

# A revision of the genus *Psallopsis* (Heteroptera: Miridae)

F.V. Konstantinov

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A key and descriptions are given for all 13 species of this genus, including 3 new species: *Psallopsis neglecta* sp. n. (Ukraine, south of European Russia, Altai, Central Asia, and Mongolia), *P. caspia* sp. n. (Caucasus, northern coast of the Caspi Sea, Central Asia, and Iran) and *P. kalidivcola* sp. n. (Central Asia and Mongolia). The following new synonymies are established: *Psallopsis kirgistica* (Becker) = *Solenoxyphus flavicans* Qi & Nonnaizab; *Psallopsis minima* (Wagner) = *Solenoxyphus viridulus* Qi & Nonnaizab. Data on distribution, mainly based on the collection of the Zoological Institute (St. Petersburg) are illustrated by maps for 9 species.

F.V. Konstantinov, Entomology Department, St. Petersburg State University, Universitetskaya nab. 7/9, St. Petersburg 199034, Russia.

## Introduction

This article is based on examination of the material in the collection of Zoological Institute, Russian Academy of Sciences, St. Petersburg. The revision of this group has revealed 3 new species, apart from the 10 ones already described before. The Irano-Turanian distribution is characteristic of many species, some of them are found also in SE Europe, Transcaucasia, Mongolia and NW China. The published keys (Stichel, 1957; Kerzhner & Jaczewski, 1964; Wagner, 1975) include a few species of this genus.

Some species differ mainly in the structure of the male genitalia (vesica of aedeagus), but some have also external distinctions, such as peculiarities of spot pattern. After alkaline boiling or after soaking of the genital segment in 15% KOH for several hours, the weakly sclerotized parts of vesica and parameres change their shape (e.g. the twisting of vesica; the position of paramere hypophysis). Thus, the soaking of genital segment in water within sufficient time and subsequent transfer of samples in glycerol should be used to avoid these alterations of shape. The illustrations were made using the magnification 200x. Sometimes this considerable magnification is necessary for identification. The vesica is figured in lateral and frontal views. They are identical in all species and correspond to the right lateral and ventral views of the vesica located in the body of the insect.

All explanations of terminology used for the description of the vesica are given in the Figs 15-16. The identification in this genus is difficult due to high variability, and detailed morphological description is given for each species. In ratios between antennal segments each unit equals 0.014 mm. All species of *Psallopsis* are specialized feeders of Chenopodiaceae, and knowledge of the host plant is helpful in identification of related species. Unfortunately, for some species host plants remain unknown.

## Genus *Psallopsis* Reuter, 1901

Type species *Psallopsis femoralis* Reuter, 1901.

*Description.* Oblong-oval, small-sized bug ( $\sigma$  of largest species about 4 mm long). Body with whitish, easily obliterated hairs. Males with almost parallel-sided body. Females smaller, more stumpy. Head wider than high, protruding; frons and tylus protuberant, rostrum reaching or nearly reaching hind coxae. Frons in darkest specimens with dark spots arranged in series of rays radiating from its median line. Antennae thin, light. First antennal segment darkened in some species (*P. femoralis*, *P. basalis*). Upper side of body with small spots of different shades of fuscous on hemelytra and legs, in *P. femoralis*, *P. kirgistica*, *P. haloxyli* and *P. neglecta* also on head, pronotum and scutellum, and in  $\text{q}$  of *P. haloxyli* often also on second antennal segment. In addition to