



## A note on the new species of the genus *Isopsera* (Orthoptera: Phaneropteridae: Phaneropterinae) from India

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### Abstract

A new species of the genus, *Isopsera*: *Isopsera arcuata* Nagar, Mal, Swaminathan **sp. nov.** (Orthoptera: Phaneropteridae Burmeister, 1838; Phaneropterinae Burmeister, 1838) is described. The holotype (♂) was collected from South India: Coimbatore (Tamil Nadu). The geographical location had the following specifications: 12°58' N 77°35' E 930MSL South India. The described species differs from the two closely related species, *I. caligula* Ingrisch and *I. spinosa* Ingrisch, based on the structure of the male sub-genital plate, cerci and stridulatory file on the left tegmen.

**Key words:** Orthoptera, Phaneropteridae, Phaneropterinae, *Isopsera arcuata* Nagar, Mal, Swaminathan **sp. nov.**

### Introduction

The Phaneropterinae occupy a wide range of open habitats (Kocarek and Holusa, 2006) and are one of the more widespread groups of Orthoptera (Jago, 1997). It is the largest subfamily of family Tettigonidae (Eades *et al.*, 2015). Some members of this subfamily are often associated with specific host plants, while others are restricted to the canopy (Rentz, 2010); thus, information on their life history is scanty.

The genus *Isopsera* was raised by Brunner von Wattenwyl in 1878 and is classified under undetermined tribus. The type species, *Isopsera pedunculata* Brunner von Wattenwyl, 1878 is frequently found in Asia-Tropical and the Indian subcontinent. Heller *et al.* (2014) consider the plant-feeding Phaneropterinae, Pseudophyllinae (except Pterochrozini; Mugelston *et al.*, 2013), Mecopodinae and Phyllophorinae as one natural and the most speciose group in the family Phaneropteridae, as reflected in Orthoptera Species File (Eades *et al.*, 2013). The checklist of Orthoptera (Insecta) of India consists of only three known species: *Isopsera pedunculata* Brunner von Wattenwyl, *Isopsera spinosa* Ingrisch and *Isopsera stylata* Brunner von Wattenwyl (Shishodia *et al.*, 2010). *Isopsera caligula* Ingrisch has been reported from Nepal (Ingrisch, 1990).

### *Isopsera arcuata* Nagar, Mal, Swaminathan, **sp. nov.**

<http://lsid.speciesfile.org/urn:lsid:Orthoptera.speciesfile.org:TaxonName:470201>

Fig: 1; Plates I & II

**Material examined.** (02 Specimens, 2♂) **Holotype:** India: Tamil Nadu: 22.I.2014, Coll. Rajendra Nagar (TNAU, Coimbatore); **Paratype:** 25.VI.2010, Coll. Maralis (GKVK, Bangalore, Karnataka, India)

#### Genus *Isopsera* Brunner von Wattenwyl, 1878

**Description.** *Fastigium verticis* widening anteriorly, ca 0.90 mm wide and widens slightly towards the frons; dorsal surface shallowly sulcate and separated from *fastigium frontis*. Pronotum lateral margins rounded; in dorsal view disc flat, very slightly widening paranota 1.1–1.2 times higher than long, ventral margin rounded, humeral sinus weak. Mesosternal lobes triangular, metasternal lobes rounded. Tegmina surpassing hind knees, translucent;