Complying with the rules of the ICZI

Weevil News

1 August 2010

Bagous monanthiphagus sp.n. (Coleoptera: Curculionidae: Bagoinae)*

by Peter E. Stüben, Mönchengladbach with 8 figures

> Received: 1 July 2010 Accepted: 16 July 2010

No. 54

Published in Internet: 1 August 2010

**In print: 1 August 2010

Abstract

A new species of the weevil genus Bagous Germar 1817 is described from the Canary Islands (La Gomera). This species is distinguished from the related species Bagous subruber Reitter 1890 (Mediterranean area, Saudi Arabia, Iraq, Iran); with 8 figures. Key words. Curculionidae, Bagoinae, genus Bagous, new species, taxonomy, Canary Islands, La Gomera.

Bagous monanthiphagus sp.n.

Type material

Holotype. 13, "E: Canary Is., La Gomera: NW San Sebastian, La Gerode to Casas de Cuevas Blancas ("Stangenpfad"), Monanthes laxiflora (DC.) Bolle, 28°7'N 17°8'W, 621 m, 22.1.2010, leg. Stüben (59) "; coll. Curculio-Institute, D-Mönchengladbach. / *Paratypes.* 7♂, 14♀, data as for holotype, coll. Stüben, CURCULIO-Institute, Mönchengladbach (1♀). 5 specimens used for molecular analysis, data as for holotype, (coll. Stüben

Description (Fig. 1, 3, 5 - 8)

Length. 1.8 – 2.3 mm (without rostrum).

Head & Rostrum. Eyes small, short-oval rounded, placed at the sides of the head, not surpassing the upper margin of the antennal groove, hardly visible from above. Rostrum short and robust, 2.24x as long as wide between the insertions of the antennae (Fig. 7); antennae inserted directly in front of the middle (β) or at the middle (γ) of the rostrum; scape and funicle reddish-brown, club darker brown, 1st segment of the funicle stout, 2nd also long, but considerably more slender, 3rd - 6th very short, 7th fused with

Pronotum. As long as wide; widest behind the deep ring-like depression behind the fore-margin; laterally less rounded towards the fore-margin than towards the base. Disc of pronotum flattened, with an elongate middle-impression and with fine punctures. Pronotum mostly covered with dark brown scales, only the impression and the sides are lacking clearly demarcated bright spots of

Elytra. Short, with parallel sides, 1,44x as long as wide; with "shoulders", 1,41x broader than pronotum, apex acute-oval rounded, produced, with a strong depression laterally in front of the apex. In lateral view, contour-line of the elytra, which slightly surpasses the line of the pronotum, begins with a flat circular line and drops down in a constant arc of a circle; 2,37x as long as high. The base of elytron forms a shallow arch. The integument comprises more or less uniformly black or dark brown scales with white, irregularly bordered spots of scales on the anterior half of the 2nd to 4th interval (excluding the suture stripe); with a white fascia that is rich in contrast on the first three intervals in front of the apex. Striae only a slightly more slender than the arched intervals, with deep and rectangular punctures. The interval covered with two rows of short, predominant brown and conspicuous bright and upright bristles, the ends of which are semi-recumbent and in contact with each other - the rows of bristles appear tapered (see

Legs. Short; front femora reach the fore-margin of the pronotum, the hind femora clearly ending in front of the elytral apex. Outer edge of tibiae covered with predominantly beige and short bristles in an upright position. Tarsi short, dark reddish; tarsomeres 1-3 trapezoidal, tarsomere 3 slightly longer and wider than 1 and 2.

Venter. See: Fig. 6.

Female genital: See: Fig. 5.

Aedeagus. Median lobe (in ventral view) symmetrical, internal sac with a W-shaped sclerites (Fig. 3).

Differential diagnosis

The new species is closely related to Bagous subruber Reitter 1890 compared with material collected from Frankenia pulverulenta by P. Sprick (Cyprus, Larnaka salt lake) and 10 specimens from DEI (inter alia Attica, leg. Reitter / Biskra, leg. De Vauloger) and belongs to the Bagous subruber group (cf. Caldara & O'Brien 1998), species of which have a short rostrum. It can be distinguished from B. subruber by: 1. shorter elytra (1,44x (Fig. 1) vs. 1,54x (Fig. 2) as long as wide), 2. completely different contourline of the elytra (Fig.1 vs. 2, lateral), 3. broader, stoutly built and not so steeply sloping in lateral view (Fig. 1,7 vs. 2), 4. upright bristles on the lacklustre elytral intervals forming tapered rows (vs. more or less glabrous, sleek surface), 5. smaller and short-oval rounded eyes (Fig. 1,7 vs. larger, long-oval rounded eyes, Fig. 2), 6. completely rounded (ventral) and broader (lateral) median lobe of aedeagus (Fig. 3 vs. a sharply rounded and more slender aedeagus, Fig. 4) and 7. internal sac of aedeagus with different complex sclerites (Figs. 3 vs. 4). Bagous monanthiphagus can be distinguished from Bagous fuentei Pic 1908 and Bagous septemcostatus Chevrolat 1860 by the form of the aedeagus, the median lobe of which is more tapered in ventral view.

Ecology. Bagous monanthiphagus was discovered on La Gomera during a three-month research trip by the author to study the weevil fauna for the "Encyclopedia of the Curculionoidea of the Makaronesian Islands" (first edition 2010, together with L. Behne & J. Brunner). This species lives on *Monanthes laxiflora* (DC.) Bolle at over 600 m above sea level northwest of San Sebastian (La Gerode), on a precipitous and moist rockface. No other localities are known. Laboratory experiments by the author confirmed that this species feeds off the succulent leaves of the Crassulaceae *Monanthes laxiflora* (see Fig. 8).

Etymology. The species name refers to host plant *Monanthes laxiflora*, which is endemic to the Canary Islands. **Distribution.** Bagous monanthiphagus is so far only known from La Gomera.

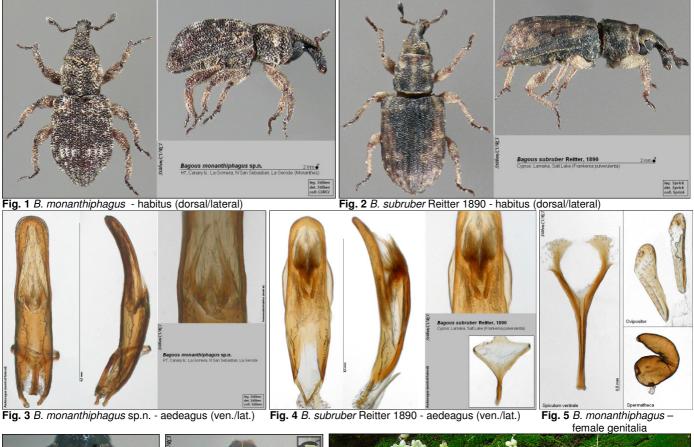




Fig 6 B. monanthiphagus (ven.) Fig. 7 B.monanthiphagus (rostrum) Fig. 8 Monanthes laxiflora - host plant of B. monanthiphagus

References

Caldara, R. & O'Brien Ch. W. (1998): Systematics and evolution of Weevils of the genus *Bagous*. VI. Taxonomic treatment of the species of the Western Palearctic Region (Col. Curculionidae) – *Mem. Soc. entomol. ital.*, **76**: 131-347.

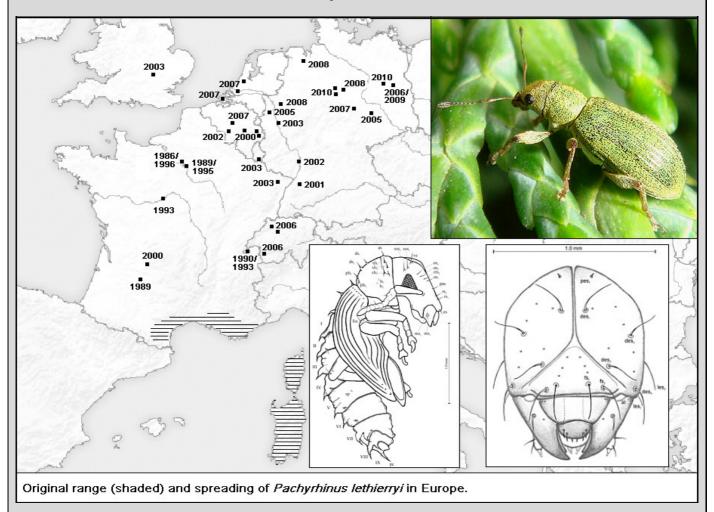
Reitter E. (1890): Neue Coleopteren aus Europa, den angrenzenden Ländern und Sibirien, mit Bemerkungen über bekannte Arten. 9. Teil. - Deutsche entomologische Zeitung: 145-164.

- * 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.

Address of the author: Dr. Peter E. Stüben, CURCULIO-Institute, Hauweg 62, 41066 Mönchengladbach, Germany, e-Mail: P. Stueben@t-online.de

SNUDEBILLERonline - SNUDEBILLERonline - SNUDEBILLERonline

New publication



The following interactive contributions were published in *SNUDEBILLER* online: August 1st, 2010

Gosik, R., Hirsch, J., Sprick, P. (2010): Biology and molecular determination of *Pachyrhinus lethierryi* (Desbrochers, 1875) with description of the mature larva and pupa (Coleoptera, Curculionidae, Entiminae: Polydrusini) - SNUDEBILLER 11, Studies on taxonomy, biology and ecology of Curculionoidea, Mönchengladbach: CURCULIO-Institute, 80 - 95, with 1 map, 90 colour photos arranged to 19 photo tables, 1 black-and-white photo and 22 line drawings.

Original range, spreading, life-cycle, egg-laying behaviour, habitat and host plants of *Pachyrhinus lethierryi* (Desbrochers, 1875) and its larvae were studied. The mature larva and the pupa are described, illustrated and compared to immature life stages of *Pachyrhinus mustela* (Herbst, 1797) for the first time. In addition to the morphological description, a fragment of the cytochrome oxidase subunit II (COII) was analysed and a diagnostic molecular marker for the identification of *Pachyrhinus lethierryi*, independent of the developmental stage, was generated.

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 *SNUDEBILLER*online: "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.