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Article



## A new species of the genus *Sason* (Araneae: Barychelidae) from Rameshwaram Island, Tamil Nadu, India

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## Abstract

A new species of the genus *Sason, S. rameshwaram* **sp. nov.,** of the Brush-footed trapdoor spider family Barychelidae is described from Rameshwaram Island, Tamil Nadu, India. Nest structure and habitat are documented.

Key words: New description, taxonomy, Sason, Brush-footed trapdoor spider

## Introduction

The family Barychelidae is represented by 300 species under 44 genera (Platnick 2009). This family is poorly known from India and so far only five species—*Diplothele walshi* O.P-Cambridge 1890, *Sason andamanicum* (Simon 1888), *S. robustum* (O.P.-Cambridge 1883), *Sasonichus sullivani* Pocock 1900, *Sipalolasma arthrapophysis* (Gravely 1915) — have been reported in four genera (Siliwal *et al.* 2005; Siliwal & Molur 2007; Platnick 2009). Like many other Indian mygalomorphs, all barychelid species from India were described a century ago by European arachnologists using specimens deposited in European museums. Redescription or revision for all Indian barychelids is critically needed.

Spiders of the genus *Sason* are arboreal and build their nests in shallow depressions on tree trunks or bark; their retreat consists of a small tube with doors on both the ends, leaf and soil particles adherent on the outer surface of the retreat giving it a coarse/ rough appearance; sometimes lichens also grow on it (Raven, 1986, 1994). The double trapdoor/retreats are highly camouflaged with the bark texture making it difficult to locate them in the wild. Females hardly ever leave their retreats and males leave only after maturing, when they wander in search of mate and are often encountered at night on tree trunks. In the past, few *Sason* species have been described from males and that has inevitably lead to taxonomic confusion. Raven (1986) revised the genus *Sason* based on museum specimens and fresh material of *S. colemani* Raven 1986. He tentatively synonymised two Indian species (*S. cinctipes* Pocock 1892 and *S. armatoris* Pocock 1900) with *S. robustum* due to lack of consistent diagnostic differences and the absence of males of both sexes for comparison.

Taxonomy of the genus *Sason* is made more difficult due to variation in characters in specimens from same locality and lack of bilateral symmetry same specimen (in characters like number of cuspules on left and right maxillae and number of teeth on left and right palp claw). There is a need to collect fresh specimen from the wild and do comparative studies with the specimens deposited in European museums to confirm whether *S. cinctipes* and *S. armatoris* should be retained as junior synonyms of *S. robustum*, or if these species should be resurrected. First, however, documentation of variation within one population is critically needed.

Rameshwaram Island (East 9.3102639°N, 79.3361028°E to West 9.2752639°N, 79.20485°E; North 9.328117°N, 79.3105472°E to South 9.1933806°N 79.38884°E ) is about 62 sq km in area and is located just off