



## A taxonomic revision of the genus *Platycranus* Fieber, 1870 (Hemiptera: Heteroptera: Miridae: Orthotylinae)

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### Abstract

The Mediterranean orthotyline genus *Platycranus* is revised. Updated diagnoses and descriptions, data on distribution and hosts are provided for the genus and included species, and a key is presented to facilitate identification of species. Pictures of the dorsal habitus, scanning electron micrographs, and figures of genital structures are given. The following new synonymies are established: *P. putoni* Reuter, 1879 = *P. eckerleini* Wagner, 1962 = *P. jordanicus* Linnavuori, 1984; *P. metriorrhynchus* Reuter 1883 = *P. longicornis* Wagner, 1955 = *P. rumelicus* Simov, 2006; *P. remanei* Wagner, 1955 = *P. minutus* Wagner, 1955 = *P. orientalis* Linnavuori, 1965 = *P. jurineae* Putshkov, 1985 = *P. boreae* Gogala, 2002. *P. erberi* Fieber, 1870 is for the first time reported from Syria, and *P. remanei* is reported as new to Portugal.

**Key words:** systematics, review, diagnosis, synonymy, key to species, hosts, Mediterranean, *Genista*

### Introduction

Fieber (1870) established the genus *Platycranus* to include his new species, *P. erberi*. Then Reuter described two more species, *P. putoni* Reuter, 1879 and *P. metriorrhynchus* Reuter, 1883. Subsequent descriptions of new species appeared only in the second half of the twentieth century (Lindberg 1948; Wagner 1951; Wagner 1954; Wagner 1955; Wagner 1962; Wagner 1963; Linnavuori 1965; Wagner 1973; Linnavuori 1984; Putshkov 1985; Tamanini 1987; Linnavuori 1999; Gogala 2002; Josifov & Simov 2006); the last species of the genus was described quite recently (Günther 2011).

Wagner (1955) recognized two distinct groups within *Platycranus*, viz. *P. erberi*-group and *P. metriorrhynchus*-group, which he later (Wagner 1956) described as subgenera *Platycranus* and *Genistocapsus* respectively. The subgenus *Platycranus* was distinguished by him by the larger body size, flat head with narrow vertex, and a short labium. The subgenus *Genistocapsus* has smaller body size, convex vertex, and a long labium. The only comprehensive review of the entire genus with a key to species was published by Wagner (1974) and is largely outdated.

*Platycranus* is a small to medium-sized orthotyline genus principally distributed in the Mediterranean region. A clear diagnosis has never been given to the genus, but the complex of several distinguishing characters was often mentioned in descriptions (Wagner & Weber 1964, Wagner 1974). These characters are the flattened and widened vertex, the presence of both simple and scalelike setae on dorsum, and the shape of both parameres.

The present work provides color digital habitus figures, scanning electron micrographs of selected structures, and consistent illustrations of the male and female genitalia. All species are provided with differential diagnoses and descriptions paying special attention to variation in sizes, coloration, vestiture, and genitalic structures.

Prior to the present study, 21 species were included in the genus *Platycranus*, and delimitation of some of them was rather ambiguous. Species identification within the group has always been difficult and traditionally based on sizes, body proportions, and measurements. Although measurements are very important in recognizing some *Platycranus* spp., they also show considerable infraspecific variability (see Table 1). The male and female genitalia