

Linzer biol. Beitr.	32/1	79-84	31.5.2000
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## A new species of *Cantaberella* TRONQUET 1998 from northwestern Spain (Coleoptera: Staphylinidae, Aleocharinae)

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**Abstract:** *Cantaberella feldmanni* sp. n. is described from the Sierra de Teleno in northwestern Spain and distinguished from the type species and sole congener, *C. pacei* (TRONQUET). The primary and secondary male sexual characters of the new species are figured. Based on phylogenetic arguments, *Cantaberella* TRONQUET, which was originally described as a subgenus of *Alpinia* BRUNDIN, is regarded as a distinct genus.

**Key words:** Coleoptera, Staphylinidae, Aleocharinae, *Cantaberella*, *Alpinia*, Palearctic region, Spain, taxonomy, new species

### Introduction

Based on a new species from Cantabria, *Alpinia pacei*, TRONQUET (1998) established the genus group taxon *Cantaberella*, which he attributed as a subgenus to the genus *Alpinia* BRUNDIN 1948 because of the short metasternum, the morphology of the mouthparts, and the trapezoid shape of the pronotum. He distinguished the new subgenus from other *Alpinia* by the shape of the spermatheca, the absence of a basal transverse impression on the abdominal tergum VI, and the isolated distribution, which was far outside the known range of *Alpinia*.

Staphylinid material from northern Spain sent to me by Benedikt Feldmann, Münster, contained four specimens of Aleocharinae which, after comparison with material of *A. pacei* from the type locality, proved to represent an undescribed close relative of that species.

### Systematics

A comparative study of *A. pacei* TRONQUET, the new species described below, the type species of *Alpinia* BRUNDIN, *A. alpicola* (MILLER 1859), and other *Alpinia* species from the Alps, Slovakia, and the Balkans revealed that the taxa from northern Spain differ from *Alpinia* (s. str.) significantly. The former are distinctly smaller and (especially the abdomen) of more slender build. In addition, they are of distinctly lighter colour (testaceous, with only the abdomen infuscate), the forebody is less densely punctured and more shining, and the antennae have more transverse antennomeres IV-X. The ligula is deeply bifid (Fig. 1) (in *A. alpicola* only weakly split at apex), longer and more slender, the maxillary palpi are less densely pubescent (Fig. 3), the labrum is more strongly trans-

verse, and its chaetotaxy is different (Fig. 2). In the ♀, the hind margin of the abdominal sternum VIII is triangularly emarginate in the middle (Figs 11, 15). The most striking differences, however, are found in the genitalia: the spermatheca has a coiled and much longer duct (Fig. 7), the median lobe of the aedeagus is of completely different basic morphology (Figs 4, 5), and the apical lobe of the paramere has a long terminal seta (Fig. 6). For illustrations of the morphology of the genitalia in *Alpinia* (s. str.) see e. g. ZERCHE (1995).

The characters on which TRONQUET (1998) based the systematic position of *Cantaberella* (see above) do not convincingly justify an inclusion in *Alpinia*. A transverse pronotum can be found in many Athetini and is either plesiomorphic or homoplastic. Furthermore, I have been unable to appreciate the length of the metasternum as a distinctive character, and, as stated above, the morphology of the mouthparts is not as similar as claimed by TRONQUET (1998). Finally, the distribution of *Cantaberella* is apparently confined to the Cordillera Cantábrica and is indeed far outside the range of *Alpinia*, whose westernmost representatives occur in the eastern Alps.

Consequently, it seems most unlikely that the similarities shared by *Cantaberella* and *Alpinia* (s. str.) should represent synapomorphies and that both taxa should be sister groups. There is, in fact, evidence that *Alpinia* is more closely related to some species currently included in *Atheta* THOMSON 1858. For these reasons, it is here proposed to treat *Cantaberella* TRONQUET as a distinct genus.

#### *Cantaberella feldmanni* sp. n.

**H o l o t y p e** ♂, E. LEON, 22.V.1999, S.d. Teleno, 2000m, w. Alto Las Portilinas, leg. B. Feldmann / Holotypus *Cantaberella feldmanni* sp. n. det. V. Assing 2000 (coll. Assing).

**P a r a t y p e s**: 1♂, 2♀: same data as holotype (coll. Feldmann, coll. Assing).

**D e s c r i p t i o n**: Measurements (range in mm, n=4): maximal head width: 0.25 - 0.26; maximal width of pronotum: 0.27; length of pronotum along median line: 0.23 - 0.24; length of elytra from apex of scutellum to elytral hind margin: 0.13 - 0.14; elytral width: 0.27 - 0.29; total length from apex of mandibles to hind margin of tergum VIII: 1.7 - 1.8.

In coloration similar to *C. pacei* (TRONQUET), i. e. bicoloured, with the forebody and the appendages testaceous and the abdomen, except for the apex, infusate. Body of similar size and proportions, but on the whole slightly more slender.

Head and pronotum similar to *C. pacei*, but pronotum relatively narrower, only 1.05 - 1.10x wider than head. Pronotum as in *C. pacei* with sexual dimorphism; in the ♂ along median line with shallow, in the middle finely sulcate impression, which is absent in the ♀. Elytra at suture only little more than half the length of pronotum. Hind wings completely reduced. Abdominal segments III - VII as in *C. pacei*.

♂: posterior margin of tergum VIII truncate (Fig. 8), that of sternum VIII moderately convex (Fig. 9); median lobe of aedeagus and apical lobe of paramere as in Figs 4-6.

♀: posterior margin of tergum truncate (Fig. 10), that of sternum VIII triangularly incised in the middle (Fig. 11); spermatheca as in Fig. 7.

**D e r i v a t i o n o m i n i s**: I dedicate this species to my friend and colleague Benedikt Feldmann, Münster, who collected the type species and who takes special interest in the staphylinid fauna of northern Spain.

**Comparative notes:** For external characters separating *C. feldmanni* from its only congener, *C. pacei*, see the description above. Both species are particularly distinguished by the primary and secondary sexual characters. In *C. pacei*, the hind margin of the ♂ tergum VIII is shallowly concave (Fig. 12), that of the ♂ sternum VIII is more strongly convex (Fig. 13), the ♀ tergum VIII is weakly concave posteriorly (Fig. 14), and the triangular incision of the ♀ sternum VIII is slightly less pronounced (Fig. 15). In addition, the spermatheca and especially the aedeagus are of different shape (see Figs 2-5 in TRONQUET 1998). From similar small species of *Geostiba* THOMSON 1858, both species of *Cantaberella* are best separated by the more transverse pronotal pubescence and by the morphology of the genitalia.

**Distribution and bionomics:** *C. feldmanni* is known only from the Sierra del Teleno, northwestern Spain, some 200 km ESE of the type locality of *C. pacei*, the Pico de Tres Mares near Reinosa. Like the latter species (TRONQUET 1998, WUNDERLE pers. comm.), it was found under stones near snow at an altitude of ca. 2000m (FELDMANN pers. comm.).

### Acknowledgements

I am indebted to Benedikt Feldmann for providing the material of the new species and for the generous gift of the holotype as well as to Paul Wunderle, Mönchengladbach, to whom I owe specimens of *C. pacei* from the type locality for comparison.

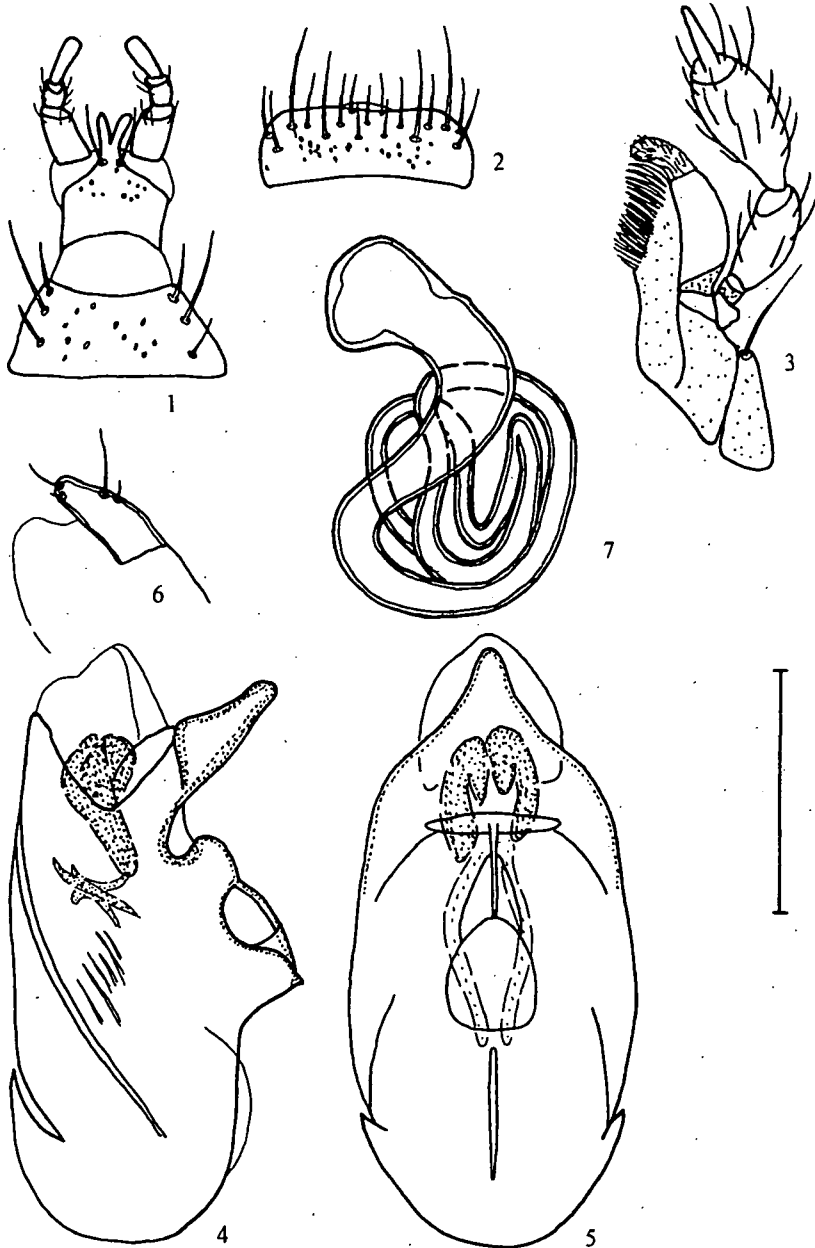
### Zusammenfassung

*Cantaberella feldmanni* sp. n. wird von der Sierra del Teleno in Nordwestspanien beschrieben und von der Typusart *C. pacei* (TRONQUET) unterschieden. Die primären und sekundären Sexualmerkmale werden abgebildet. *Cantaberella* TRONQUET, ursprünglich als Untergattung von *Alpinia* BRUNDIN beschrieben, wird aus phylogenetischen Gründen als distinkte Gattung betrachtet.

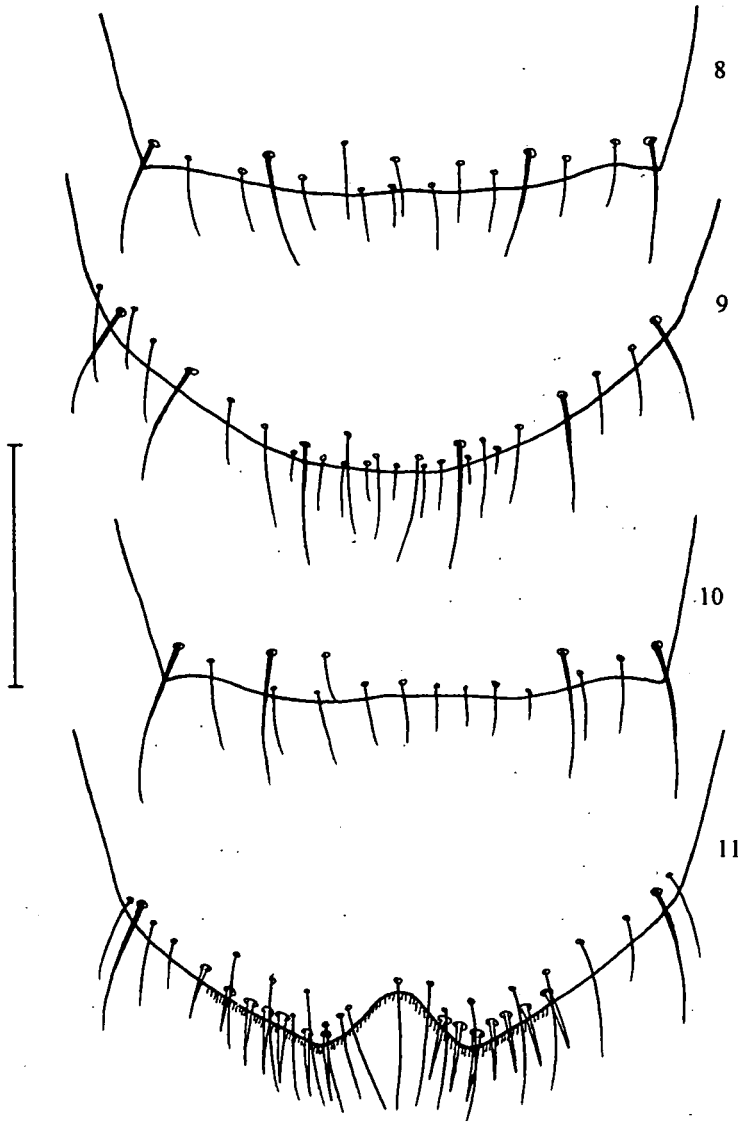
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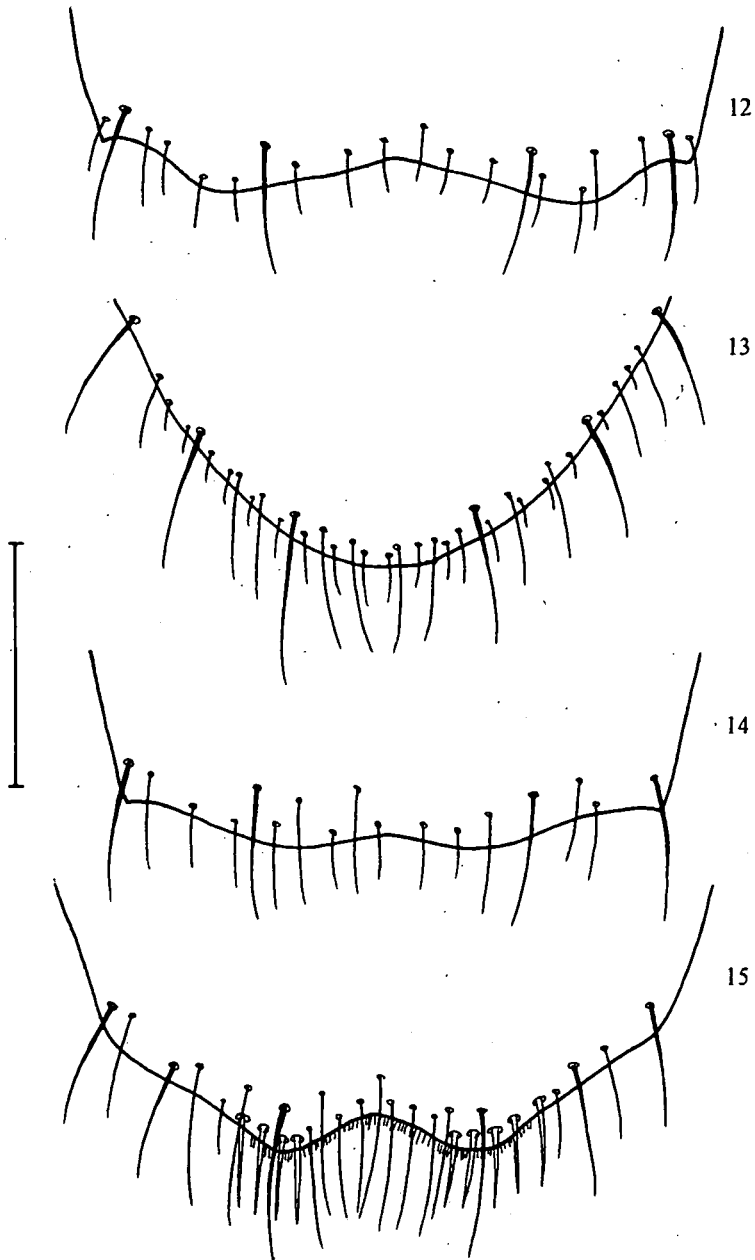
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Figs 1-7: *Cantaberella feldmanni* sp. n.: 1 - labium; 2 - labrum; 3 - maxilla; 4, 5 - median lobe of aedeagus in lateral and in ventral view; 6 - apical lobe of paramere; 7 - spermatheca. Scale: 0.1 mm.



Figs 8-11: *Cantaberella feldmanni* sp. n.: 8 – hind margin of ♂ tergum VIII; 9 – hind margin of ♂ sternum VIII; 10 – hind margin of ♀ tergum VIII; 11 – hind margin of ♀ sternum VIII. Scale: 0.1 mm.



Figs 12-15: *Cantaberella pacei* (TRONQUET): 12 – hind margin of  $\delta$  tergum VIII; 13 – hind margin of  $\delta$  sternum VIII; 14 – hind margin of  $\text{q}$  tergum VIII; 15 – hind margin of  $\text{q}$  sternum VIII. Scale: 0.1 mm.