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## THE FIFTH ENDEMIC *STENUS* FROM MADEIRA: *STENUS (TESNUS) RUIVOMONTIS* SPEC. NOV. (COLEOPTERA, STAPHYLINIDAE)

By VOLKER ASSING \* and PAUL WUNDERLE\*\*

With 2 figures

*ABSTRACT:* *Stenus (Tesusus) ruivomontis* spec. nov., a new endemic species from Madeira, is described. Differential characters allowing separation from *S. heeri* Woll. and *S. wollastoni* Gemm. & Har. are pointed out and illustrated.

*RESUMO:* A quinta espécie endêmica de *Stenus* da Madeira: *Stenus (Tesusus) ruivomontis* spec. nov. (Coleoptera, Staphylinidae) é descrita no presente trabalho. São referidos e ilustrados os caracteres que permitem a distinção entre *S. heeri* Woll. e *S. wollastoni* Gemm. & Har.

### INTRODUCTION

Hitherto, four endemic species of the genus *Stenus* have been known to occur in Madeira: *Stenus (s.str.) undulatus* Woll., *S. (Tesusus) heeri* Woll., *S. (Tesusus) wollastoni* Gemm. & Har. and *S. (Parastenus) maderensis* Puthz (PUTHZ 1966; 1980). During a joint excursion to Madeira in spring 1993 we collected 5 specimens of a further species of the *brunnipes*-group (subgenus *Tesusus*), which is described below.

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\* Gabelsbergerstr. 2, D-3000 Hannover 1

\*\* Hehnerstr. 15, D-4050 Mönchengladbach

***Stenus (Tesus) ruivomontis spec. nov.*****Type material:**

Holotype, ♂, Madeira, Achada do Teixeira, 1350m, 6.IV.1993 (coll. Assing).

Paratypes, 1 ♂, 3♀♀, same data as holotype (1 ♂, 1 ♀ in coll. Wunderle, 1 ♀ in coll. Assing, 1 ♀ in coll. Puthz).

**Description:**

General appearance very similar to that of *S. heeri* Woll.

Body length 3,0-3,65 mm; length from front margin of labrum to elytral apex 1,35-1,44 mm.

Head, pronotum, elytra and abdomen black, maxillary palps yellowish to light brown with the last segment darkened, antennae red-brown to pitchy-brown, legs red-brown to dark brown with the tip of the femura a little darker.

Body surface with subdued shine due to coarse punctuation, the elytra almost completely mat.

Head slightly (1,01-1,08x) wider than elytra (head width 218-233 µm), frons with weakly elevated median area (as in *S. heeri*).

Pronotum slightly (1,0-1,12x) broader than long (length 162-188 µm, width 168-191 µm), its punctuation somewhat coarser than that of the head.

Elytra very short (at suture 128-146 µm), maximal width 196-226 µm, sometimes with shallow longitudinal impressions on disk, punctuation very coarse; hind wings reduced.

Density and depth of punctuation on abdomen similar to that of the head; base of first abdominal tergites without carinae.

Shape of tarsal segments as in *S. heeri*.

♂ : posterior margin of sternite VIII very shallowly concave; aedoeagus and sternite IX as in fig. 1a, 2a.

♀ : valvifer as in fig. 2a.

**Separation from *S. heeri* and *S. wollastoni*:**

The most prominent external characters distinguishing *S. ruivomontis* sp. n. from the two other Madeiran *Tesus* species are its less shiny appearance, coarser elytral punctuation, smaller body size (length from front margin of labrum to elytral apex in *S. heeri* 1,40-1,60 mm, in *S. wollastoni* 1,60-1,80 mm) and shorter elytra (length of suture in *S. heeri* 148-185 µm, in *S. wollastoni* 157-180 µm). In addition, *S. wollastoni* is characterized by the shape of the 4th tarsal segments, which are relatively wider and more emarginate, and the deeper elytral impressions, which are sometimes absent in the new species.

The aedoeagus of *S. ruivomontis* sp. n. is smaller (420 µm) than and not as slender as in *S. wollastoni*, the apical portion of the median lobe lacks the short ventral carina that is typical of *S. heeri*, and the internal structures are different (fig. 1); the latter particularly refers to the shape of the strongly sclerotized expulsion mechanism, a character which is of

high taxonomic value in the respective group (PUTHZ, in prep.).

It should be noted here that the size (445-535  $\mu\text{m}$ ) as well as the shape of the aedeagus in *S. heeri* is subject to comparatively high variability; particularly, the median lobe may be more rounded latero-apically and therefore appear less slender than depicted in the illustration (fig. 1b).

The shapes of sternite IX in the males as well as the valvifer in the females are of little diagnostic value, since they are rather similar and may vary to some extent (fig. 2; see also fig. 4 and fig. 6-8 in PUTHZ (1966)).

**Ecology and distribution, with notes on *S. heeri* and *S. wollastoni*:**

All five specimens of *S. ruivomontis* sp. n. were collected only on one location: below Achada do Teixeira, ca. 5km NE Pico Ruivo, in the northeast of Madeira proper, at an altitude of 1350m. They were sieved from deep litter layers in a stand of old *Erica arborea* on a slope with northern exposition.

In contrast to *S. ruivomontis* sp. n., *S. heeri* appears to be rather abundant at altitudes between 1220 and 1750m. Altogether 66 specimens were collected by the present authors on various locations with northern, northeastern and northwestern exposition, especially in stands of *Erica arborea*, *Vaccinium padifolium* and *Ulex europaeus*. In some places *S. heeri* was observed to co-occur with *S. ossium*, apparently the most common and eurytopic *Stenus* species on Madeira.

*S. wollastoni*, on the other hand, was sampled only at Queimadas (900m) from moss and grass vegetation near a waterfall (6 specimens) and at Bica da Cana (1550m) in a stand of *Erica arborea* and *Vaccinium padifolium* (1 specimen).

**Derivatio nominis:**

The name refers to Pico Ruivo, the highest mountain peak on Madeira proper, below which the new species was collected.

## REFERENCES

PUTHZ, V.:

- 1966. Die *Stenus*-Arten Madeiras und der Kanarischen Inseln (Coleoptera Staphylinidae). 21. Beitrag zur Kenntnis der Steninen. *Entomol. Blätter*, **62**: 129-149.
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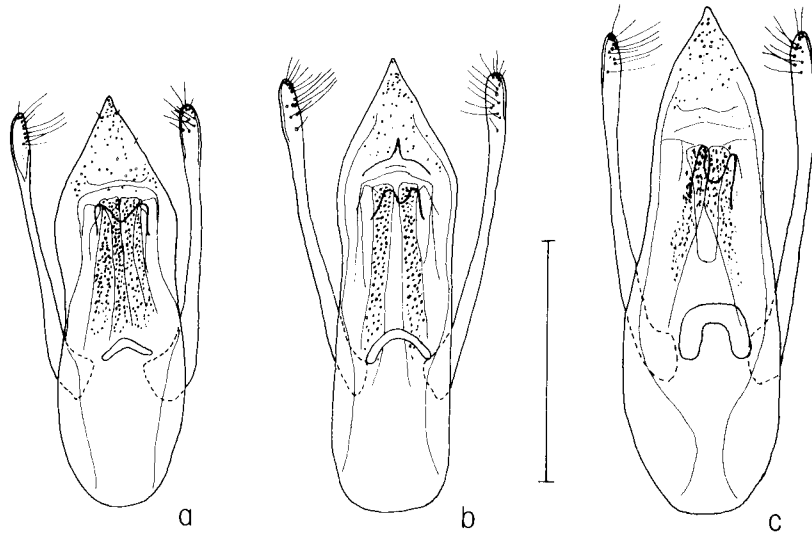


Fig. 1: Aedeagi of a) *Stenus ruivomontis* sp. n. (holotype), b) *S. heeri* and c) *S. wollastoni*. Scale: 0.25 mm.

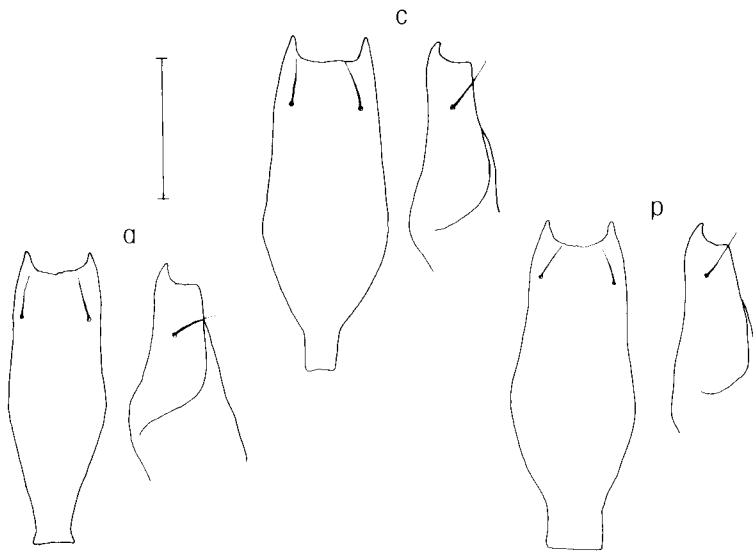


Fig. 2: ♂ IX sternite (left) and ♀ valvifer (right) of a) *S. ruivomontis* sp. n., b) *S. heeri* and c) *S. wollastoni*. Scale: 0.25 mm.