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New species of the genus *Psix* Kozlov & Lê (Hymenoptera: Platygastridae)

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Abstract

Psix sunithae sp. nov. is described and illustrated from Hyderabad, Andhra Pradesh, India. Specimens of the new species have been reared from coreid eggs laid on the leaf of Nux Vomica. *Psix abnormis* Kozlov & Lê and *P. saccharicola* (Mani) are redescribed and an updated identification key to Indian species of *Psix* is provided.

Key words: new species, Telenominae, identification key, India, coreid parasitoids, Loganiaceae

Introduction

The genus *Psix* was erected by Kozlov & Lê in 1976, with the type species, *P. abnormis*, and was classified within the subfamily Telenominae of the family Scelionidae. Sharkey (2007) subsequently synonymized the family Scelionidae with Platygastridae after the phylogenetic analysis of the platygastroid wasps by Murphy *et al.* (2007). Johnson & Masner (1985) revised the world species of this *Psix* group of genera, which led to changes in the placement of the five species originally described in other genera as well as descriptions of twelve more species. The group is most diverse in Africa, Asia, and Australia (Johnson & Masner, 1985). Johnson (1988) summarizes the distinguishing features of the closely related *Psix*-group of genera. To date, 21 species are known (Johnson, 2012), of which seven species are from India, viz. *Psix abnormis* Kozlov & Lê, *P. confluus* Johnson & Masner, *P. lacunatus* Johnson & Masner, *P. robustus* Rajmohana, *P. saccharicola* (Mani), *P. striaticeps* (Dodd), and *P. variosus* Johnson & Masner. These had been recently keyed out by Rajmohana & Talukdar (2010). The present study describes a new species *Psix sunithae* sp. nov. from India, provides an update to the keys of Johnson & Masner (1985) and Rajmohana & Talukdar (2010), and the redescription of *P. abnormis* and *P. saccharicola*. The redescriptions provide additional details of the antennae and wings in terms of measurements.

Materials and Methods

The material includes the specimens from the Network Project on Insect Biosystematics and the National Pusa Collection (NPC), Division of Entomology, Indian Agricultural Research Institute, New Delhi, India. The terminology follows Masner (1979, 1980), Johnson & Masner (1985) and Mikó *et al.* (2007). Abbreviations used: POL: posterior ocellar line; LOL: lateral ocellar line; OOL: ocular ocellar line; OD: ocellar diameter; F1, F2, ... F10: antennal flagellomeres 1, 2, ... 10; T1, T2, ... T5: metasomal tergites 1, 2, ... 5; S1, S2: metasomal sternites 1 and 2. Antenna, wings and legs were mounted in Canada balsam after overnight immersion in 10% KOH and exposure to 70%, 80%, 99% ethyl alcohol and clove oil. Line diagrams were drawn using a drawing tube attached to a Leica DM500 compound microscope and Leica MZ16A stereozoom microscope for antenna, wings, and legs and whole body, respectively. Photographs were taken with Leica DFC425C digital camera attached with Leica M205FA stereozoom microscope. Scanning electron microscopy