

## A new species of *Megalocoleus* (Hemiptera: Heteroptera: Miridae: Phylinae) from Morocco

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**Abstract.** *Megalocoleus stysi* sp. nov. is described from Morocco and its habitus and male and female genitalia are illustrated. An amendment to the key for *Megalocoleus* Reuter, 1890, is proposed.

**Key words.** Heteroptera, Miridae, Phylinae, *Megalocoleus stysi* sp. nov., genitalia, key, Morocco

### Introduction

The important collection of Eckerlein preserved in the Natural History Museum of Geneva (MHNG) is essential for the study of numerous Palaearctic mirid species and sometimes brings surprises. During the study of a large quantity of specimens collectively identified as 'Amblytylus', I encountered a small series of a new species of the genus *Megalocoleus* Reuter, 1890.

This genus is strictly Palaearctic (SCHUH 1995, KERZHNER & JOSIFOV 1999). The 24 described species assigned to it were recently re-examined by MATOCQ (2004), and after establishing seven synonymies, one new combination, and one restoration of species status, the number of species belonging to *Megalocoleus* decreased to 14. Most of them are characterised mainly by the male genitalia.

The new species is described below, including a modification to the recently published key to *Megalocoleus* species (MATOCQ 2004). The species is warmly dedicated to Pavel Štys.

### Results

#### *Megalocoleus stysi* sp. nov.

(Figs. 1-10)

**Type locality.** Morocco, Kenitra, Forêt de Mamora.

**Type material.** HOLOTYPE: ♂, 'Morocco / Kenitra / Forêt de Mamora / 5-V-1967 / Eckerlein leg.' (MHNG). PARATYPES: 2 ♂♂ 6 ♀♀, same data as holotype (MHNG); 1 ♂ 1 ♀, same data as holotype (coll. Matocq). The 11 specimens of the type series have lost most of their vestiture; setae can only be observed in places.

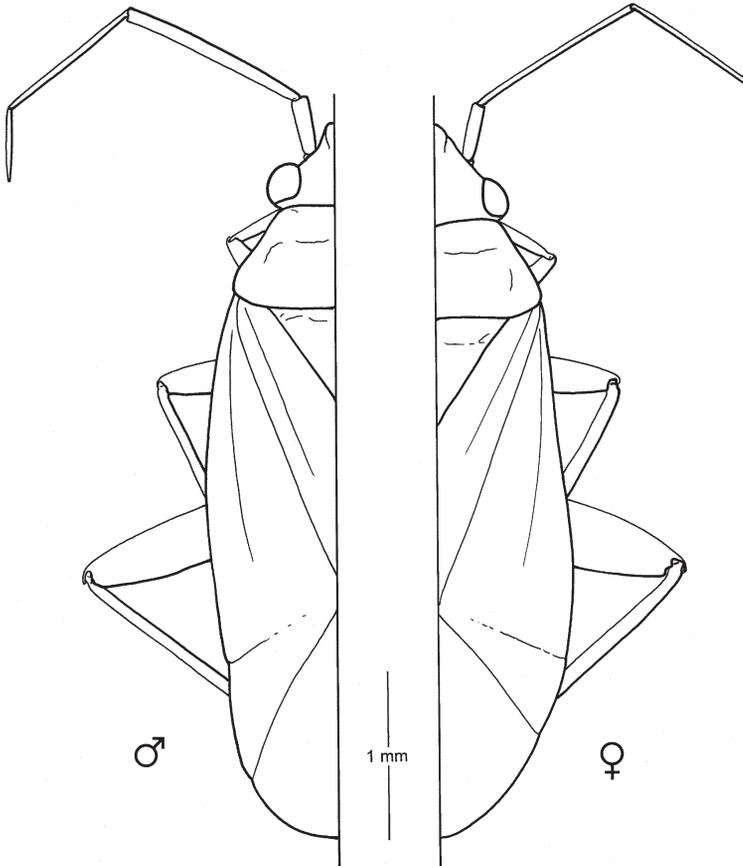


Fig. 1. *Megalocoleus stysi* sp. nov. Habitus of male and female.

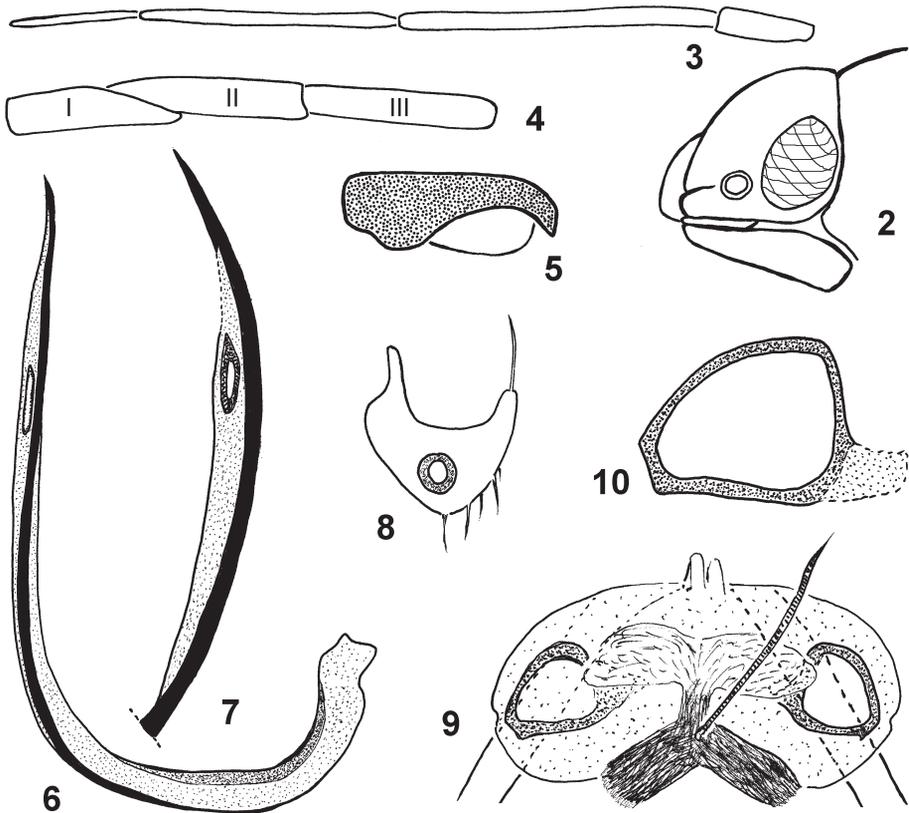
**Description** (both sexes). Integument rather mat, body and appendages entirely greyish yellow except the last segment of rostrum and the last tarsal segments and claws of all legs, which are black. Dorsal vestiture with two types of setae of unknown distribution (see the note above), fine and adpressed pale setae and semi-erect dark setae observed along lateral margin of hemelytra and on cuneus). Length ( $\text{♂}$  and  $\text{♀}$ ) = 3.8-4.5 mm.

Head short, not elongated (Fig. 2); length of antennal segments: I – 0.35 mm, II – 1.1 mm, III – 0.9 mm, IV – 0.45 mm (Fig. 3). Rostrum reaching the middle of abdominal sternite VIII.

Pronotum trapezoidal with slightly carinate lateral margin; xyphus concave and carinate.

Hemelytra slightly translucent with more or less darkened spot in the middle (more pronounced in females); membrane smoky transparent with white veins.

Legs: femora without black spots; tibiae with black spines; tarsi: segments I and II greyish yellow, segment III and claw black; hind tarsi: segments II and III of hind tarsus subequal in length (Fig. 4); claws as in Fig. 5.



Figs. 2-10. *Megalocoleus stysi* sp. nov. (male holotype: 2 to 8). 2 – head, lateral view; 3 – antenna; 4 – hind tarsus; 5 – claw; 6 – vesica, lateral view; 7 – apex of vesica, different angle; 8 – left paramere; 9 – vagina, dorsal view; 10 – detail of left ring sclerite of vagina.

Genitalia. Male: vesica slender, U-shaped; with a thin, straight and acute apex (Fig. 6); secondary gonopore removed far from apex of vesica (Fig. 7); left paramere as in Fig. 8. Female: vagina large and oval (Fig. 9). Ring sclerites subtriangular (Fig. 10).

**Differential diagnosis.** *Megalocoleus stysi* sp. nov. shows some similarities with *M. lunula* (Fieber, 1861) in the colouration and vestiture but differs from the latter species in the structure of the vesica. The vesica of *M. stysi* sp. nov. is thin with a straight apex and the secondary gonopore is removed far from the apex of the vesica, while the vesica of *M. lunula* is thicker with a curved apex and subapically placed secondary gonopore. The vesica of *M. stysi* sp. nov. is similar to that of *M. krueperi* (Reuter, 1879), but the latter species is easily distinguished by its general shape, short and incrassate antennae, and vestiture (see MATOCQ 2004).

*Megalocoleus stysi* sp. nov. runs to couplet 12 in the key presented by MATOCQ (2004). A third choice can be added at that point to accommodate *M. stysi* sp. nov. in the key. Asterisk (\*) means that an examination of the male genitalia is necessary to identify the species with certainty.

12. Second segment of antenna slender, at least 1.5 mm long. Female: pubescence generally pale dense and fine, dark hairs sparse. Male: pubescence brownish, flexible, not dense. Rostrum in both sexes very long, reaching or even surpassing posterior end of abdomen. Large species. .... \**M. longirostris* (Fieber, 1861)
- Second segment of antenna much shorter, 1.1 mm long; apex of rostrum reaching middle of abdominal segment VIII. .... \**M. stysi* sp. nov.
- Second segment of antenna shorter, 1.25 mm long. .... 13
13. Brown pubescence dense, hairs thick; pale pubescence sparse and fine. Apex of rostrum surpassing abdominal segment VIII (male) or reaching its basal quarter (female). Corium sometimes with a round, more or less pronounced mark. .... \**M. lunula* (Fieber, 1861)
- Brown and pale pubescence fine and rather dense, evenly distributed. Apex of rostrum surpassing abdominal segment VIII (male) or reaching its middle (female). Cuneus sometimes orange. .... \**M. naso* (Reuter, 1879)

**Etymology.** The species is dedicated to Prof. Pavel Štys on the occasion of his 75<sup>th</sup> birthday and in recognition of his important contribution to our knowledge of the Heteroptera.

**Distribution.** Northwestern Morocco.

### Discussion

Specimens of *Megalocoleus* are commonly mixed in collections with specimens belonging to other similar genera, in particular with *Amblytylus* Fieber, 1858 (and vice versa). I have already mentioned the difficulties of separating these two and other genera such as *Tinicephalus* Fieber, 1858 (MATOCQ 2004), which are due to the insufficient definition of generic characters. *Megalocoleus stysi* sp. nov. exhibits all the external characters previously listed for the genus in a provisional diagnosis (MATOCQ 2004: 71): the general colouration, shape of the head, comparative length of the tarsal segments, and morphology of the claws. Only one character (lateral margin of the pronotum slightly carinate) does not fit well with the definition of the genus. However, the most important diagnostic character is the form of the vesica (Figs. 6 and 7).

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