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Platycranus jordii nov. sp. (Hemiptera: Heteroptera: Miridae) from southern Spain

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Abstract

Platycranus (*Genistocapsus*) *jordii* **nov. sp.** (Heteroptera: Miridae: Orthotylinae) is described from southern Spain. All specimens were collected on the Fabaceae *Retama sphaerocarpa* (L.) Boiss. Its placement in the subgenus *Genistocapsus* is discussed, comparing it with some other species of this subgenus, mainly with *P. wagneri* Carapezza, 1997 (= *P. bicolor* Wagner, 1973), the species showing the colour pattern most similar to *P. jordii* **nov. sp.**

Key words: *Platycranus jordii* **nov. sp.**, *P. wagneri*, Spain, *Retama sphaerocarpa* (L.) Boiss.

Resumen

Platycranus jordii *nov. sp.* (*Hemiptera: Heteroptera: Miridae*) *del sur de España*

Se describe *Platycranus* (*Genistocapsus*) *jordii* **nov. sp.** (Heteroptera: Miridae: Orthotylinae) del sur de España. Todos los ejemplares fueron capturados en la Fabaceae *Retama sphaerocarpa* (L.) Boiss. Se discute su ubicación en el subgénero *Genistocapsus* y se compara con otras especies de dicho subgénero, principalmente con *P. wagneri* Carapezza, 1997 (= *P. bicolor* Wagner, 1973), la especie que muestra el patrón de coloración más parecido a *P. jordii* **nov. sp.**

Palabras clave: *Platycranus jordii* **nov. sp.**, *P. wagneri*, España, *Retama sphaerocarpa* (L.) Boiss.

Laburpena

Platycranus jordii *nov. sp.* (*Hemiptera: Heteroptera: Miridae*) *Espainiaren hegoaldekoa*

Platycranus (*Genistocapsus*) *jordii* **nov. sp.** (Heteroptera: Miridae: Orthotylinae) deskribatzen da, Espainiaren hegoaldekoa. Ale guztiak *Retama sphaerocarpa* (L.) Boiss Fabaceae landarean harrapatu ziren. Espezie berria *Genistocapsus* subgeneroan kokatzea eztabaidatzen da eta subgenero horretako beste espezie batzuekin konparatzen da, batez ere *P. wagneri*rekin Carapezza, 1997 (= *P. bicolor* Wagner, 1973), zeinaren kolorazio-eredua *P. jordii* **nov. sp.**renaren antzekoena baita.

Gako-hitzak: *Platycranus jordii* **nov. sp.**, *P. wagneri*, Espainia, *Retama sphaerocarpa* (L.) Boiss.

Introduction

The genus *Platycranus* Fieber, 1870 shows a Palaearctic distribution, which reaches from Ukraine, Turkey, Asia Minor, northern Africa, central and western Europe, Mediterranean Region to the Canary Islands (Kerzhner and Josifov, 1999). All species are characterized by its parallelsided shape, head with eyes wider than the pronotum and a wide, flat vertex. Many of the species are restricted to small areas of distribution, especially on Mediterranean islands.

Taxonomy

Platycranus jordii nov. sp.

Type material:

HOLOTYPE: ♂, Mojacar, prov. Almeria, Spain, 5.5.2006, H. Günther leg.

PARATYPES: 5 ♂♂, 9 ♀♀, same locality, 27.4.2001,

H. Günther leg.; 1 ♂, 7 ♀♀, same locality, 5.5.2006, H. Günther leg.; 1 ♂, 6 ♀♀ Sorbas, prov. Almeria, Spain, H. Günther leg.

The type material is deposited in the collection of the Naturhistorisches Museum Mainz (NHMM).

Description:

Small species, 4.1–4.5 mm (♂♂) and 3.9–4.2 mm (♂♂) (Fig. 1a).

Colour green during life, pale after mounting. Species with dark medial stripe from head to the membrane. Vertex dark, often bright in the females, two dark diagonal stripes from the middle of vertex to the base of antennae. Antennae bright, segments three and four darkened. Pronotum with two distinct dark callosities, black, except two small yellow stripes laterally. Scutellum dark. Clavus dark, corium pale with small central dark part. Membrane dark with yellow veins. Ventral side pale.

Legs pale, last tarsal segment black. Rostrum pale, last segment black, reaching the mesocoxae.

Head and distal part of pronotum with silvery, squamous hairs. Corium with short, bright, adpressed hairs and long, bright, semierect hairs on its margins. Membrane bare.

Antennae with short, adpressed hairs, first segment with two or three longer hairs.

Tibiae with short, bright hairs and bright spines, little longer than the diameter of tibiae.

Male genitalia (Fig. 2a):

Right paramere straight, basally thick, reduced apically, hypophysis curved, very slender with a sharp tip. Left paramere regularly curved, hypophysis slender, tip bent to the outer side, space between basal part and hypophysis relatively broad.

Vesica long and slender, about 0.3 mm long, slightly winded, top with a tip.

Measurements:

Body length: ♂♂ 4.1–4.5 mm (holotype 4.4 mm)
♀♀ 3.9–4.2 mm

Body width: 1.0–1.1 mm in both sexes

Head length: 0.4–0.5 mm in both sexes

Head width: 0.80–0.95 mm in both sexes

Vertex: ♂♂ 0.40–0.45 mm
♀♀ 0.50–0.55 mm

Eyes: ♂♂ 0.20–0.225 mm
♀♀ 0.20–0.25 mm

Proportion vertex : eyes: ♂♂ 1.6–2.0
♀♀ 2.5–2.8

Antennae length: ♂♂ 3.5–3.7 mm
♀♀ 3.3–3.7 mm

Segments I / II / III / IV :
♂♂ 0.4–0.5 / 1.3–1.5 / 1.2–1.3 / 0.4–0.5 mm
♀♀ 0.5 / 1.3–1.5 / 1.0–1.2 / 0.4–0.5 mm

Discussion:

The genus *Platycranus* is divided into two subgenera, *Genistocapsus* Wagner, 1956, with thirteen species, and *Platycranus* Fieber, 1870, with six species (Kerzhner and Josifov, 1999; Gogala, 2002; Josifov and Simov, 2006). The distinguishing characters of the two subgenera are the length of the rostrum and the relation of vertex to eye (Wagner, 1974: 143).

The new species *Platycranus jordii* **nov. sp.** undoubtedly belongs to the subgenus *Genistocapsus*: Its body length is small, as in the majority of the species of the subgenus; its rostrum reaches the middle coxae; and the relation vertex/eye is greater than in the members of the subgenus *Platycranus*. On the other hand, that relation does not fit well to the measurements for the subgenus *Genistocapsus* (according to Wagner, 1974), but the width of vertex and eyes often show a greater variability than those given in the descriptions or keys. Consequently *P. jordii* **nov. sp.** will not be compared to the members of the subgenus *Platycranus*: *P. eckerleini* Wagner, 1962, from Algeria and Libya, *P. erberi* Fieber, 1870, from the Balkans, the Mediterranean Region and Turkey, *P. hartigi* Wagner, 1951, from Italy, *P. jordanicus* Linnavuori, 1984, from the Near East, *P. lindbergi* Wagner, 1954, from the Canary Islands and *P. putoni* Reuter, 1879, from Sicily.

Within the subgenus *Genistocapsus*, a group of green species without black dorsal patterns can be separated: *P. boreae* A. Gogala, 2002, from Slovenia, *P. concii* Tamanini, 1987, from Italy, *P. jurineae* P.V. Putshkov, 1985, from Ukraine, *P. longicornis* Wagner, 1955, from Andorra, southern France and Spain, *P. metriorrhynchus* Reuter, 1883, from Austria, France and east and south Mediterranean countries, *P. minutus* Wagner, 1955, from Spain, *P. orientalis* Linnavuori, 1965, from Turkey, *P. remanei* Wagner, 1955, from southern France and Spain and *P. rumelicus* Simov, 2006, from Bulgaria.

Another group of species of the subgenus *Genistocapsus* showing dark patterns on the dorsal side will be compared with *P. jordii* **nov. sp.**, as follows:

P. bicolor (Douglas & Scott, 1868). This species was originally placed in the genus *Pachylops* and was trans-

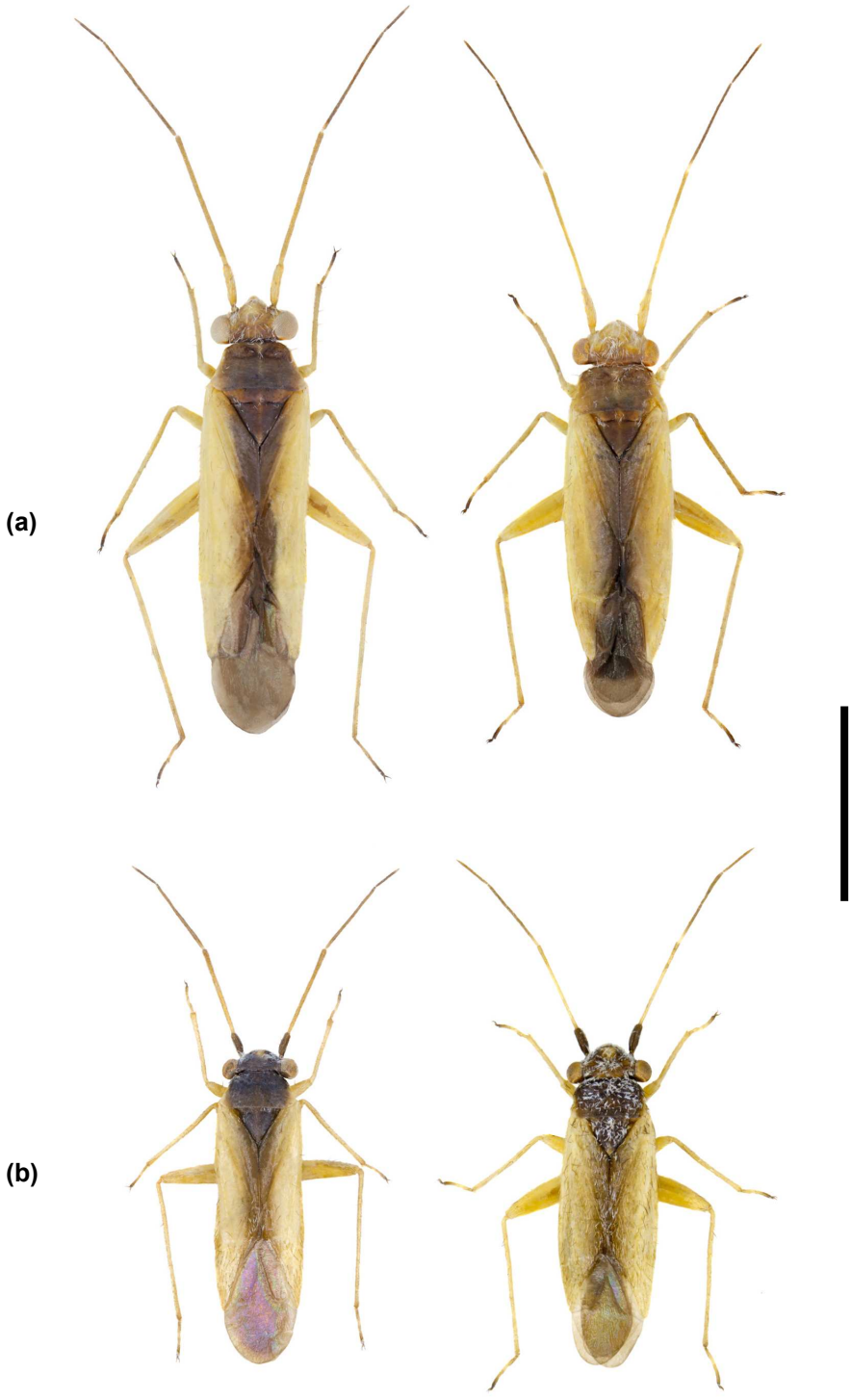

FIGURE 1. Habitus of: (a) *Platycranus* (*Genistocapsus*) *jordii* **nov. sp.**, ♂ (left) and ♀ (right); (b) *Platycranus* (*Genistocapsus*) *wagneri* Carapezza, 1997, ♂ (left) and ♀ (right) (Scale bar = 2 mm).

FIGURE 2. Male genitalia of: (a) *Platycranus* (*Genistocapsus*) *jordii* **nov. sp.**: Left paramere (two views), right paramere and vesica; (b) *Platycranus* (*Genistocapsus*) *wagneri* Carapezza, 1997. Left paramere (two views), right paramere and vesica (Scale bar = 0.1 mm).

ferred to *Platycranus* by Carapezza (1997). It occurs in southern France, Great Britain, Ireland, Italy, Portugal and Spain (Kerzhner and Josifov, 1999). It is similar to *P. jordii* **nov. sp.** with its equal body length and the dark, longitudinal stripe extending from the head to the inner margin of the corium. The first antennal segment is bright, as in *P. jordii* **nov. sp.** Its distinguishing marks from *P. jordii* **nov. sp.** are mainly the shape of the genital structures as given by Carapezza (1997: 77): Right paramere of *P. bicolor* without a curved hypophysis and without a sharp tip as in *P. jordii* **nov. sp.** Left paramere not regulary rounded as in *P. jordii* **nov. sp.**, forming nearly a right angle at the convex side, hypophysis not distinctly bent to the outer side. Vesica quite straight. Semierect hairs dark (Wagner, 1974), pronotum 1.3 as broad as the head in ♂♂ and ♀♀ (1.1 in *P. jordii* **nov. sp.**).

P. genistae Lindberg, 1948 occurs on Cyprus only. It is clearly smaller (♂♂ 3.7 mm, ♀♀ 3.5 mm) than *P. jordii* **nov. sp.** A conspicuous difference to the new species is the black first antennal segment.

P. pictus Wagner, 1963 occurs on some Mediterranean islands (Kerzhner and Josifov, 1999). It is of equal length as *P. jordii* **nov. sp.**, vertex 2.4 as width as eyes in ♂♂ (2.0 in the new species), 2.8 in the ♀♀. First antennal segment black. According to the figures in Wagner (1974: 151) the convex side of the left paramere is nearly right angled.

P. wagneri Carapezza, 1997 is a new name for *P. bicolor* Wagner, 1973, to avoid the homonymy of *Platycranus bicolor* Douglas & Scott with *Platycranus bicolor* Wagner after the transfer of the first one from the genus *Pachylops* to *Platycranus* (Carapezza, 1997). In my collection there are several specimens of *P. wagneri* from the Isle of Crete, collected by light trap by H. Malicky in 1977 and 1978 (Heiss *et al.*, 1991). This allows detailed comparison between *P. jordii* **nov. sp.** and *P. wagneri*, whereas the comparisons between *jordii* **nov. sp.**, *bicolor*, *genistae* and *pictus* are based on the figures by Carapezza (1997: 77) and Wagner (1974: 151).

With its dorsal coloration pattern, *P. jordii* **nov. sp.** is most similar to *P. wagneri* Carapezza (= *P. bicolor* Wagner, 1973) (Carapezza, 1997: 79) (Fig. 1). With a body length of 3.9–4.5 mm, *P. jordii* **nov. sp.** is longer than *P. wagneri* (3.4 mm in average). The antennae of *P. jordii* **nov. sp.** are longer (3.3–3.7 mm) than those in *P. wagneri* (2.3 mm). The first antennal segment is black in *P. wagneri*, bright in *P. jordii* **nov. sp.**

Male genital structures are quite different in *P. jordii* **nov. sp.** and *P. wagneri* (Fig. 2). The right paramere in the new species is slender with a sharp tip, in *P. wagneri* it is thick and the tip not very sharp. In the left paramere of *P. jordii* **nov. sp.** the space between base and hypophysis is relatively wide, more narrow in *P. wagneri* (the photograph does not exactly show the hypophysis of *P. wagneri*). The vesica of *P. jordii* **nov. sp.** is long and slender, about 0.28 mm long, in *P. wagneri* it is shorter (about 0.24 mm long) and more straight (the drawings by Wagner are not correct).

Biology:

All recorded specimens of *P. jordii* **nov. sp.** were taken from the Fabaceae *Retama sphaerocarpa* (L.) Boiss., which is abundant in the province of Almería, southern Spain (Sagredo, 1987: 213). Specimens occurred in April and May, but they do not seem to be present during these months every year, but depending on the course of the weather during early spring.

Distribution:

The distribution area of the species might be very small: province of Almería, in southern Spain, and depending on the occurrence of the host plant. That is also true for other members of the subgenus *Genistocapsus*: *P. wagneri* is present on the islands of Cyprus and Crete only, *P. genistae* on Cyprus also, *P. pictus* on some Italian islands (Kerzhner and Josifov, 1999), *P. boreae* in the karstic region of Slovenia (A. Gogala, 2002).

Etymology:

I dedicate the new species to my very good friend and famous heteropterist Jordi Ribes on occasion of his 80th birthday.

Acknowledgements

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References

Carapezza A. 1997. Heteroptera of Tunisia. *Il Naturalista Siciliano* **21(Suppl. A)**: 1-131.

Gogala A. 2002. *Platycranus* (*Genistocapsus*) *boreae* sp. nov. from Slovenia (Hemiptera: Heteroptera: Miridae: Orthotylinae). *Acta Entomologica Slovenica* **10**: 13-20.

Heiss E, Günther H, Rieger Ch, Malicky H. 1991. Artenspektrum und Phänologie von Heteropteren aus Lichfallenausbeuten von Kreta (Heteropteren aus Kreta IX). *Berichte des Natuurwissenschaftlich-Medizinischen Vereins Innsbruck* **78**: 119-143.

Josifov M, Simov N. 2006. Endemism among the Heteroptera on the Balkan Peninsula. *Denisia* **19**: 879-898.

Kerzhner IM, Josifov M. 1999. Miridae Hahn, 1833. In: Aukema B, Rieger Ch (Eds.). *Catalogue of the Heteroptera of the Palaearctic Region 3. Cimicomorpha II*. The Netherlands Entomological Society. Amsterdam.

Sagredo R. 1987. *Flora de Almería. Plantas vasculares de la provincia*. Diputación Provincial de Almería. Almería.

Wagner E. 1974. *Die Miridae Hahn, 1831, des Mittelmeerraumes und der Makaronesischen Inseln* (*Hemiptera, Heteroptera*). *Teil 2*. Entomologische Abhandlungen Staatliches Museum für Tierkunde Dresden Suppl.: 1-421.

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