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A new genus of Falagriini from the Canary Islands

(Coleoptera: Staphylinidae, Aleocharinae)

With 11 figures

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Summary

Euphorbagria gen. n., presently containing only the designated type species *E. rotundicollis* (LINDBERG) from Tenerife, is described and distinguished from closely related falagriine genera, particularly *Myrmecopora* SAULCY, *Falagrioma* CASEY, *Falagria* LEACH and *Anaulacaspis* GANGLBAUER. A lectotype is designated for *Falagria rotundicollis* LINDBERG. A detailed redescription of the type species, illustrations of diagnostic characters including the genitalia and comments on distribution and bionomics are provided.

Zusammenfassung

Die Gattung *Euphorbagria* gen. n., gegenwärtig mit nur einer Art, der designierten Typusart *E. rotundicollis* (LINDBERG) von Teneriffa, wird beschrieben und von nahverwandten Falagriinengattungen, insbesondere *Myrmecopora* SAULCY, *Falagrioma* CASEY, *Falagria* LEACH und *Anaulacaspis* GANGLBAUER, unterschieden. Für *Falagria rotundicollis* LINDBERG wird ein Lectotypus designiert. Eine ausführliche Redeskription der Typusart wird durch Abbildungen von Differentialmerkmalen, einschließlich der Genitalien, sowie durch Angaben zur Verbreitung und zur Bionomie ergänzt.

Keywords: Coleoptera - Staphylinidae - Aleocharinae - Falagriini - *Euphorbagria* - *Falagria* - Palearctic - Canary Islands - taxonomy - lectotype designation - new genus

Introduction

In his revision of Nearctic Falagriini HOEBEKE (1985) raised former subgenera of *Falagria* LEACH to generic level, among them *Anaulacaspis* GANGLBAUER and *Falagrioma* CASEY (see FENYES 1920; GANGLBAUER 1895; LOHSE 1974, 1989), basing his concept on a phylogenetic analysis, which again was later modified through the inclusion of further characters, but in principle confirmed by AHN & ASHE (1995).

When treating the North African *Myrmecopora gravata* PEYERIMHOFF, which apparently inhabits dead *Euphorbia*, in the course of a revision of Palearctic *Myrmecopora* SAULCY, I first suspected that *Falagria rotundicollis* LINDBERG from the Canary Islands might be related to this species, since according to personal observations it appears to have a similar ecology. An examination of its external morphology, the mouthparts and the genitalia, and a comparison with other falagriine genera, however, revealed that *F. rotundicollis* is neither a *Myrmecopora* nor a *Falagria* LEACH (sensu HOEBEKE 1985), but belongs to a new genus apparently closely related to *Falagrioma* CASEY.

Euphorbagria gen. nov.

Type species: *Falagria rotundicollis* LINDBERG, 1953, present designation.

Description

In size and general proportions similar to *Falagria* and allied genera; microsculpture of integument absent, except for the vestigial tergum II and anterior margins of terga IV-VI.

Head subquadrate, posterior corners evenly rounded; dorsally weakly convex, without impressions; neck slender, ca. 2/7 of head width; eyes developed, almost as long as temples in lateral view; antennae with antennomeres 1-3 distinctly elongate and subequal in length, 4 weakly elongate, 5-8 subquadrate, 9-10 weakly transverse, and 11 elongate but shorter than the combined length of the two preceding segments; antennomeres 4-10 gradually increasing in width (Fig. 1).

Labrum distinctly transverse with membranous appendage anteriorly, without spine-like setae (Fig. 4); mandibles asymmetrical, apically acute and curved, right mandible with obtuse molar tooth and with or without a row of faint teeth in dorsal molar region, both absent in left mandible (Fig. 3); maxillary and labial palpi 4- and 3-jointed, respectively; ligula bifid (Fig. 2). Pronotum with maximal width in first half, narrowed posteriorly; dorsally in both sexes with distinct, narrow, but not very deep median sulcus, which is effaced near the anterior and posterior margin; hypomera visible in lateral view and separated from disk by carina; middle of prosternum obtusely pointed.

Elytra \pm uniformly punctate, wider than and at suture (measured from apex of scutellum to hind margin of elytra) subequal in length to pronotum, with a shallow depression at suture behind scutellum; scutellum coarsely punctate and mat, without carina; alae present, macropterous.

Mesospiracular peritremes large, contiguous and subquadrate; mesosternal process broad, roughly rectangular, its apex rounded and reaching between mesocoxae; mesocoxal acetabula not margined posteriorly; mesosternum on same level as metasternum.

Legs not distinctly elongate; hind tarsi clearly shorter than hind tibiae; first tarsomere of metatarsus longer than second, but shorter than the combined length of the second and third; tarsal formula 4,5,5.

Abdomen narrower than elytra, maximal width at terga V-VI; terga III-V with transverse impression anteriorly; anterior ridge of basal impression of terga IV and V protruding caudad in the middle; sternum IV with gland opening anteriorly; apical margin of tergum VIII convex centrally and with a comb-like row of ca. 13-15 short but very stout spines (Fig. 9); posterior margin of sternum VIII in ♀♀ faintly concave centrally and with a row of microscopic setae, in ♂♂ evenly rounded and without such setae (Figs 10-11).

Aedeagus with external morphology of median lobe unmodified; without distinct flagellum, but with characteristic internal structures (Fig. 5); parameres with velum of condylite and paramerite distinctly separated; condylite relatively short; parameral apex triangular (Fig. 7); capsule of spermatheca weakly enlarged and sclerotized, duct short and simply bent (Fig. 8).

Diagnosis

For a separation of *Euphorbagria* from falagriine genera not explicitly referred to here and for further details regarding the taxa also occurring in the Nearctic region, the diagnoses and lists of character states in HOEBEKE (1985) and AHN & ASHE (1995) should be referred to.

Euphorbagria is separated from *Myrmecopora* SAULCY by the large mesospiracular peritremes, by the lack of a sexual dimorphism of head and pronotum, by the presence of a row of stout spines at the posterior margin of tergum VIII and by the different construction of median lobe, paramere and spermatheca.

The new genus is readily distinguished from *Falagria* LEACH especially by the absence of carinae on the scutellum, but also by the less deep pronotal sulcus, by the pronotum being less distinctly narrowed posteriorly, by the denser and clearly more distinct punctation, by the internal structures of the median lobe, the different shapes of the condylite and of the apical lobe of the paramerite, and the construction of the spermatheca.

Euphorbagria differs from *Anaulacaspis* GANGLBAUER in the presence of a distinct pronotal sulcus and a row of stout spines on the hind margin of tergum VIII, in the mat scutellum, in distinctly slenderer antennae and shorter hind tarsi.

From *Falagrioma* CASEY the new genus is separated by the uniform elytral punctation, by the distinctly shorter hind tarsi and first tarsomere, by the slenderer antennae, the different chaetotaxy of the labrum, by the shorter row of stout spines on the posterior margin of tergum VIII, by the different construction of the contents of the internal sac and by the triangular apical lobe of the paramerite (which is broadly truncate in *Falagrioma*).

Euphorbagria rotundicollis (LINDBERG, 1953), comb. nov.

Falagria (*Anaulacaspis*) *rotundicollis* LINDBERG, 1953, p. 5f.

Lectotype ♂, here designated and labelled accordingly: Tenerife, Las Caletas, 27.I.1949, *Falagria rotundicollis* Harald Lindberg det., Spec. typ. No. 2591 (Zoological Museum, University of Helsinki).

Paralectotypes, present designation: 3 sex?, same data and collection as lectotype.

Further material examined: 4♂♂, 1♀, E. Tenerife, Igueste, 300 m, in dead *Euphorbia canariensis*, 3.IV.1992, leg. & coll. Assing; 8 ex., same data, leg. & coll. Wunderle; 6♂♂, 10♀♀, E. Tenerife, Barranco del Infierno, 500 m, in dead *Euphorbia canariensis*, 9.IV.1992, leg. & coll. Assing; 8 ex., same data, leg. & coll. Wunderle.

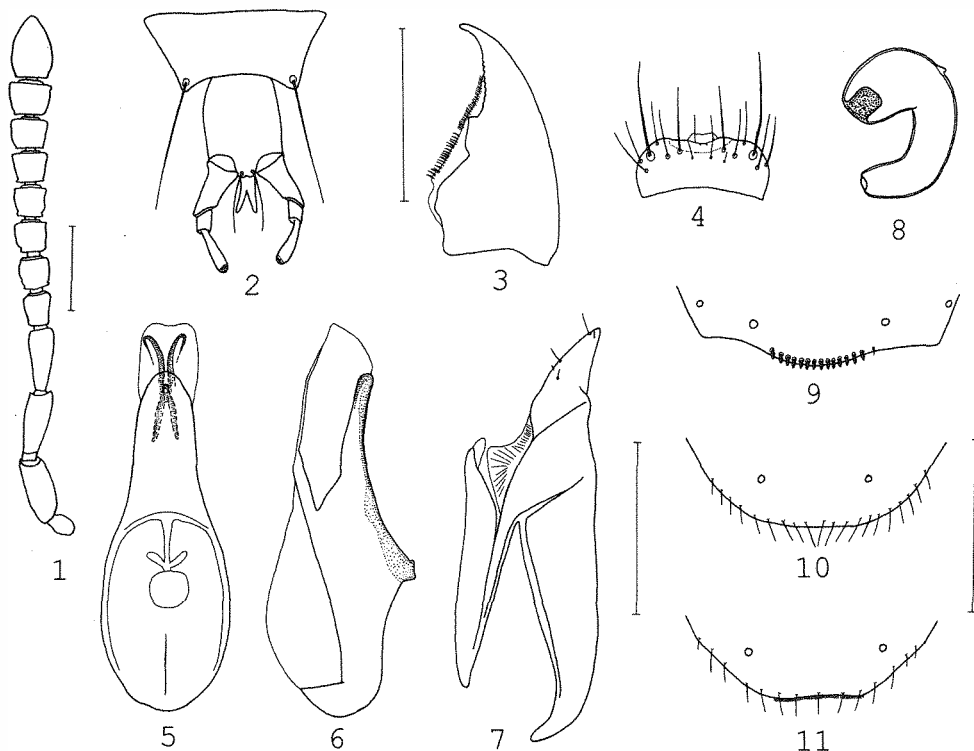
Description

2.4 - 2.9 mm. Colour of body blackish brown to black with the tip of the abdomen and sometimes the hind margin of the elytra lighter; legs yellow to yellowish brown; antennae brown, flagellum apically darkened.

Head without microsculpture and shining; dorsal surface with pale and mostly transverse pubescence; punctation distinct and rather dense; antenna and mouthparts as in Figs 1-4.

Pronotum slightly wider than head, approximately as long as wide or indistinctly transverse; lateral margins in posterior half straight or slightly convex, converging; median sulcus distinct, but narrow and not very deep; punctation denser than on head; pale pubescence along median line directed cephalad in anterior 1/5 and caudad in posterior 4/5, in lateral areas oriented in various directions but meeting in a spot near the posterior pronotal angles.

Elytra clearly wider than pronotum; punctation rather dense, but finer than on pronotum and slightly granulose; pubescence short and directed \pm caudad; microsculpture absent; scutellum coarsely sculptured; alae present.



Figs 1-11 *Euphorbagria rotundicollis* (LINDBERG): antenna (1); labium (2); right mandible (3); labrum (4); aedeagus in ventral and in lateral view (5, 6); paramere (7); spermatheca (8); posterior margins of ♂ tergum VIII (9), ♂ sternum VIII (10) and ♀ sternum VIII (11). Scale: 0.2 mm.

Legs with rather short tarsi, hind tarsi only ca. 0.65x the length of hind tibiae; first tarsomere of hind tarsus shorter than the combined length of the following two tarsomeres.

Abdomen shining, with punctation distinctly finer than on head and pronotum; pubescence decumbent, terga VI-VIII with some semi-erect to erect long black setae; tergum VIII as in Fig. 9.

♂: sternite VIII evenly rounded and without micropubescence posteriorly (Fig. 10); median lobe and paramere as in Figs 5-7.

♀: hind margin of sternite VIII with a faint concavity and a row of microscopic hairs in the middle (Fig. 11); spermatheca as in Fig. 8.

Distribution and bionomics

E. rotundicollis is presently known only from Tenerife, Canary Islands, and apparently no further records have been published since the discovery of the species (HERNANDEZ et al. 1994). However, there is at least some doubt that this species is endemic to the archipelago, since it was not recorded in a study of *Euphorbia*-inhabiting beetles carried out by WOLLASTON (1862) in the last century.

In his original description LINDBERG (1953) does not state any ecological observations. During a joint excursion to Tenerife PAUL WUNDERLE and I on two occasions collected the species in

dead *Euphorbia canariensis*, together with the staphylinids *Atheta canariensis* (WOLLASTON), *Oligota wollastoni* WILLIAMS and *Gyrophypnus marginalis* (WOLLASTON). Thus, *E. rotundicollis* appears to be ecologically very similar to *Myrmecopora gravata* PEYERIMHOFF from Morocco, to my knowledge the only further falagriine occurring in dead *Euphorbia* (ASSING, 1997).

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