

GEA, FLORA ET FAUNA

A new Iberian *Phytocoris* Fallén, 1814 from the Balearic archipelago, Spain (Hemiptera: Heteroptera: Miridae)

J. Ribes* & E. Ribes**

Rebut: 22.08.02
Acceptat: 04.11.02**Abstract**

The authors describe *Phytocoris* (*Compsocero-coris*) *degregorioi* n. sp. from Formentera, the southernmost island of the Balearic archipelago. This is a very distinctive species with a typical hemelytral pattern, a tooth-like process in the front part of the bucculae and antennal joint I, fore femora and fore tibiae covered with white long setae.

KEY WORDS: Hemiptera, Heteroptera, Miridae, Mirinae, *Phytocoris* (*Compsocero-coris*) *degregorioi* n. sp., description.

Resum

Un *Phytocoris* Fallén, 1814 ibèric nou de les illes Balears, Espanya (Hemiptera: Heteroptera: Miridae)

Els autors descriuen *Phytocoris* (*Compsocero-coris*) *degregorioi* n. sp. de Formentera, l'illa més

meridional de l'arxipèlag Balear. És una espècie molt peculiar, amb un dibuix hemelital característic, una apòfisi dentiforme a la part anterior de la búcula i l'artell I de les antenes cobert de setes blanques llargues, com també ho són els fèmurs i les tíbies del davant.

MOTS CLAU: Hemiptera, Heteroptera, Miridae, Mirinae, *Phytocoris* (*Compsocero-coris*) *degregorioi* n. sp., descripció.

Resumen

Un *Phytocoris* Fallén, 1814 ibérico nuevo de las Islas Baleares, España (Hemiptera: Heteroptera: Miridae)

Los autores describen *Phytocoris* (*Compsocero-coris*) *degregorioi* n. sp. de Formentera, la más meridional de las islas del archipiélago Balear. Se trata de una especie muy peculiar, con un dibujo hemelital típico, una apófisis dentiforme en la parte anterior de la búcula y el artejo I de las antenas provisto de cerdas blancas largas al igual que lo están los fémures y tibias delanteros.

PALABRAS CLAVE: Hemiptera, Heteroptera, Miridae, Mirinae, *Phytocoris* (*Compsocero-coris*) *degregorioi* n. sp., descripción.

*València, 123-125, ent., 3a. 08011 Barcelona.

A/e: 4354jrr@comb.es

**Departament de Biologia Animal (Artròpodes). Facultat de Biologia. Universitat de Barcelona. Av. Diagonal, 645. 08028 Barcelona. A/e: ribes@bio.ub.es

Introduction

The subgenus *Compsocerochoris* Reuter, 1876 includes 25 mediterranean taxa (Kerzhner & Josifov, 1999), of which eight have an Iberian distribution (J. Ribes & E. Ribes, 1999; J. Ribes & Heiss, 2001) and show the following geographical pattern: *Phytocoris juniperi* Frey-Gessner, 1865 is a middle European-mediterranean element, *P. sanctipetri* Carapezza, 1985 seems to be a possible holomediterranean representative, *P. viberti* Horváth, 1911 and *P. retamae* Reuter, 1900 are both Ibero-maghrebin, this last one extended to the Canary Islands. Finally *P. rosmarini* Wagner, 1976, *P. perangustus* Wagner, 1961, *P. ribesi* Wagner, 1969 and *P. vallhonrati* J. Ribes & E. Ribes, 1999 are strict Iberian endemics. Thus the species described is the ninth Iberian *Compsocerochoris* Rt. On the other hand *P. sanctipetri* Car., recorded from Mallorca (J. Ribes, 1965) and Eivissa (J. Ribes, 1985) as *P. femoralis* Fieber, 1861 was until now the unique *Compsocerochoris* Rt. which lives in the Balearic Islands. On the contrary the record from Gran Canaria, Canary Islands (Heiss *et al.*, 1996; Báez & Zurita, 2001) is mistaken being *P. riegeri* J. Ribes & Heiss, 2001 the correct species.

Phytocoris (Compsocerochoris) degregorioi n. sp. (Fig. 1-7)

Description

Macropterous male. Length 6.85 mm. Body very elongate, 4.4 x longer than the basal width of pronotum. Dorsal vestiture consisting of semierect black hairs and adpressed pale ones. Coloration whitish with brown irroration and hemelytral pattern characteristic as shown in figure 1. Moderately shiny.

Head with grill-shaped slender reddish markings on frons and another slender reddish

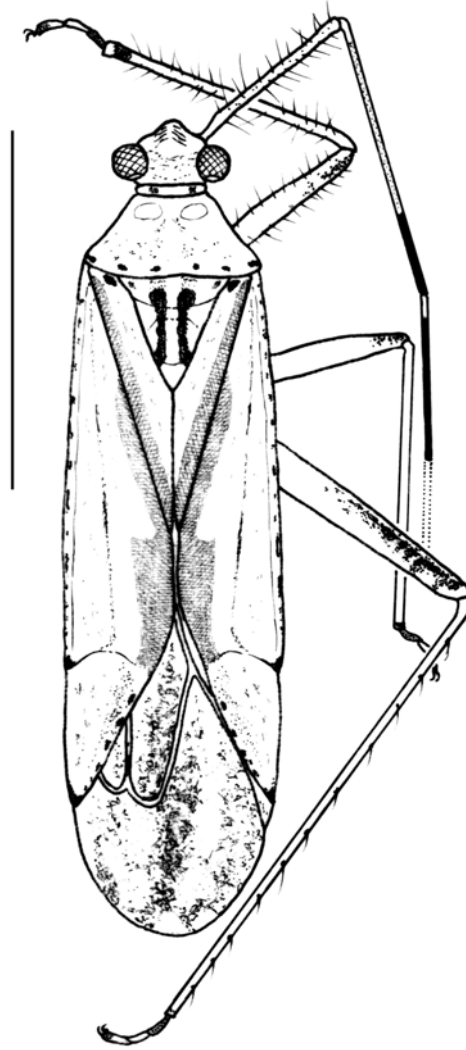
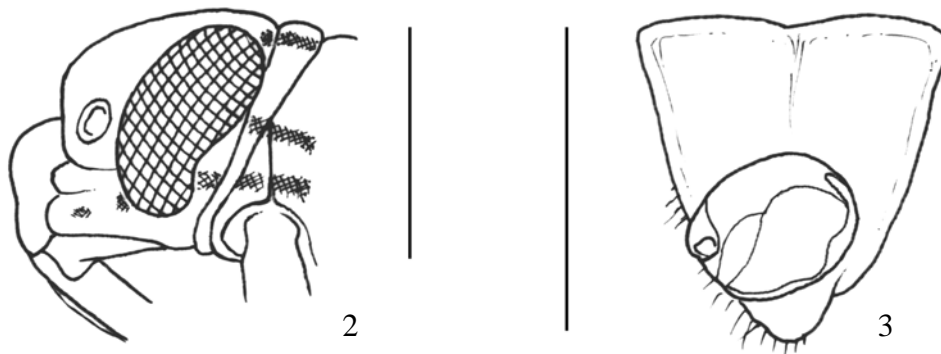


FIGURE 1. *Phytocoris (Compsocerochoris) degregorioi* n. sp., dorsal habitus (Scale bar = 3mm).

streaks on vertex; top of tylus with a pair of brown marks. Three parallel dark stripes behind the eyes. Head in frontal view 1.33 x as broad as high, in lateral view 1.13 x as long as high. Tylus prominent, weakly sinuate; frons moderately convex; genae laterally produced; bucculae with a conspicuous tooth-



FIGURES 2-3. 2) *Phytocoris (Compsocerocoris) degregorioi* n. sp., lateral view of head (Scale bar = 0,6 mm). 3) Same, dorsal view of the pygophore (Scale bar = 1 mm).

like process in the front part (Fig. 2). Ocular index: 1.22. Length of antennal joints: I-II-III-IV = 1.5-2.1-1.4-missing, in mm. Joint I slender, yellowish, scarcely punctured, provided with very long, erect white setae, much longer as the diameter of the joint; joint II yellowish, a basal ring white and distal third blackish; joint III blackish, only a narrow basal ring pale. Ratio I/diatone = 1.49; ratio I/hind margin of pronotum = 0.96. Rostrum extending much beyond hind coxae.

Pronotal collar dorsally with a pair of spots, width like that the antennal joint I. Prototum trapezoidal 2.07 x as broad as long (excluding collar) and 1.47 x as broad as diatone. Calli flat, well delimited. Lateral margins extensively while weakly sinuate. Hind margin sinuated in the middle, its subbasal area with six irregular equidistant blackish stains.

Scutellum as broad as long, with a pair of longitudinal subparallel dark stripes, its fore subbasal part leant apicad, its middle transversally furrowed and its hind part swollen, except the very sunk apex.

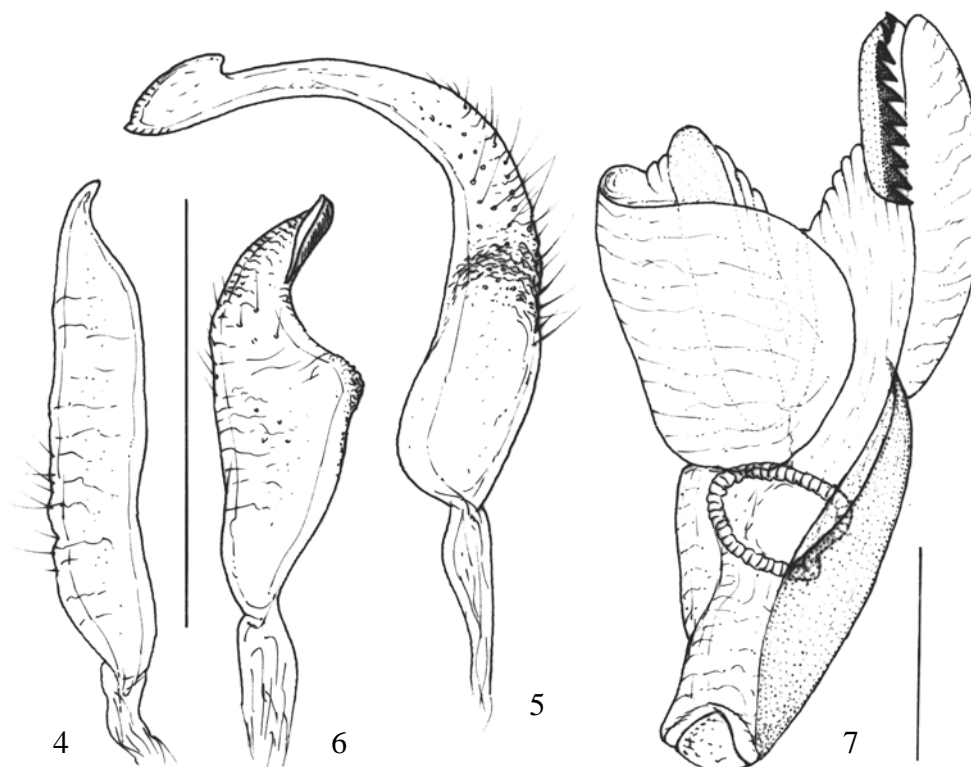
Hemelytra with scattered inconspicuous dark dots and streaks, its mesocorium with a characteristic brown pattern, which is welded to the brown surface occupying the depressed

outer side of clavus. The inner side of clavus only with a brown spot close to the pronotum. Inner margin of cuneus along its subbasal area with some dark irregular dots. Membrane pale, covered with brown irroration irregularly dispersed, but more intensively disposed at its antero-posterior middle surface; intercellular vein mainly darkened.

Legs long, pale. Fore femora and tibiae provided with very long erect white setae, like on the antennal joint I. Femora with brown irroration, scanty and limited to apical part in fore and middle femora, more dense and spread in hind femora. Fore tibiae covered with abundant, regular, small brown dots, its distal part darkened; middle tibiae with scarce small brown dots and hind tibiae with long pale-brown spines, arising from blackish dots. Ratio of hind tarsomeres: I-II-III = 0.2-0.3-0.35 mm. The first tarsal joint is brown in all legs; the third pro- and mesotarsal joints have the distal half brown while the metatarsal one remains only darkened in the third distal part.

Sternal and abdominal segments irregularly darkened and glabrous.

Male genitalia as in figs. 3-7. Pygophore as long as broad, provided with an angulated knob on left side and a diaphragm-like structure



FIGURES. 4-7. 4) *Phytocoris (Compsocerochoris) degregorioi* n. sp., right paramere (Scale bar = 0.25 mm). 5). Same, left paramere (Scale bar = 0.25 mm). 6). Same, left paramere, another aspect (Scale bar = 0.25 mm). 7). Same, vesica (Scale bar = 0.25 mm).

with irregular folds inside and around the genital opening (Fig. 3). Right paramere straight, elongated, slender, its hypophysis curved and sharp (Fig. 4). Left paramere arched, slender, its body lacking teeth, only with some obsolete denticles around the sensory lobe, which is expanded in lateral view (Fig. 5); its hypophysis classically crest-shaped fashioned (Fig. 6). Phallosome short, curved, sheath-shaped, its distal half sclerotized. Vesica with a secondary gonopore very large; basal process moderately sclerotized; right lobe elongated, bearing a comb-like sclerotized process (spiculum) with 10 strong three-cornered teeth (Fig. 6); primary membranous sac with lobes

more or less fused; in the left side one of these is a soft wrapping lobe that involves the relatively clavate one placed behind (Stonedahl, 1988).

Etymology

This new species is dedicated to our friend and esteemed Catalan lepidopterist J. J. Pérez De-Gregorio, «J. J.» for the colleagues, who collected the holotype.

Material

Holotype male. Es Caló, 31SCC78, 5 m, 31-III-2002, at light. Formentera Island, Pityusic Islands, Balearic archipelago, Spain. J. J. Pérez De-Gregorio leg., coll. J. Ribes.

Differential diagnosis

We have included *P. degregorioi* n. sp. in the subgenus *Compsocerochoris* Reuter, 1876, not in *Eriamiris* Wagner, 1968 because of its antennal coloration specially in the joint III, but also in its hemelytral pattern and lacking setae in the whole pairs of tibiae. This is a very distinctive Iberian *Phytocoris*, only related to *P. vallhonrati* J. Ribes & E. Ribes, 1999 for its antennal coloration, though the remaining characters are completely different (J. Ribes & E. Ribes, 1999; J. Ribes & Heiss, 2001). Likewise nor European neither south-mediterranean species (Wagner, 1974; Carapezza, 1997) show any resemblance with *P. degregorioi* n. sp. (Carapezza, pers. comm.).

References

- BÁEZ, M., & ZURITA, N. 2001. Orden Hemiptera. In: *Lista de especies silvestres de Canarias (hongos, plantas y animales terrestres)*. (IZQUIERDO, I.; MARTÍN, J. L.; ZURITA, N & ARECHAVALETA, M. Ed.). Consejería de Política Territorial y Medio Ambiente. Gobierno de Canarias: 182-197.
- HEISS, E.; HEYDEN, T. v. d.; RIBES, J. & RIEGER, Chr. 1996. Nachtrag zur Heteropterenfauna der Kanarischen Inseln. IV (Insecta, Heteroptera). *Linzer biologische Beiträge*, 28(2): 1117-1148.
- CARAPEZZA, A. 1997. Heteroptera of Tunisia. II *Naturalista Siciliano*, 21, Suppl. A, ser. 4: 1-312.
- KERZHNER, I. M. & JOSIFOV, M. 1999: Cimicomorpha II, Miridae. In: AUKEMA, B. & Chr. RIEGER, (eds.). Catalogue of the Heteroptera of the Palearctic Region. *The Netherlands Entomological Society, Amsterdam*, 3: 1-577.
- RIBES, J. 1965. Hemípteros de Mallorca. *Publicaciones del Instituto de Biología Aplicada*, 39: 71-95.
- RIBES, J. 1984. 17. Heteroptera of Eivissa and Formentera. In: *Biogeography and Ecology of the Pityusic Islands (Monographiae biologicae, 52)*. (KÜHBIER, H.; ALCOVER, J. A. & GUERAU d'ARELLANO TUR, C. Ed.). Dr. W. Junk Publ., The Hague, Boston, Lancaster: 365-376.
- RIBES, J. & HEISS, E. 2001. On Ibero-Canarian *Phytocoris* subgen. *Compsocerochoris* with description of a new species from Canary Islands (Heteroptera, Miridae). *Linzer biologische Beiträge*, 33(1): 625-636.
- RIBES, J. & RIBES, E. 1999. Contribution à l'étude du genre *Phytocoris* Fallén, 1814. Synonymie nouvelle et description de *P. (Compsocerochoris) vallhonrati* n. sp. (Heteroptera, Miridae). *Bulletin de la Société entomologique de France*, 104(5): 467-472.
- STONEDAHL, G. M. 1988. Revision of the Mirine Genus *Phytocoris* Fallén (Heteroptera: Miridae) for western North America. *Bulletin of the American Museum of Natural History*, 188(1): 1-257.
- WAGNER, E. 1974. Die Miridae Hahn, 1831, des Mittelmeerraumes und der Makaronesischen Inseln (Hemiptera, Heteroptera). Teil 1. *Entomologische Abhandlungen herausgegeben vom Staatlichen Museum für Tierkunde Dresden*, 39 Suppl.(1973): I-II; 1-421.