



## A review of the genus *Platypygus* Loew (Mythicomyiidae: Platypyginae) in Iran, with notes on *Cyrtisiopsis maculiventris* (Loew) n. comb.

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### Abstract

The genus *Platypygus* Loew, 1844 in Iran is reviewed. *Platypygus kurdorum* Paramonov and *P. melinoproctus* Loew are redescribed and a new species, *Platypygus titanomedeae* sp. nov., is described and illustrated. A diagnostic key to species of *Platypygus* and *Cyrtisiopsis* in Iran is provided and variability of some characters in genus *Platypygus* is briefly discussed. As a result of this study, *Platypygus maculiventris* Loew is transferred to the genus *Cyrtisiopsis* Séguéy.

**Key words:** *Platypygus*, *Cyrtisiopsis*, Platypyginae, Mythicomyiidae, taxonomy, Iran

### Introduction

The mythicomyiid genus *Platypygus* includes tiny flower visitors that are easily distinguished in the field by their black and yellow-colored body and humpbacked thorax. This genus belongs to the subfamily Platypyginae, the concept of which has been changed since Hull's (1973) book wherein he divided Platypyginae into two tribes, Cyrtosini and Platypygini, and included the genus *Onchopelma* Hesse, 1938. *Onchopelma* has subsequently been considered to the subfamily Psiloderoidinae (Greathead & Evenhuis, 2001). Platypyginae now includes five genera, *Ahessia* Greathead & Evenhuis, 2001, *Cephalodromia* Becker, 1914, *Cyrtisiopsis* Séguéy, 1930, *Cyrtosia* Perris, 1839 and *Platypygus* Loew.

*Platypygus* contains eleven species that were characterized in Greathead & Evenhuis (2001) by the absence of an acute process on the postgena, the presence of vein  $R_{2+3}$  ending in the costal margin well beyond the level of the end of vein  $M_2$ , and a closed discal cell. The genus is distributed mainly in the Palaearctic region although a few species are known from the Afrotropical (*P. natalensis* Hesse, 1967) and Oriental (*P. limatus* Séguéy, 1963) regions (Evenhuis, 2002).

From a historic view, Loew (1844) originally described the genus *Platypygus* to include his new species, *P. chrysanthemii*. Subsequently, Loew (1869, 1873, 1874) described five additional new species. Loew's species were sometimes represented by only a single specimen (e.g. *P. maculiventris* Loew, 1874) or by very short descriptions with few diagnostic characters. Engel (1933) provided a key to nine species of the genus in the Palaearctic region and synonymized *P. algirus* Paramonov, 1929 with *P. melleus* Loew, 1856. Paramonov (1929, 1934) redescribed some species much more comprehensively and, by describing two species and one new subspecies and preparing a key to known species, helped clarify the taxonomy of *Platypygus*. Nevertheless, all these studies lacked illustrations of genitalia. This was apparently due to either the paucity of specimens, absence of good optical equipment, or not realizing the importance of genitalic characters.

The brief and general descriptions and the few morphological illustrations in Zaitzev (1966) created some problems when he prepared a key to species of *Platypygus* in the Caucasus region. He used some illustrations of Engel (1933) and those made of other specimens under the same name (e.g., in *P. kurdorum*). He apparently did not