

*Calomicrus doramasensis* n. sp., a new leaf-beetle  
from the Cailai-y Islands  
(Coleoptera, Chrysomelidae, Galerucinae)

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RESUMEN: Se describe una nueva especie del género *Calomicrus* (Col. Chrysomelidae) de la isla de Gran Canaria (Islas Canarias). Se trata de la primera especie bicolor (pronoto amarillo-rojizo, élitros negros o marrón oscuros) descrita de las Islas Canarias. Se compara esta especie con otras relacionadas.

Palabras clave: Chrysomelidae, Galerucinae, *Calomicrus*, nueva especie, Islas Canarias.

ABSTRACT: A new, bicolour species of *Calomicrus* (Col., Clirysomelidae) with light pronotum and dark elytra is described from Gran Canaria (Canary Islands). Some comparative remarks are made.

Key words: Clirysomelidae, Galerucinae, *Calomicrus*, new species, Canary Islands.

INTRODUCTION

Two species and one subspecies of the genus *Calomicrus* Dillwyn, 1829 have been previously described from the Canary Islands. *C. wollastoni* Paiva, 1901 was described from Tenerife, La Palma and Hierro (Paiva, 1901: 211); later was also recorded from Gomera (Wollaston, 1865: 301) and, more recently, from Gran Canaria (Israelson *et al.*, 1982: 130). *C. hispiniger* s. str. was described from La Palma by Israelson (1968: 161) and *C. hispiniger longicornis* was described by Israelson (1980: 195) from Gomera.

In this paper a third species of *Calomicrus* from the Canary Islands is described.

*Calomicrus doramasensis* n.sp.

**Diagnosis:** With the generic features of *Calomicrus* Dillwyn, 1829 (see Vela & Bastazo, 1991). Easily recognizable from other Palearctic species of this genus by its colouration: head, elytra and legs dark brown to black, pronotum yellowish-red.

	♂♂ n=5		♀♀ n=5	
	average	range	average	range
Antennal length	3,18	2,76-3,54	2,98	2,76-3,34
Interantennal width	0,13	0,11-0,14	0,16	0,14-0,17
Interocular width	0,45	0,42-0,46	0,47	0,43-0,50
Cephalic width	0,78	0,73-0,81	0,78	0,73-0,84
Pronotal length	0,64	0,60-0,71	0,67	0,63-0,74
Pronotal width	0,92	0,85-0,98	0,97	0,88-1,08
Elytral length	2,31	1,97-2,51	2,49	2,27-2,80
Body width	1,45	1,36-1,55	1,72	1,65-1,82
Protarsal length	0,49	0,41-0,52	0,48	0,45-0,50
Protarsomere 1 length	0,21	0,18-0,24	0,21	0,20-0,22
Protarsomere 11 length	0,15	0,14-0,17	0,13	0,13-0,14
Protarsomere 111 length	0,10	0,10-0,11	0,10	0,10-0,11
Protarsomere IV length	0,18	0,15-0,20	0,18	0,15-0,20
Protarsomere 1 width	0,10	0,08-0,11	0,07	0,07-0,08
Protarsomere 11 width	0,08	0,07-0,10	0,09	0,08-0,10
Protarsomere 111 width	0,12	0,11-0,13	0,13	0,12-0,14
Protarsomere IV width	0,04	0,04-0,05	0,04	0,04-0,04
Metatibial length	0,69	0,63-0,70	0,67	0,61-0,71
Metatarsomere 1 length	0,45	0,42-0,47	0,43	0,39-0,49
Metatarsomere 11 length	0,16	0,14-0,18	0,14	0,13-0,17
Metatarsomere 111 length	0,10	0,10-0,11	0,10	0,10-0,11
Metatarsomere IV length	0,19	0,17-0,21	0,18	0,17-0,20
Metatarsomeres II+III+IV length	0,43	0,41-0,45	0,38	0,35-0,41

Table I. Morphometrical data of *Calomicrus doramasensis* n. sp. (in mm).

## Description

Length: **d**: 3.0 - 3.4 mm; **q**: 3.3 - 4.1 mm.

Colouration: Pronotum, prothoracic hypomera **and** aiteiiiiiiiices I, II, III yellowish-red. Legs from black to dark brown. Tarsiiiiices III brown. Mandibles and labrum brown. The other parts of the body are black but in immature specimens they are lighter.

Body elongated, slender; its length is 2.12 - 2.34 (**d**) 1.85 - 2.24 (**q**) **iiiiii** its maximum width.

Head as wide as the width of the apical part of pronotum. Cephalic width 1.67 - 1.81 (**d**) 1.62 - 1.08 (**q**) **iiiiii** the interocular width. Interantennal width 0.25 - 0.30 (**d**) 0.32 - 0.35 (**q**) times the interocular width. Head glabrous, fairly iiiicroreticulated. Vertex convex. Suprantennal calli well marked; they join downwards in a conspicuous nasal keel that beneath is widened to reach all the width of epistoma. Vertex **and** frons separated by a deep groove, that in the middle became a hole. Interantennal width 0.57 - 0.77 (**♂**), 0.79 - 0.02 (**♀**) **iiiiii** the length of antennomere I. The length ratio of the antennomeres is: 14-0-7-14-14-12-13-13-12-12-14 (**d**) **and** 13-6-6-12-12-11-12-11-11-10-13 (**♀**). The **length** of antennae is 0.92 - 1.04 (**d**) 0.80 - 0.83 (**♀**) **iiiiii** the length of the body.

Pronotum transverse (fig.1), with **one** slight depression on each side; its maximum width, that is at the 1/3 anterior, is 1.43 - 1.47 (**♂**), 1.40 - 1.46 (**♀**) **iiiiii** its length and 1.15 - 1.23 (**♂**), 1.18 - 1.29 (**♀**) times the cephalic width. Pronotum shiny, fairly punctuated, with **one** long seta in the anterior **and** in the posterior setigerous pore; the rest of the pronotum is glabrous. Pronotum margined; side margins well visible; posterior margin visible but in the middle it becomes faint; anterior margin almost imperceptible.

Scutellum small, scarcely punctate and with a smooth apex.

Elytra as long as 1.45 - 1.67 (**d**) 1.26 - 1.53 (**q**) times the maximum width of the body and 1.88 - 2.13 (**d**) 2.04 - 2.19 (**♀**) **iiiiii** the pronotal length. Humeral calli well developed, isolated by a little depression in its inner part. Elytral puncturation dense **and** moderately marked; the distance among punctures is similar to the radius of a puncture. Elytra shining, with yellow erected hairs in the distal portion.

Protarsomere I wider in males than in females (fig. 2). The ratio length:width of protarsomere I is 1.75 - 2.50 (**d**) 2.33 - 3.20 (**♀**); idem II is 1.57 - 2.20 (**d**) 1.43 - 1.50 (**♀**); idem III is 0.78 - 0.89 (**♂**, **♀**); idem IV is 3.67 - 4.67 (**d**) 2.75 - 3.50 (**♀**). The length of protarsomere I is 0.72 - 0.89 (**d**) 0.82 - 1.00 (**♀**) times the length of protarsomeres II + III. Length of metatibia 0.69 - 0.89 (**d**) 0.79 - 0.85 (**♀**) **iiiiii** the length of the metatarsus. Length of metatarsomere I (fig. 3) 2.50 - 3.10 (**♂**), 2.67 - 3.22 (**♀**) **iiiiii** the length of metatarsomere II and 1.00 - 1.07 (**♂**), 1.03 - 1.12 (**♀**) times the length of the rest of metatarsus. In the inner part of the apex of each tibia there is **one** yellow spur of the same length that the surrounding setae; these spurs break loose easily.

**♂**: Anal sternite: fig.4. **Aedeagus**: fig.5. Tegmen: fig.6. **Spiculum gastrale**: fig.7.

**♀**: **spermatheca**: fig.8. **Stylus**: fig.9. **Spiculum ventrale**: fig.10.

**Morphometrical data**: some relevant measurements are shown in Table I.

**Typical series**: Holotype **♂**: Islas Canarias, Gran Canaria, Moya, Barranco Oscuro (UTM 28RDS4204), 10.04.1989, R. García Becerra leg. Paratypes: 11 **♂♂**, 9 **♀♀**,

same data as holotype. The holotype is deposited in the Department of Zoology, University of La Laguna (Tenerife). Paratypes are deposited in col. García Becerra (La Palma), col. Bastazo & Vela (Málaga), col. Baccini (Nicuwegeciii), col. Petitpierre (Palma de Mallorca), col. Siede (Hamburg), col. Warciulowski (Wrocław), Musciii of Natural Sciences (Santa Cruz de Tenerife) and National Musciii of Natural Sciences (Madrid).

**Ecology**: *Calomicrus doramasensis* n.sp. was collected on a Rosaceae **froiii** genus *Bencomia*, probably *B. caudata* (**Ait.**) Webb & Berth.; this plant is **found** on the Canary Islands **and** Madera, **and** grows in the relict rupicolous scrub communities in **suuuu** situations in the high level laurel forest (Suárez Rodríguez, 1994)

**Etymology**: the new chrysomeiid is named after the ancient forest of Doramas, in recent time almost completely destroyed, where it has been found.

## Comparative remarks

The colouration of *C. doramasensis* n.sp. resembles the other bicolor species with yellow or red pronotum **and** black or dark blue elytra. They can easily be separated by the following characters:

1(4) Metatarsomere I shorter than the rest of the metatarsus. **Aiiiiiiiiiii** IV shorter than **iiiiii** **and** III together. Species **from** Europe.

2(3) Head yellowish-brown. Species **froiii** Central and Western Alps ..... *C. gularis* (Gredler, 1857)

3(2) Head dark brown to black. Species **froiii** great part of continental Europe, **froiii** Northern Spain to Scandinavia (not yet known from Denmark and Norway) ..... *C. pinicola* (Duftshmid, 1825)

4(1) Metatarsomere I equal or longer than the rest of metatarsus. **Aiiiiiiiiiii** IV not shorter than **iiiiii** **and** III together. Species **froiii** Maghreb **and** Macaronesia.

5(8) Head and legs yellowish-brown.

6(7) Smaller (2.9-3.6 **iiiiii**). Vertex smooth, without conspicuous punctures, a little obscured. Elytrae dense but superficially punctuated. Species from Algeria ..... *C. quereus* (Pic, 1895)

7(6) Greater (3.4-4.5 **iiiiii**). Vertex with regular and conspicuous punctures. darker than the rest of head. Elytrae with dense and deep puncturation. Species from Morocco .. *C. moralesi* (Codina, 1003)

8(5) Head **and** legs dark brown to black. Species from Canary Islands ..... *C. doramasensis* n.sp.

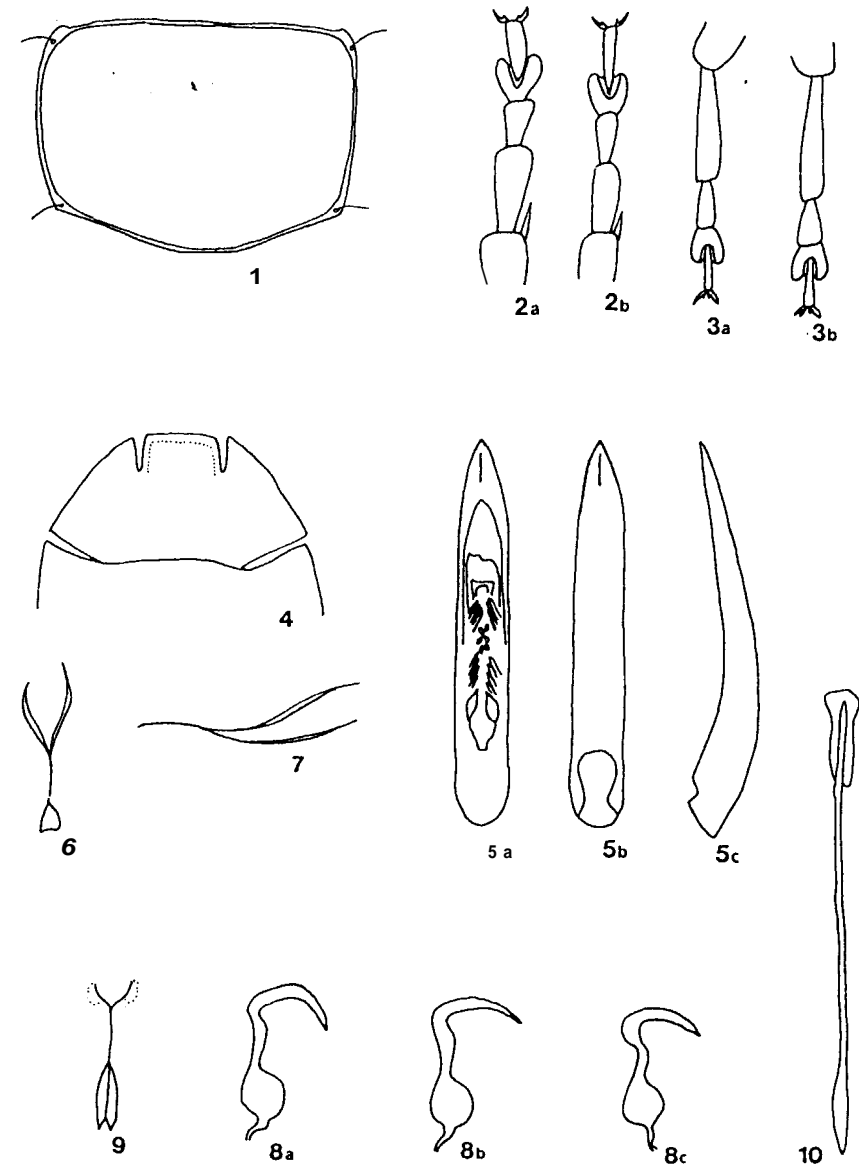
Nevertheless, the new species is related to the other **Canarian** **and** *Calomicrus* such as *C. wollastoni* Paiva 1861 **and** *C. hispiniger* Israelson 1968 (including its subspecies *longicornis* Israelson 1980) by the form of the aedeagus **and** by the very developed sclerites of the internal sac of the aedeagus; see for comparison the figures of the aedeagus of *C. wollastoni* and *C. hispiniger* s. str. offered by Israelson (1968: 162) and of *C. hispiniger longicornis* by Israelson (1980: 209). *C. doramasensis* n. sp. is very different **froiii** all these species by its particular colouration **and** by its different aedeagus and spermatheca.

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Figs. 1-10. *Calomicrus doramasensis* n. sp.: 1: pronotum of male (EL = 2,34). 2: protarsomeres male (EL = 2,34) (a) and female (EL = 2,50) (b). 3: metatarsomeres male (EL = 2,34) (a) and female (EL = 2,50) (b). 4: Anal sternite of male (EL = 2,39). 5: Aedeagus in dorsal (showing, by transparency, the sclerites of the internal sac) (a), ventral (b) and side (c) view (EL = 2,34). 6: tegmen (EL = 2,39). 7: *Spiculum gastrale* (EL = 2,39). 8: *Spermathecae* of three specimens: a (EL = 2,50), b (EL = 2,45), c (EL = 2,32). 9: *Stylus* (EL = 2,50). 10: *Spiculum ventrale* (EL = 2,50). (Scale = 0,50 mm. EL = elytral length)