



***Echinodera (Ruteria) cyprica* sp.n.**  
(Coleoptera: Curculionidae: Cryptorhynchinae)\*

by

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with 5 figures

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**Abstract**

A new species of the weevil genus *Echinodera (Ruteria)* Wollaston 1863 is described from Cyprus and distinguished from the related species *Echinodera (Ruteria) minosi* Bahr & Bayer 2005 and *Echinodera (Ruteria) major* (A. & F. Solari 1907); with 5 figures.

**Key words.** Curculionidae, Cryptorhynchinae, genus *Echinodera*, subgenus *Ruteria*, new species, taxonomy, systematics, Cyprus.

***Echinodera (Ruteria) cyprica* sp.n.**

**Type material**

**Holotype.** 1♂, „Cyprus, N Pafos, Drouseia, 19.04.2010, N 34°57'51.08" E 32°23'53.60", 603 m, sifting under *Quercus infectoria* ssp. *veneris*, leg. Stüben (24)"; coll. Curculio-Institute, D-Mönchengladbach. / **Paratypes.** 26♂, 32♀, data as for holotype, coll. Stüben (17♂, 21♀), Brunner (3♂, 5♀), Behne (6♂, 5♀), CURCULIO-Institute, Mönchengladbach (1♀); 5 further specimens used for molecular analysis, data as for holotype, (coll. Stüben & ZFMK); 1♂, "Cyprus - m 500/600, surroundings of Drouseia; 17/22.VI.2010 – E. Colonnelli", coll. Colonnelli; 1♀, "Cyprus, Drouseia, in litter under *Cydonia vulgaris* (not far from *Quercus infectoria* ssp. *veneris*), 25.4.2010, leg Teodor", coll. Teodor.

**Further material.** 1♀, "Cyprus, Troodos Mts.: Stavros, 20.04.2010, N 35°01'33" E 32°37'43", 546 m, under *Quercus alnifolia* (forest track, sifting), leg. Stüben (25)"; 1 specimen used for molecular analysis, "Cyprus, Troodos Mts.: Cedar Valley, 20.04.2010, N 34°59'28" E 32°41'18", 1097 m, under *Quercus alnifolia* (forest track, sifting), leg. Stüben (26)", (coll. ZFMK).

**Description** (Fig. 1, 3, 5)

**Length.** 3.0 - 4.5 mm (without rostrum).

**Head & Rostrum.** Eyes large, long-oval rounded, placed at the sides of the head but protruding the upper margin of the antennal groove, always visible from above (an unambiguous indication that this species belongs to the subgenus *Ruteria*). Rostrum of male fine, sparsely punctuated and 3x as long as wide (breadth of rostrum measured at the base), always with a shining and unpunctuated centre line between the insertions of the antennae; rostrum of female more slender, at least 4x as long as wide.

**Pronotum.** 1.16x - 1.26x as wide as long; widest at the end of the first fourth or first third of the pronotum; laterally, less rounded towards the fore-margin than towards base. Disc of pronotum flattened, with deep and broad punctures. Every puncture with a stout, flattened and upright bristle; pronotum mostly covered with dark scales, with small and bright spots consisting of 2 - 5 scales on the edge of the disc of pronotum and directly in front of the fore-margin.

**Elytra.** Short-oval, 1.10x - 1.15x as long as wide; widest at the end of the first third of the elytra; laterally more rounded towards the base than towards the apex. In lateral view, contour-line of the elytra, which slightly surpasses the line of the pronotum, begins with a flat circular line which drops down vertically towards the apex. The base of the elytra is straight. The integument comprises more or less uniformly black or dark brown scales, with a white spot on the anterior half on the 3<sup>rd</sup> interval (excluding the suture stripe) or - very rarely - with some more irregularly bordered beige spots; white, "M"-shaped fascia in front of the apex on the first three intervals - typical for most species of *Echinodera* - is always visible. The puncture stripes are clearly more slender than the slightly arched intervals. The interval covered with a single row of very long, predominant black and conspicuous light-coloured bristles, which are slightly erected (further raised on the elytral slope); these are slender, oblong-oval, 2.5x - 3.0x as long as wide and their distance from each other equals 1,5 - 2,0x bristle-length.

**Legs.** Short; front femora reach the fore-margin of the eyes, the hind femora clearly ending in front of the elytral apex. Outer edge of tibiae covered with predominantly beige bristles in an upright position (sometimes with bright horizontal-stripes)

**Venter.** 1<sup>st</sup> abdominal sternite clearly longer than the three following sternites together.

**Female genital:** See (Fig. 5).

**Aedeagus.** Median lobe ventrally with a bottleneck-like, long and slender apex (Fig. 3).

**Discussion and differential diagnosis**

The new species is closely related to *Echinodera (Ruteria) minosi* Bahr & Bayer 2005 from Crete and *Echinodera (Ruteria) major* (A. & F. Solari 1907) from Dalmatia (Astrin & Stüben 2008), which have a similar median lobe of the aedeagus ('*Ruteria major* group', cf. Fig. 3, 4). They are nested, with all other monophyletic *Ruteria* species, within

*Echinodera* (Astrin & Stüben in press). Almost all species of *Ruteria* can be quickly recognized and easily distinguished from all other *Echinodera* by their habitus. *Ruteria* species are larger (3-7 mm), have bigger eyes that can easily be discerned in dorsal view and that clearly reach up beyond the upper margin of the antennal groove, and do not have - excluded the 3 species of the *Ruteria major* group (!) - an S-shaped, long and tapering, transparent apex of the aedeagus as in *Echinodera* s.str. (Bahr & Stüben 2007).

*Echinodera (Ruteria) cyprica* sp.n. from the mountains of Western Cyprus has conspicuous light-coloured bristles, which are slightly erected on the elytral intervals. *Echinodera (Ruteria) major* from Dalmatia has vertically raised bristles. The most closely related species is *Echinodera (Ruteria) minosi* from Crete. However the elytra of this species are brighter, light brown, yellow and rich in contrast (not predominant black, cf. Fig. 1, 2), the intervals covered with a single row of nearly circular (at most 1.5x as long as wide), clearly more raised bristles and - in ventral view - the bottleneck-like apex of the aedeagus is broader and laterally less curved (Fig. 4).

For the placement of the new *Echinodera (Ruteria)* species among the known 16 species of the Western Palaearctic, see the current pictorial key to the species of *Ruteria* (Stüben & Bahr 2008): *Echinodera (Ruteria) cyprica* must be placed at the beginning of the key (between 2 and 2\*).

**Etymology.** The species name refers to the type locality in the mountains of **Cyprus**.

**Distribution.** *Echinodera cyprica* is so far only known from Drouseia and Troodos Mts: Stavros and Cedar Valley.

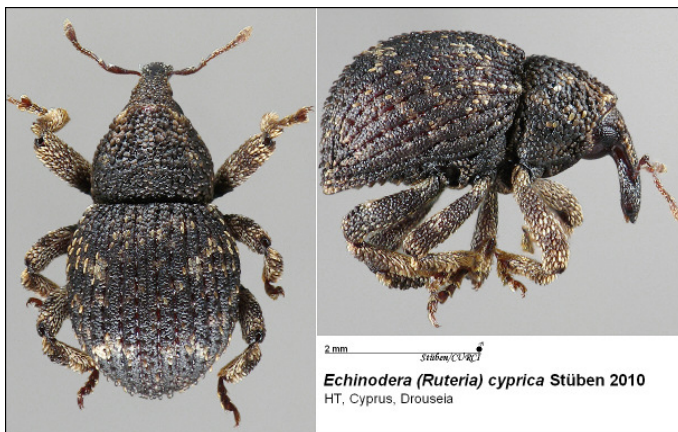


Fig. 1 *E. cyprica* sp.n. – Habitus (dorsal/lateral)



Fig. 2 *E. minosi* – Habitus (dorsal/lateral)

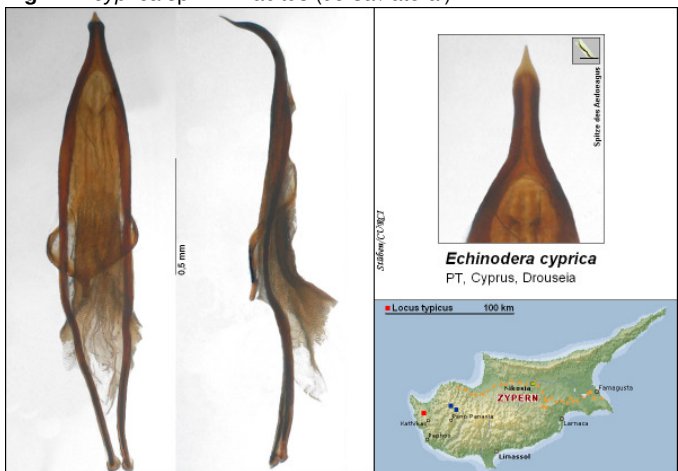


Fig. 3 *E. cyprica* sp.n. – Aedeagus (vental/lateral) / Distribution

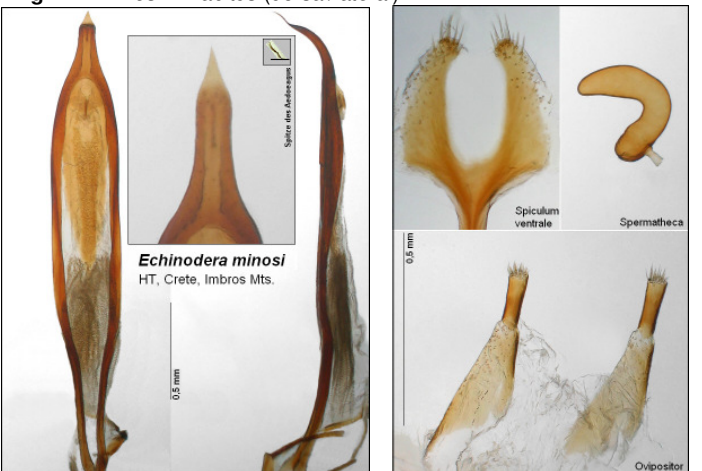


Fig. 4 *E. minosi* sp.n. – Aedeagus (vental/lateral)

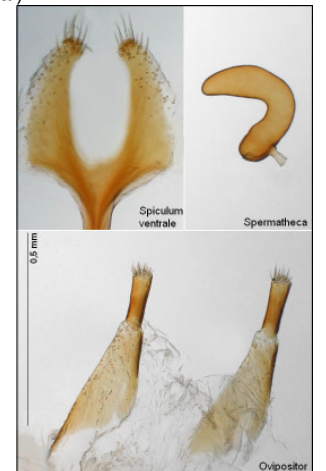


Fig. 5 Female genitalia of *E. minosi*

## References

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\* Price of printable version: 6,- € + postage (CURCI, Hauweg 62, D-41066 Mönchengladbach); but we recommend to download this article and to archive it on your computer.

\*\* Printable versions of this article of the *Weevil News*: *Biol. Abstr.*, *Entomol. Abstr.*, *Zool. Record*.

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## New publications



The following interactive contributions were published in *SNUDEBILLERonline*:

April 1<sup>st</sup>, 2010 / English

**CURCULIO Team (2010): Digital-Weevil-Determination for Curculionoidea of West Palaeartic. Transalpina: *Tychius*** (Curculioninae: Tychiini) / ENGLISH - *SNUDEBILLER 11*, Studies on taxonomy, biology and ecology of Curculionoidea, Mönchengladbach: CURCULIO-Institute, 27-39, with **543 coloured photographs, 45 plates and 49 distribution maps**

June 1<sup>st</sup>, 2010 / Deutsch

**CURCULIO Team (2010): Digital-Weevil-Determination der westpaläarktischen Curculionoidea: Transalpina: *Tychius***. (Curculioninae: Tychiini) / DEUTSCH - *SNUDEBILLER 11*, Studies on taxonomy, biology and ecology of Curculionoidea, Mönchengladbach: CURCULIO-Institute, 40-53, mit **543** Abbildungen, **45** Tafeln, **49** Karten.

In the framework of the 'Digital Weevil Determination' project a digital and interactive determination work for the genus *Tychius* (Curculioninae: Tychiini) is presented for the first time as a pictorial key in English and German language. 49 species of the West Palaeartic region "Transalpina" (the eastern delimitation is orientated approximately along the eastern borderlines of the EU members) were taken into account. Each information in the key is firstly given as a pictorial information and is also - more additionally - 'translated' into text. By this, we follow a basic principle of modern entomological and taxonomical work: To see by light-optical microscope exactly that, what the digital picture is keeping ready on the screen. Information on the biology for every species is completing this work.

According to the payment of your membership fee for 2010 (only 50,-€) and the allocation of your registration code (via e-Mail) you will be able to download this contribution directly in the BOOKREADER program under *SNUDEBILLERonline*: "Current articles" and to call it on under "Downloaded articles". Furthermore, as a member of the CURCULIO Institute you receive the *SNUDEBILLER* CD ROM as usual at the end of the year! Please make use of this and contact us to be a member of the CURCULIO Institute: [P.Stueben@t-online.de](mailto:P.Stueben@t-online.de).

See also: [www.curci.de/MEMBERSP.htm](http://www.curci.de/MEMBERSP.htm)