Davide SASSI & Stefano ZOIA

Cryptocephalus (Burlinius) plantaris from Sicily and Malta, species resurrected from synonymy with C. (B.) luridicollis (Coleoptera Chrysomelidae)

Abstract - *Cryptocephalus* (*Burlinius*) *plantaris* Suffrian, 1868 is resurrected from synonymy with *C.* (*B.*) *luridicollis* Suffrian, 1868. The species is recorded from Southern Sicily and Malta. Illustrations and comparative remarks are provided. The species is related to the very variable *C.* (*B.*) *fulvus* (Goeze,1777) from which it can be readily distinguished by the pronotal punctation, the peculiar morphology of male foretibia and tarsi and the shape of the aedeagus.

Riassunto - Cryptocephalus (Burlinius) plantaris di Sicilia e Malta, specie rimossa dalla sinonimia con C. (B.) luridicollis (Coleoptera Chrysomelidae).

Cryptocephalus (Burlinius) plantaris Suffrian, 1868 viene rivalutato come specie distinta e rimosso dalla sinonimia con C. (B.) luridicollis Suffrian, 1868. La specie, ridescritta su nuovi esemplari provenienti dalla Sicilia meridionale e dall'isola di Malta, è molto simile a C. (B.) fulvus (Goeze, 1777), taxon molto variabile e ad ampia distribuzione nella regione Paleartica, da esso può essere facilmente distinto in base alla punteggiatura del pronoto, alla peculiare conformazione dei tarsi e delle tibie anteriori del maschio e alla morfologia edeagica.

Key words: resurrection from synonymy, Coleoptera, Chrysomelidae, *Cryptocephalus, Burlinius*, Sicily, Malta.

INTRODUCTION

The west palearctic species of the subgenus Burlinius Lopatin, 1965, within the cosmopolitan genus Cryptocephalus, have been recently the subject of an interesting work by A. Warchalowski (1999), in which he critically discussed the status of all the taxa and provided the current state of knowledge. Nevertheless, many species remain poorly known only from short and unsatisfactory original descriptions of ancient authors and in recent years some new taxa belonging to this subgenus (Biondi, 1995; Sassi & Regalin, 1998) were described even from territories, such as Italy, whose knowledge of entomological fauna appears to be well advanced. In the present work we resurrect Cryptocephalus (Burlinius) plantaris Suffrian, 1868, from synonymy with C. luridicollis Suffrian, 1868. The species was described on a single male specimen from Sicily (without any further indication of locality). Even though Suffrian gave the indications for a correct identification of the taxon as distinct from other formerly known species (pronotal punctation fairly impressed and, above all, the typical shape of forelegs), the species was reported as a possible synonym of C. luridicollis Suffrian in the Junk -Schenkling Coleopterorum Catalogus (Clavareau, 1913) and this status has been kept as such by all the subsequent authors.

Among the material recently collected by one of us (S.Z.) and I. Sparacio in

southern Sicily and by D. Mifsud in Malta, we found specimens of a species unknown to us that revealed a strong correspondence with Suffrian's original description of *C. plantaris*. Thanks to the courtesy of Dr Karla Schneider, we could examine the type of this species and were able to confirm the identity of this taxon. A redescription of *C. plantaris* is given below. It is a species very distinct from C. (B.) *luridicollis* (see Warchalowski, 1999: 577) and is more closely related to *C. (B.) fulvus*.

Cryptocephalus (Burlinius) plantaris Suffrian, 1868

Locus Typicus. Sicily, Italy.

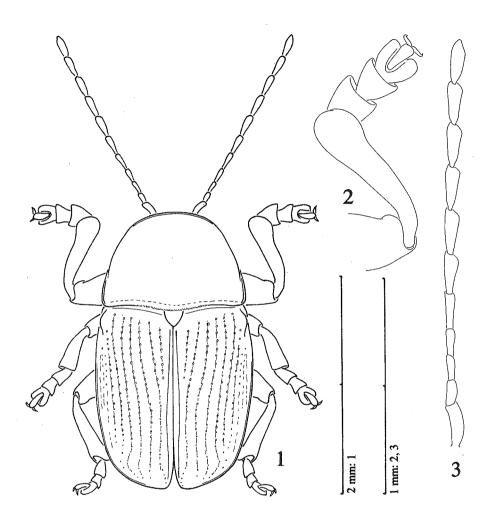
MATERIAL EXAMINED. Holotype (3, MLUH): ["12589" (handwritten, white label) /"MLU Halle WB Zoologie S.-Nr. 7/1/6" (printed, white label) / "Cryptocephalus plantaris Suffrian, 1868 Holotypus Sassi & Zoia det." (printed, red label)/ "absurdus m: plantaris m." (handwritten, brown label on a separate pin)].

ADDITIONAL MATERIAL. Sicilia, (Trapani) Selinunte (Acrópoli) 30.IV.2000 S. Zoia e F. Polese legg., 2 \circlearrowleft and 3 \circlearrowleft (SZPC, DSPC); Sicilia, TP, Selinunte, 22.V.1996, legit I. Sparacio, 1 \circlearrowleft (DSPC, ISPC); Sic., ocropescus [sic] Sicilia, nec ochroleucus det. Burlini 1 \circlearrowleft (MSNM); Malta, Zejtun, 19.IX.1996, leg. D. Mifsud, 1 \circlearrowleft 1 \circlearrowleft (DMPC, DSPC); Malta, Migra Ferha, 30.X.1995, leg. D. Mifsud, 1 (DMPC); Malta, Wied Babù, 15.IX.1995, leg. D. Mifsud, 1 \circlearrowleft (DSPC); Malta, Busket, 15.IX.1995, leg. D. Mifsud, 1 \circlearrowleft (DMPC).

ABBREVIATIONS: DSPC: Davide Sassi, private coll.; DMPC: David Mifsud, private coll., Malta; ISPC: Ignazio Sparacio, private coll., Palermo, Italy; MLUH: Martin Luther University, Zoological Museum, Halle; SZPC: Stefano Zoia, private coll.; MSNM: Museo civico di Storia naturale, Milano, Italy.

DIAGNOSIS. The species belongs to the wide and poorly known light coloured species group of the subgenus *Burlinius*. It is similar to pale specimens of *C. (B.) fulvus* Goeze. Like this species it has distinct interocular furrows extended to antennal tubercles, frons with moderately coarse punctation, pronotum only weakly transverse, elytral punctation well impressed up to elytral apex. It differs in the stronger pronotal punctation, in the characteristic shape of the male forelegs and in the morphology of the aedeagus. The close relationship between the two species is also suggested by the great similarity of the shape of the ductus spermathecae (see Sassi & Regalin, 1998). *C. (B.) connexus* Olivier has also a quite similar external morphology, but it is readily distinguishable on the basis of the very different chromatic pattern.

DESCRIPTION. Body relatively stout and robust (fig. 1). Head creamy yellow, antennal insertions and median longitudinal line on frons dark reddish, labrum yellow. Pronotum rusty yellow, a light, often vague anchor-shaped marking on disk. Basal margin narrowly black. Scutellum yellow, bordered by black. Elytra yellow, anterior margin narrowly black, suture and a vague longitudinal arcuate median stripe light reddish, bottom of punctures fairly darker than interstices. Antennae (fig. 3) pale at base, six last antennal



Figs 1-3. Cryptocephalus (Burlinius) plantaris Suffrian: 1 - body outline; 2 - male forelegs; 3 - antennae.

segments darker. Legs entirely yellow. Pygidium yellow. Ventral side of body testaceous, mesoepimera and margins of abdominal sternites paler.

Frons flat and bare, interocular furrows fairly impressed on inner ocular margin, extended to antennal insertion in form of puncture lines. Vertex and frons, between interocular furrows, coarsely punctured.

Pronotum convex, widest basally, gradually narrowing towards the anterior margin, with minute, sparse, but distinct punctures. Lateral margins quite large, simultaneously visible in dorsal view at basal third.

Scutellum moderately raised, triangular, impunctate. Elitra feebly rounded at sides and slightly tapered towards apex, lateral margins narrow, humeral tubercles lengthened, moderately prominent. Punctation arranged in regular rows, well impressed and distinguishable also on elytral apex, intervals between elytral rows slightly convex and sparingly micropunctured, epipleural surface flat, impunctate.

In males, protibiae (fig. 2) are strongly and angularly dilated apically, surface with fine, sparse but well visible longitudinal wrinkling. Apex of mesotibiae less evidently dilated. First and second protarsal segment greatly enlarged.

Prosternum broad, flat, coarsely punctate, anterior and posterior margins evenly arcuate. Pygidium regularly convex, dull, with weak sparse punctation and fine whitish pubescence. Anal sternite simple in males, without median impression.

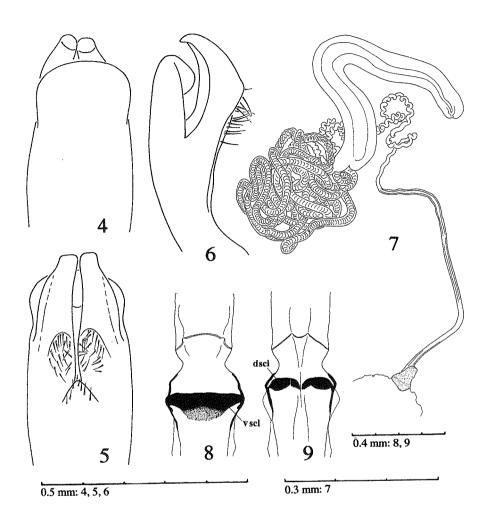
Aedeagal dorsal process fairly shorter than ventral ones, parallel-sided, robust and slightly enlarged on apical end; median edge of ventral processes long, prominent, raised and arcuate (figs 4, 5, 6).

In females, legs are normally shaped, but forelegs something more robust than in the related species. Fovea on the fifth abdominal sternite quite large, oval and faintly impressed. Spermatheca (fig. 7): sickle-shaped, slender throughout, with obtuse and reflexed apex and short recurved base; ductus smooth at base, but finely and very closely coiled on median and apical part, forming a dense skein towards the spermatheca, distal end forming a subtriangular, fairly sclerotized and pigmented diverticulum at its aperture into genital chamber

Dorsal sclerites of the kotpresse (figs 8, 9) elliptical and slightly splitten on their median third; ventral sclerite strongly transverse with anal margin sinuate and bordered at center by an elliptical band generally less sclerotized than the sclerite; terminations of ventral sclerite (i.e. the apodemes) moderately broadened.

	Total length	Pronotal length	Pronotal width	Elytral length	Interocular distance
females (n.6)	2.90 ± 0.04	0.95 ± 0.02	1.51 ± 0.04	1.68 ± 0.03	0.53 ± 0.01
males (n.3)	2.61 ± 0.04	0.93 ± 0.01	1.38 ± 0.03	1.50 ± 0.02	0.46 ± 0.01

Table 1. Morphometric data: means (with 96% confidence interval) and number of measured specimens. Measures in mm.



Figs 4-9. Cryptocephalus (Burlinius) plantaris Suffrian: 4 aedeagus in dorsal view; 5 - idem, ventral view; 6 - idem, lateral view; 7 - spermatheca; 8 - kotpresse, ventral view; 9 - idem, dorsal view (vscl=ventral sclerite, dscl=dorsal sclerites)

116 Sassi & Zoia

ACKNOWLEDGEMENTS

We would like to cordially thank Dr Karla Schneider (Martin-Luther University, Zoological Museum, Halle) for the loan of the type of *Cryptocephalus plantaris*. We also thank Dr Ignazio Sparacio (Palermo) and Dr David Mifsud (La Valletta, Malta) who enabled us to study specimens from their private collections, we are indebted to David Mifsud also for carefully revising the text.

REFERENCES

- BIONDI M., 1995 Descrizione di una nuova specie di *Cryptocephalus* del sottogenere *Burlinius* Lopatin dell'Italia meridionale (Coleoptera Chrysomelidae). Bollettino della Società entomologica italiana, 127(1): 39-44.
- CLAVAREAU H., 1913 Chrysomelidae. In JUNK W. & Schenkling S. 1913. Coleopterorum Catalogus, Berlin, 24, pars 53, 278 pp.
- SASSI D. & REGALIN R., 1998 *Cryptocephalus (Burlinius) biondii* n. sp. dell'arcipelago sardocorso e dell'isola di Capraia (Toscana) (Coleoptera Chrysomelidae). Bollettino della Società entomologica italiana, 130(2): 135-146.
- Suffrian E., 1868 Synonymische Miscellaneen. Stettiner Entomologische Zeitung, 29, 2: 170-176.
- WARCHALOWSKI A., 1999 Übersicht der westpaläarktischen Arten der Untergattung *Burlinius* Lopatin, 1965 (Coleoptera: Chrysomelidae: Cryptocephalus). Genus, 10(4): 529-627.

Authors' addresses:

- D. Sassi, via san Rocco 17, I-22030 Castelmarte, Italy. E-mail: d.sassi@mail.net1.it
- S. Zoia, via Console Marcello 18/4, I-20156 Milano, Italy. E-mail: zoia@mailserver.unimi.it