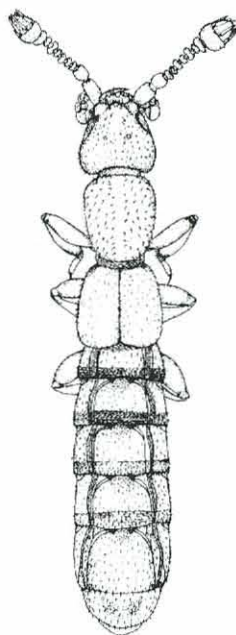


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PHYLLOTRETA GLORIAE A NEW SPECIES FROM SOUTHERN SPAIN (COLEOPTERA, CHRYSOMELIDAE, ALTICINAE) *

M. Biondi **

ABSTRACT

Phyllotreta gloriae sp.n. is described and illustrated from a short series from Southern Spain. This new species is very close to *P. consobrina* (Curtis, 1837) from which it is mainly distinguishable by antennal and aedeagic shape in the male.

Key words: *Coleoptera*, *Chrysomelidae*, *Alticinae*, *Phyllotreta gloriae* sp.n., *Iberian Peninsula*.

RESUMEN

Phyllotreta gloriae, una nueva especie del sur de España (Coleoptera, Chrysomelidae, Alticinae).

En este trabajo se describe una especie nueva del sur de España, *Phyllotreta gloriae* sp.n., muy próxima a *P. consobrina* (Curtis, 1837). Esta nueva especie se caracteriza particularmente por la diferente forma del edeago y de las antenas en el macho.

Palabras clave: *Coleoptera*, *Chrysomelidae*, *Alticinae*, *Phyllotreta gloriae* sp.n., *Península Ibérica*.

Phyllotreta gloriae sp.n.

Diagnosis

This new species is very close to *P. consobrina* (Curtis, 1837), a european-mediterranean element. *P. consobrina* and *P. gloriae* sp. n. in Southern Spain are sympatric and syntopic. The diagnostic characters to distinguish these two species are listed below.

Type material

Holotype, ♂: «Spagna (Granada), dint. Embalse del Negretin, m 700, 26-V-1990, P. Audisio / M. Biondi» (CB). Paratypes: same locality, data, and collectors, 4 ♂♂ and 6 ♀♀ (CB), 1 ♂ and 1 ♀ (MMD): «Spagna (Cadiz), da Grazalema a Puerto de Las Palomas, m 750-1360, 24-V-1990, P. Audisio / M. Biondi», 1 ♂ (CB: specimen used for scanning electron microscopic investigations); «Spagna (Alicante), Puerto de La Carrasqueta, m 770-1010,

20-V-1990, P. Audisio/M. Biondi», 1 ♂ and 1 ♀ (CB); «Cno. Ftal., S.^a Nieves, Yunquera (MA), 1000 m, 30SUF2566, 9-IV-83, G. Bastazo leg., sobre *Cru-cifera*», 1 ♀ (CBS). CB: M. Biondi collection, University of L'Aquila; CBS: G. Bastazo collection, Malaga; MMD: Museo Nacional de Ciencias Naturales, Madrid.

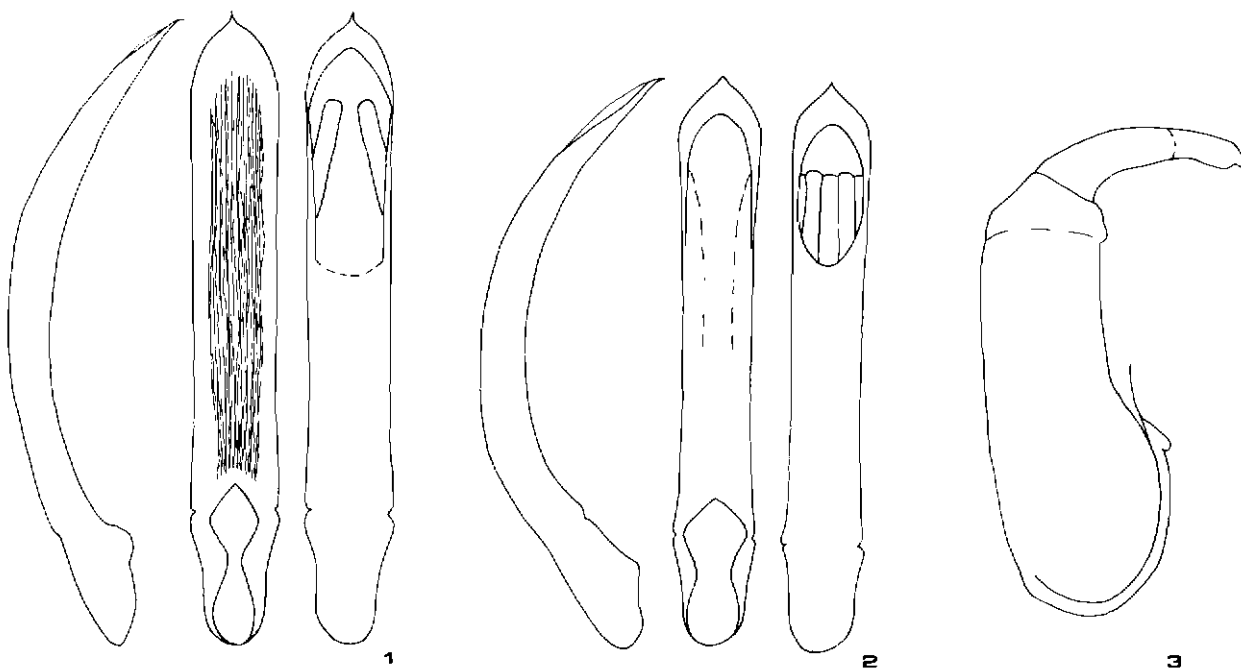
Description of holotype

♂: tegument dorsally black with evident greenish metallic reflections on pronotum and bluish on elytra.

Head (fig. 4) on vertex with puncturation only in median region, while on frons with puncturation clearly impressed on slightly shagreened, almost smooth; frontal tubercles triangular, medially united, with smooth surface; supraocular grooves well impressed; labrum and palpi strongly darkened; antennae widely blackened, partially reddish to base; 4-5 segments enlarged (fig. 6-8), 5th segment also elon-

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Figs. 1-3.—1) Aedeagus in lateral, ventral and dorsal view of *Phyllotreta consobrina* (Curtis) (Spain, Andalusia) (Lued = 0.75 mm; LuE = 1.45 mm). 2) Ditto, *Phyllotreta gloriae* sp.n. (Holotypus) (Lued = 0.74 mm; LuE = 1.36 mm). 3) Spermatheca of *P. gloriae* sp.n. (Spain, Embalse del Negretin) (Lusp = 0.28 mm; LuE = 1.55 mm).

gated, weakly curved and subtriangular shaped; length of single segments proportional to numerical sequence 11:4:5:5:7.5:4:4:5:5:5:7 (right antenna; 1 = 0.02 mm).

Pronotum transverse (LaP/LuP = 1.51; LaP = 0.59 mm; LuP = 0.39 mm), sides moderately rounded and bordered, with maximum width on median part; clearly and homogeneously punctured on finely reticulated surface.

Elytra elongate (LuE/LuP = 3.49; LuE = 1.36 mm; LaE = 0.88 mm), sides weakly rounded; lateral margin bordered from shoulder to apical convergence; punctuation similar to pronotal one; surface smooth; humeral callus present but little prominent. Wings well developed. Scutellum semicircular with shagreened surface.

Legs strongly darkened with coxae and femoral-tibial articulations partially reddish. First joint of anterior and posterior tarsi expanded. Terminal spur of posterior tibiae moderately elongated.

Ventral surface black with weak metallic gloss.

Aedeagus (fig. 2) elongated (LuE/Lued = 1.89; Lued = 0.72 mm), in ventral view with smooth surface, sides weakly narrowed to apical third; rounded towards the apex and ending in a small acute point; ventral sulcus absent; median longitudinal band prominent in subapical part; in lateral view, aedeagus regularly and strongly curved.

Last abdominal sternum with a small median hollow near to apex.

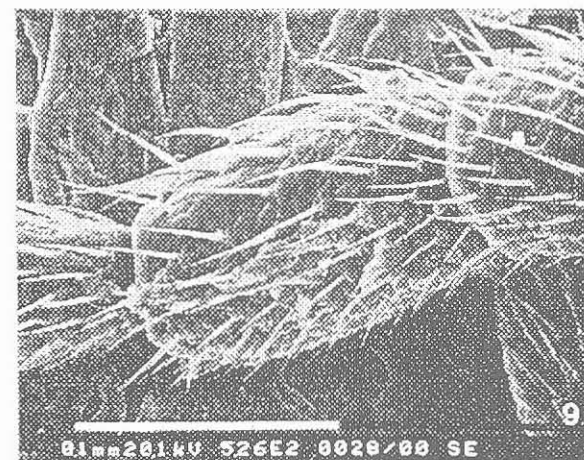
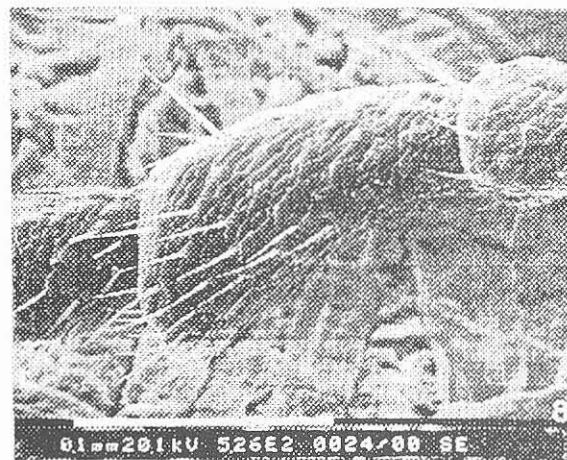
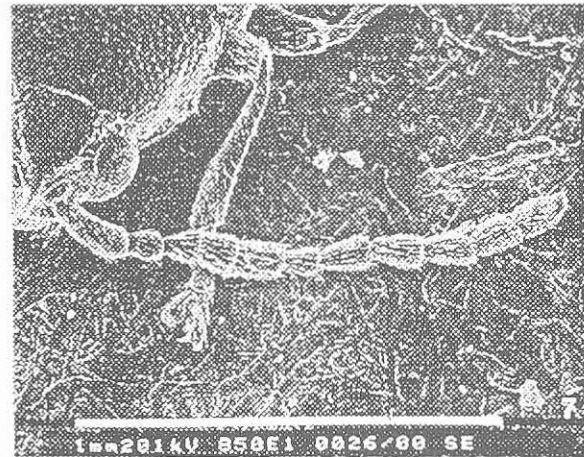
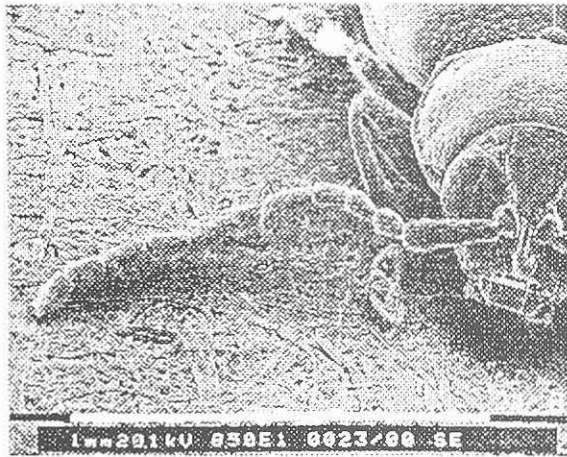
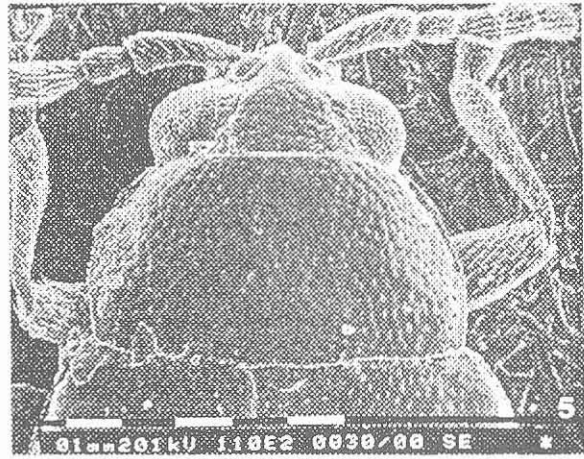
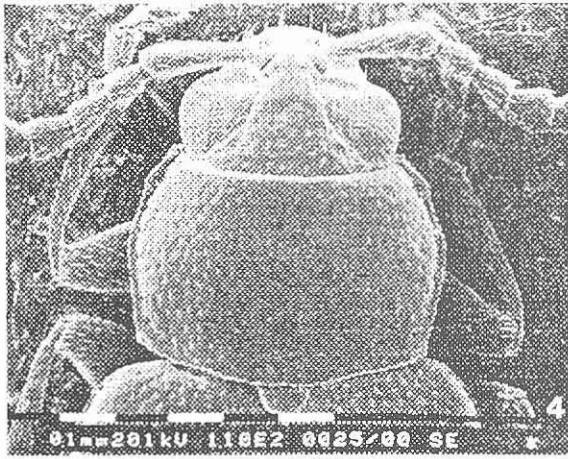
Etymology

I dedicate with pleasure this species to my colleague and friend Gloria Bastazo from Malaga, for her kindness she showed to me during my collecting trip in Andalusia.

Paratypes

Females show the first joint of anterior and median tarsi not expanded and the antennal segments 4-5 not enlarged but normally shaped. Spermatheca (fig. 3) very similar to *P. consobrina*, with basal part elongated and enlarged to base; ductus uncoiled and running closely to basal part.

Measurements: ♂♂: LuP = 0.39 ± 0.01 mm; LaP = 0.60 ± 0.02 mm; LuE = 1.40 ± 0.06 mm; LaP/LuP = 1.54 ± 0.03 ; LuE/LuP = 3.58 ± 0.09 ; Lued = 0.71 ± 0.02 mm; ♀♀: LuP = 0.40 ± 0.01 mm; LaP = 0.64 ± 0.03 mm; LuE = 1.54 ± 0.04 mm; LaP/LuP = 1.60 ± 0.04 ; LuE/LuP = 3.83 ± 0.10 mm; Lusp = 0.28 ± 0.01 mm.



Figs. 4-9.—4) Pronotum of *Phyllotreta gloriae* sp.n. (Spain, Embalse del Negretin). 5) Ditto, *Phyllotreta consobrina* (Curtis) (Spain, Andalusia). 6) Antenna of *P. gloriae* sp.n. 7) Ditto, *P. consobrina*. 8) Fifth antennal segment of *P. gloriae* sp.n. 9) Ditto, *P. consobrina*.

Taxonomical observations

The diagnostic characters useful for distinguishing the species *P. gloriae* and *P. consobrina* are in succession reported:

P. gloriae sp.n.

— Antennae in ♂ with segment 5 subtriangular shaped, weakly curved, and slightly flattened (fig. 8).

— Aedeagus (fig. 2) in ventral view with smooth surface and sides slightly narrowed before apical part; in lateral view strongly curved.

— Pronotum (fig. 4) less transverse and narrower to base.

— Head (fig. 4) with frontal puncturation less dense and more limited; frontal carina more acute (see fig. 6).

— Ratio value LuE/LuP in ♀♀ normally < 3.90.

P. consobrina

— Antennae in ♂ with segment 5 subcylindrical shaped (fig. 9).

— Aedeagus (fig. 1) in ventral view with a dense longitudinal streaking and sides subparallel in subapical part; in lateral view less strongly curved.

— Pronotum (fig. 5) more transverse and subtrapezoidally shaped.

— Head (fig. 5) with frontal puncturation denser and widely distributed; frontal carina less acute (see fig. 7).

— Ratio value LuE/LuP in ♀♀ normally > 3.90.

Ecological notes

This new species was collected, also together with *P. consobrina*, on *Sinapis*-like Cruciferae.

Abbreviations used

LaE: width of elytra; LaP: width of pronotum; LuE: length of elytra; Lued: length of aedeagus; LuP: length of pronotum; Lusp: length of spermatheca.

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