Curculio Institute
Weevil *News*
Center for Studies on European / Palearctic Curculionoidea
PDF
Complying with the rules of the *ICZN*
ISSN 1615-3472

Weevil *News* **12 July 2010** **No. 53**

Hemitrichapion gomerense sp.n.
(Coleoptera: Curculionoidea: Apionidae)*

by

Peter E. Stüben, Mönchengladbach & Lutz Behne, Müncheberg

with 9 figures

Received: 1 June 2010
Accepted: 28 June 2010
Published in Internet: 12 July 2010
**In print: 12 July 2010

Abstract
A new species of the weevil genus *Hemitrichapion* (*Lotapion*) Voss 1959 is described from the Canary Islands (La Gomera). This species is distinguished from the related species ***Hemitrichapion* (*Lotapion*) *wollastoni* Chevrolat 1852** from Madeira (a simultaneous designation of a lectotype is given by Morris & Stüben (Morris in press)) and ***Hemitrichapion (Lotapion) wagneri* (Flach 1906)** from Spain and Portugal. *Apion rotundipennis* Wollaston 1854 is not a synonym of *Apion wollastoni* Chevrolat 1852; with 9 figures.
Key words. Curculionoidea, Apionidae, *Hemitrichapion, Holotrichapion,* new species, taxonomy, Spain, Portugal, Madeira, Canary Islands, La Gomera.

Introduction

During the last 10 years we have undertaken more than two dozen research excursions to the Makaronesian Islands to search for Cryptorhynchinae. In conjunction with work on the planned „Encyclopedia of the Curculionoidea of the Makaronesian Islands“ in the WWW (Stüben, Behne & Brunner, from 1st December 2010), the non-target captures of weevils are at present being evaluated. It is therefore not surprising, that many new species are thus first coming to our attention. In issues no. 53 and no. 54 of the Weevil *News*, we make a start by presenting the descriptions of a new Apioninae and a new Bagoinae.

Hemitrichapion gomerense sp.n.

Type material
Holotype. **1**♂, „E: Canary Is., La Gomera, Hermigua to Las Caletas, succulent bush zone, 28°10'28"N 17°10'39"W, 216 m, 25.12.2009, leg. Stüben (33)“; coll. Curculio-Institute, D-Mönchengladbach. / ***Paratypes.*** **1**♂, **1**♀, data as for holotype, coll. Stüben, coll. Behne.

Description (Fig. 1, 2, 6, 7)

Length. 1.9 – 2.5 mm (without rostrum).
Head* & *Rostrum. Eyes in lateral view oblong-oval rounded, with a margin of white scales and with some distant and long hair-shaped scales on the lower side; frons nearly as wide as the rostrum between the insertion of the antennae; rostrum hardly curved, also with fine and white scales above antennal insertion, 5.1x as long as wide (Fig. 6); antennae inserted in the middle (♂) and - like the whole habitus – bronze-coloured; 1st segment of the funicle stout, 2nd also long, but considerably more slender, 3rd – 6th shortened, 7th as long as wide.
Pronotum. As long as wide; base-margin 1.26x longer than the fore-margin, widest at the end of the first third of the pronotum, laterally slightly rounded, with a fine longitudinal hollow on the disk in front of the base (cf. Fig.6), closely punctuate, the punctures less than 1/3 diameter apart, “hairs” adpressed and dense, the end of each white scale abuts against the following.
Elytra. Bronze-coloured, short, slightly egg-shaped rounded, 1.26x as long as wide; in lateral view, contour-line of the elytra, which clearly surpasses the line of the pronotum, forms a constant arc of a circle; 1.66x as long as high; the base of elytra is straight. Elytral striae with long, nearly rectangular punctures, the puncture stripes are clearly more slender than the elytral intervals, these are finely and flatly punctuated and covered with two rows of long, white and adpressed capillary scales placed predominantly in a v-shaped (sometimes forming irregular rows); the end of each white hair-scale abuts against the following; scales in the elytral striae similar to those on the intervals, but are more separated from each other (clearly visible on the elytral slope); scutellum tiny, rounded.
Legs. Slender; front femora, weakly swollen, reach the antennal insertion of rostrum, the hind femora ending directly in front of the elytral apex; protarsus 3x as long as wide, tarsomeres trapezoidal, the 1st tarsomere 1.5x, the second 1.2x as long as wide; legs covered with shorter scales than on elytra, their distance on the femora is larger.
Female genital: See **s**permatheca (Fig. 7).
Aedeagus. Tegminal plate 1.9x as long as wide; median lobe of the aedeagus tapered (Fig. 2).

Differential diagnosis

Type material examined: *Apion wollastoni* Chevrolat 1852, designation of a lectotype (♀) by Morris & Stüben (Morris, in press) and 2♂/1♀, Institut Royal des Sciences Naturelles de Belgique, see also (Fig. 3) / *Apion rotundipenne* Wollaston 1854, designation of lectotype (♂) and 3 paralectotypes (1♂/2♀) by Alonso-Zarazaga (only by labelling, cf. Alonso-Zarazaga 1990), Natural History Museum, London, coll. Wollaston, see also (Fig. 8, 9).
The new species is closely related to *Hemitrichapion* (*Lotapion*) *wollastoni* Chevrolat 1852 from Madeira and *Hemitrichapion* (*Lotapion*) *wagneri* (Flach 1906) from Iberian Peninsula:

Hemitrichapion gomerense. 1. elytra slightly egg-shaped rounded; 1.26x as long as wide; bronze-coloured (Fig. 1); 2. scales on elytral intervals longer, closely placed and stout; 3. rostrum (♂) longer: nearly 5x as long as wide (Fig. 6); 4. aedeagus wider, apex of median lobe shorter (Fig. 2).
Hemitrichapion wollastoni. 1*. elytra oblong-oval rounded; 1.36x as long as wide; black (Fig. 3); 2*. scales on elytral intervals shorter and finer; 3*. rostrum (♂) shorter: nearly 4x as long as wide (Fig. 3); 4*. aedeagus more slender, apex of median lobe clearly longer (Fig. 3).
Hemitrichapion wagneri. 1**. elytra wider, more square-edged, blue (Fig. 4); 3**. rostrum (♂): nearly 4.5x as long as wide; 4**. aedeagus more slender, apex of median lobe clearly longer (Fig. 5).
The three species of *Hemitrichapion* are completely different from *Holotrichapion* (*Nesapion*) *rotundipennis* Wollaston 1854 **resyn.** (cf. Alonso-Zarazaga, 1990: 128) from Madeira (locus typicus) and the Canary Islands: This species has 1. copper-brilliant elytra, 2. these are strongly egg-shaped (Fig. 8), 3. elytral striae are wider with deeper and more strong rectangular punctures (Fig. 8) and 4. the aedeagus is more slender, with parallel sides and a rounded (not tapered) apex in ventral view (Fig. 9).
Ecology. *Hemitrichapion gomerense* was discovered by the first author on the north side of La Gomera near Hermigua (Barranquillos los Alamos) at the end of December 2009, and was probably beaten from riparian *Lotus glaucus* Dryand. (or the similiar species *Lotus emeroides* Murr.).
Etymology. The species name refers to the type locality in the succulent bush zone (216 m) on La Gomera (Canary Islands).
Distribution. *Hemitrichapion gomerense* is so far only known from La Gomera.

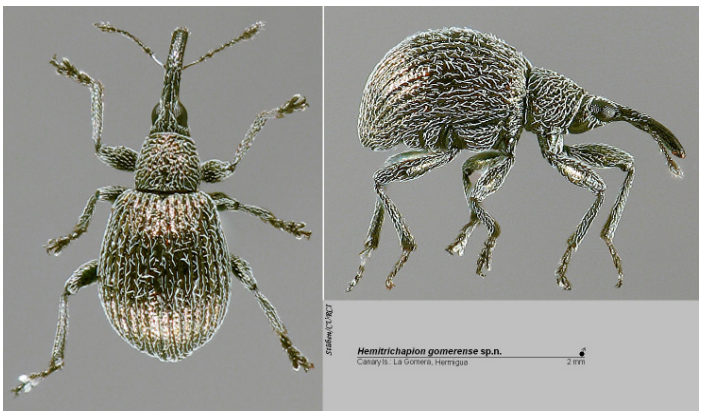

Fig. 1 *Hemitrichapion gomerense* sp.n. – HT, habitus (dorsal/lateral)

Fig. 2 *H. gomerense* sp.n. – HT, aedeagus (ven./lat.) / tegmen

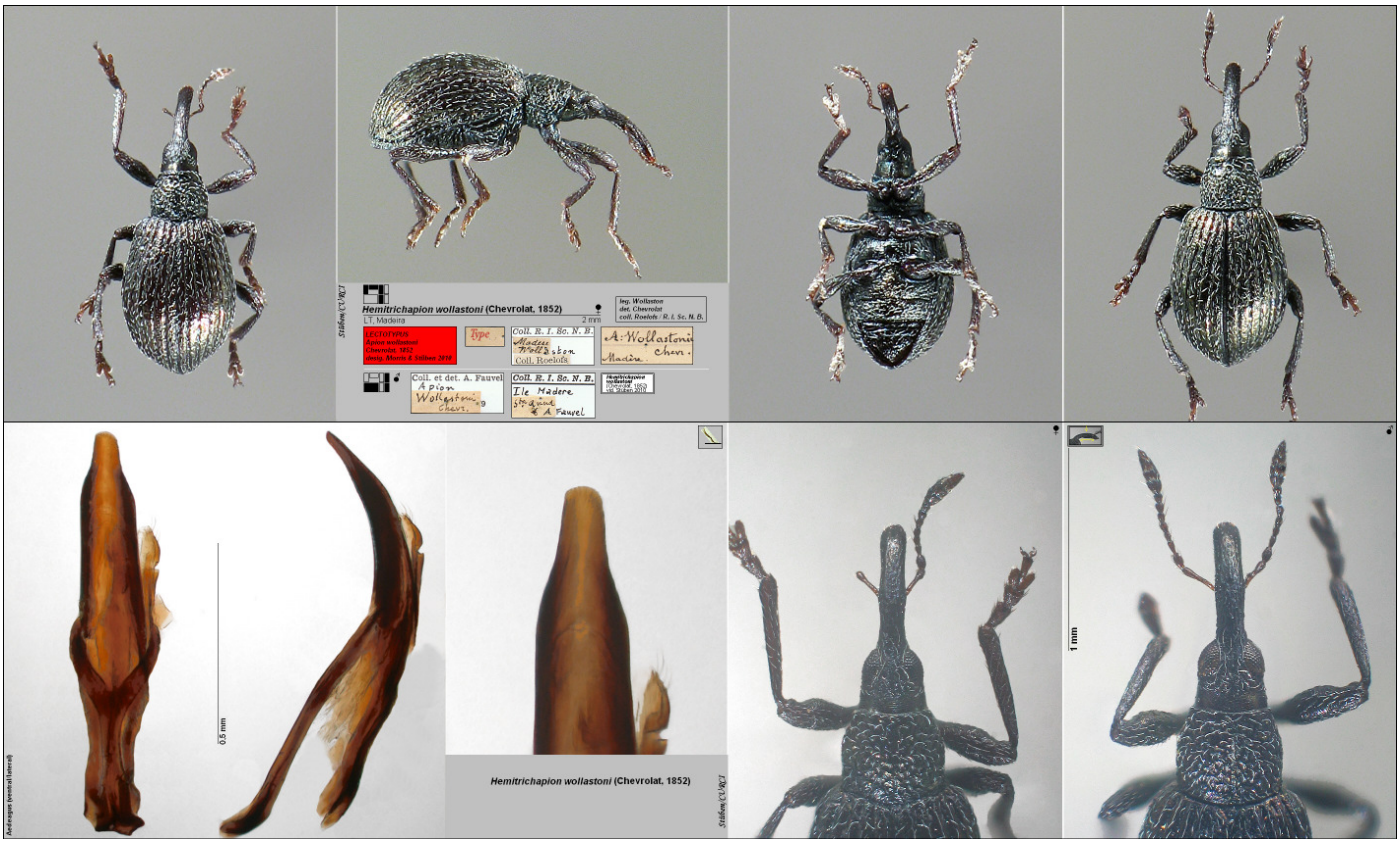

Fig. 3 Table of *Hemitrichapion wollastoni Chevrolat 1852* from Madeira – female (lectotype) & male (habitus, aedeagus & rostrum)

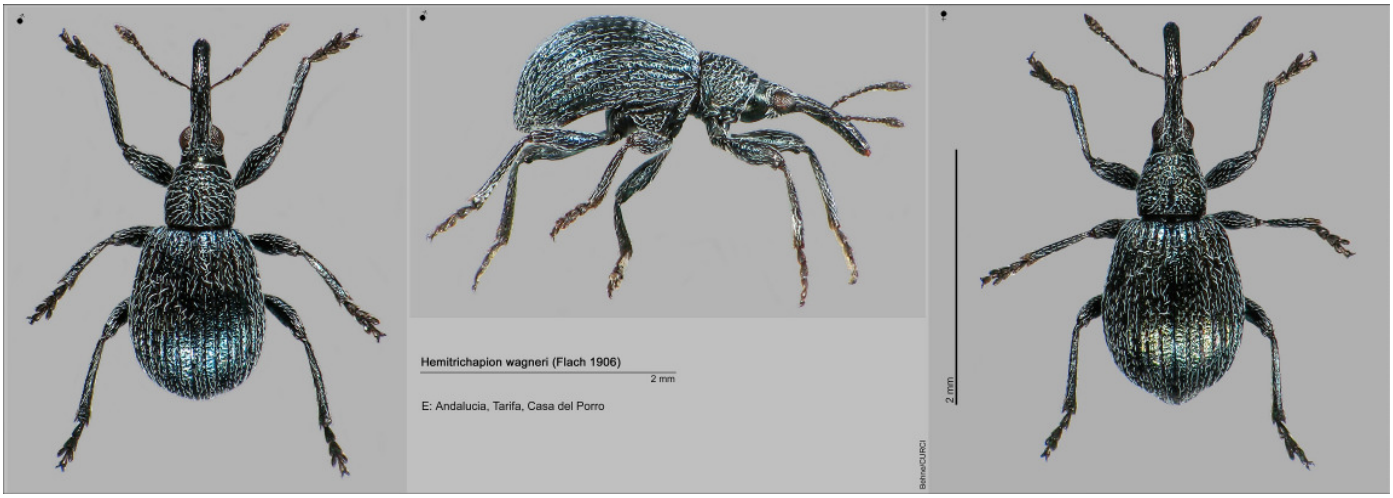

Fig. 4 *Hemitrichapion wagneri* (Flach 1906) from Spain - habitus (♂, dorsal/lateral; ♀, dorsal)

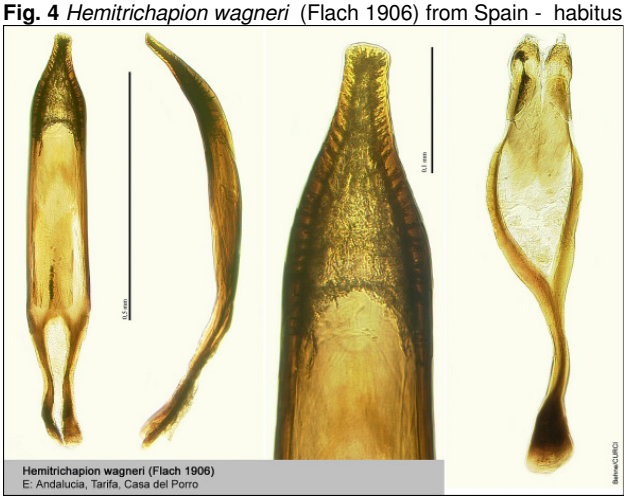

Fig. 5 *H. wagneri* (Flach 1906) - aedeagus (ven./lat.) / tegmen

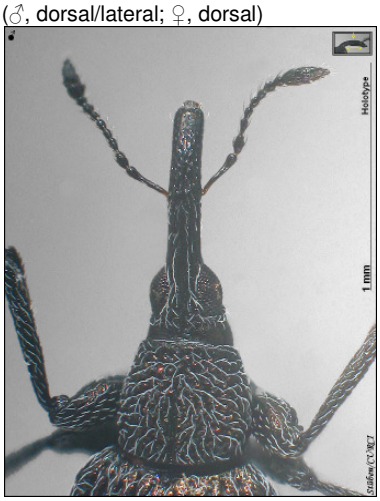

Fig. 6 *H. gomerense* - HT, rostrum (♂)

Fig. 7 *H. gomerense* - PT,spermatheca

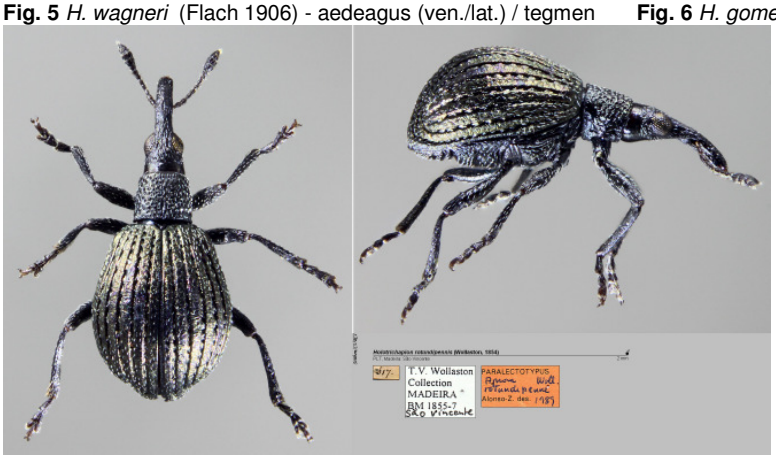

Fig. 8 *Holotrichapion rotundipennis* Wollaston 1854 from Madeira – PLT, ♂

Fig. 9 *H. rotundipennis* – PLT, aedeagus (ven./lat.) / tegmen

References

Alonso-Zarazaga, M.A. (1990): Revision of the supraspecific taxa in the palaearctic Apionidae Schönherr, 1823 (Coleoptera, Curculionoidea). 2. Subfamily Apioninae Schönherr, 1823: Introduction, keys and descriptions. - *Graellsia*, *Madrid* **46** [1991]: 19-156, 531 Fig. (31.XII.1990).

Chevrolat, L.A.A. (1852): Description de trois Coléoptères. - *Revue et Magasin de Zoologie pure et appliqué (Sér. 2), Paris* **4**(12): 578-579.

Flach, K. L. (1906): Zwei neue Coleopteren aus Portugal. - *Wiener entomologische Zeitung*, Wien **25**(2-4): 119-122.

Wollaston, T. V. (1854): Insecta Maderensia; being an account of the insects of the Islands of the Madeiran group, London, 43+634 pp. (13pls).

The authors: Dr. Peter E. Stüben, CURCULIO-Institute, Hauweg 62, D-41066 Mönchengladbach, Germany, E-Mail: P.Stueben@t-online.de
Lutz Behne, SDEI, Eberswalder Str. 90, D-15374 Müncheberg, lbehne@senckenberg.de

* *Price of printable version: 9,- € + 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***: *Zool. Record.*

*SNUDEBILLER*online - *SNUDEBILLER*online - *SNUDEBILLER*online - *SNUDEBILLER*online

New publications

Nicht mit letzter Sicherheit können wir sagen, ob in diesem Seitental bei Tacheddirt Kyklioacalles cf. oukaimedensis aus dem Detritus von Daphne oder unter Erinacea gesiebt wurde. An dieser Stelle fanden sich Exemplare, deren Elytren annähernd parallelseitig und sehr langgestreckt waren (nicht 'umkehrt eiförmig' wie bei der Nominatart K. oukaimedensis) und die noch eine Reihe weiterer auffälliger Merkmalsunterschiede aufwiesen.

Grebennikov/Stüben/CURCI

The following interactive contributions were published in *SNUDEBILLER*online:
July 1st, 2010
Stüben, P.E., Behne, L. & Grebennikov, V.V. (2010): Rüsselkäfer-Gesiebe-Exkursion des CURCULIO-Instituts im Frühjahr 2009 nach Marokko - unter besonderer Berücksichtigung der Cryptorhynchinae-Fauna. (Coleoptera: Curculionoidea) **-** SNUDEBILLER **11**, Studies on taxonomy, biology and ecology of Curculionoidea, Mönchengladbach: CURCULIO-Institute, 54-79, **mit 249 Abbildungen, 18 Tafeln und 14 Karten.**.

From April 28th to May 15th, 2009, the ninth sifting excursion of the CURCULIO-Institute took place in the western and central parts of Morocco. Biotopes and finding circumstances of many Curculionoidea, in particular of Cryptorhynchinae, are presented, and habitats are described. Finally a complete species list of all collected weevils is given (148 species). Habitus and aedeagus of many species and of such species, that could not be identified, are pictured; with 249 colour photographs, 18 tables and 14 maps.

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.