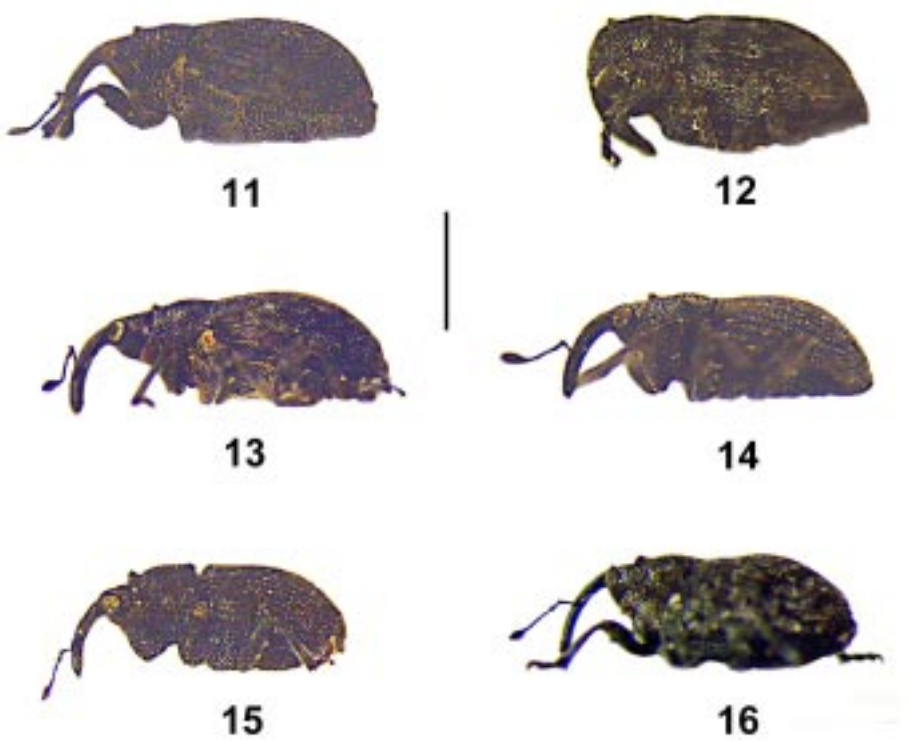


10. Distribution of *Ranunculiphilus pseudinclemens*

KEY TO THE SPECIES

We propose here a new key to the species of *Ranunculiphilus* to facilitate their recognition, also considering that SMRECZYŃSKI (1974) did not include *R. pseudinclemens* in Polish Ceutorhynchinae.

The key below slightly modifies that by DIECKMANN (1969), and should allow, used in combination with the one by that author, recognition of all species of *Ranunculiphilus* described to date. Members of this genus are chiefly separated from *Prisistus* REITTER, 1916 by the antennae inserted apicad of midpoint of rostrum, the much thicker rostrum, the structure of the claws which are appendiculate rather than dentate (that is bifid almost from base), the unci of male hind tibiae more or less sharp, the patch of whitish scales on elytral interval 6 very weak or wanting - except in *R. italicus* (C. BRISOUT, 1869), which has a kind of undulate transverse stripe from scutellar region to elytral sides. Species of *Prisistus*



11-16. Lateral view of: *Ranunculiphilus lycoctoni* (HUST.) male from Germany: Guldenfingen bei Ulm (11); *R. faeculentus* (GYLL.) male from Italy: Alessandria (12); *R. inclemens* (F.) female from Kazakhstan: Taldi-Kulgan (13); *R. pseudinclemens* (DIECK.) male from Poland: Western Tatra-Wantule (14); *R. obscurus* (C. BRIS.) male from Greece: Kavos Ishtmías (15); *Prisistus biscutellatus* (CHEVR.) male from Spain: Sierra de Baza (16). Scale bar: mm 1

have antennae not inserted apicad of midpoint of rostrum, rostrum much thinner (fig. 16), unci of male hind tibiae spatulate (sometimes weakly so), claws dentate (that is tooth starting from a more or less short distance from base), elytral pattern usually more definite. Structure of the head and prothorax, and aedeagal shape of all members of *Ranunculiphilus* - and of several ones of *Prisistus* - is rather similar to that of the species of the genus *Glocianus* REITTER 1916, and a future phylogenetic revision of Ceutorhynchini may prove that both *Ranunculiphilus* and *Prisistus* are its close relatives.

1. Apex of elytra reddish posteriad of preapical tubercles. Dorsal vestiture of rough, semi-erect hair-like scales. Yellowish hair-like scaled scutellar spot hastate, its arms obliquely extended laterally towards, and often connected to, the arched line of intervals six to nine (Fig. 7). On *Consolida*. Morocco, Tunisia, Spain, France, Italy, Slovenia, Croatia, Bulgaria, Hungary, Cyprus, Turkey, Russia, Georgia, Armenia, Azerbaijan, Iran, Syria, Turkmenistan, Uzbekistan. ……..... *R.* (*Austroceutorhynchus*) *italicus* (C. BRISOUT, 1869).
–. Apex of elytra blackish ……..……. 2.
2. Raised anterior margin of prothorax in frontal view nearly equal in width to antennal club (Figs 9, 15). Tarsi yellowish-orange or ferrous-red. Body plump. On *Delphinium*. Morocco, Tunisia, Portugal, Spain, Germany, Bulgaria, Croatia, Yugoslavia, Greece .... *R.* (*Ranunculiphilus*) *obscurus* (C. BRISOUT, 1869)
–. Width of raised anterior margin of prothorax in frontal view much less than that of antennal club (Figs 11-14). Tarsi red-brown or piceous, tarsal joint 3 usually paler ..... 3.
3. Elytra less flattened on disc, with apical declivity more abruptly sloping in lateral view (Fig. 11), and sides curved and obviously converging toward preapical tubercles so that elytra are here much narrower than at base (Fig. 8). On *Aconitum*. Alpine zone of France, Switzerland and Germany .... *R.* (*Ranunculiphilus*) *lycoctoni* (HUSTACHE, 1917)
–. Elytra obviously flat on disc, apical declivity more gently sloping in lateral view (Figs 12-14), sides usually gently converging toward preapical tubercles so that elytra are here not much narrower than at base ..... 4.
4. Elytral sides faintly converging toward preapical tubercles so that elytra are not evidently narrower at the level of preapical tubercles than at base, and appear flattened, subrectangular in shape (Fig. 3). Preapical tubercles strong, formed by several minute granules. A trace of small pale patch always visible on basal third of interspace 6 among the nebulose pattern of elytra. Female rostrum much less coarsely punctured than the male one, apicad of antennal insertion shiny. On *Consolida*. Spain, France, Italy, Austria, Germany, Czech Republic, Slovakia, Poland, Hungary, Croatia, Yugoslavia, Macedonia, Bulgaria, Romania, Moldavia, Ukraine, Russia, Turkey, Georgia, Armenia, Azerbaijan, Iran, Turkmenistan .... *R.* (*Ranunculiphilus*) *faeculentus* (GYLLENHAL, 1837)

–. Elytral sides curved and obviously converging toward preapical tubercles so that elytra are clearly narrower at the level of preapical tubercles than at base (Figs 1, 2). Elytra less flattened, trapezoidal. Usually the patch on basal third of interspace 6 is wanting or very difficult to see among the nebulose pattern of elytra. Female rostrum slightly less coarsely punctured than male one, its anterior part rather dull ..... 5.

5. Elytral striae at base clearly curved so that odd intervals are here much wider that even ones (Fig 6). Interspaces flat, much more than 1.5 times wider than the thin striae. Punctures of disc of pronotum and elytra rather smooth so that integument is quite shiny. Elytra more flat, their sides more converging toward preapical tubercles. Nebulose pattern of elytra obvious. Ecology unknown. Siberia, Turkmenistan, Kazakhstan, northern China .... *R.* (*Ranunculiphilus*) *inclemens* (FAUST, 1888)

–. Elytral striae at base only slightly curved so that odd intervals are here just a little wider than even ones (Fig. 7). Interspaces a little convex, about 1.5 times wider than the deep striae. Punctures of disc of pronotum and elytra coarse so that integument quite dull. Elytra slightly convex, their sides softly curved toward preapical tubercles. Nebulose pattern of elytra very faint. On *Delphinium* and *Aconitum*. Czech Republic, Slovakia, Poland .... *R.* (*Ranunculiphilus*) *pseudinclemens* (DIECKMANN, 1969)

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