

Short Communication

New distributional record of *Oxyopes fabae* Dhali, Saha and Raychaudhuri, 2015 (Araneae: Oxyopidae) from Western Ghats, Kerala

Souvik Sen^{1*} and Pavittu M. Sureshan²

¹Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata – 700053, West Bengal, India; Email: sensouvik07@gmail.com

²Zoological Survey of India, Western Ghat Regional Centre, Jafferkhan Colony, Kozhikode – 673006, Kerala, India

Abstract

Oxyopes fabae Dhali, Saha and Raychaudhuri, 2015, previously known from West Bengal, India, is recorded for the first time from Western Ghats, Kerala. The present record of this species extends its distributional range up to the southwest part of India. In the present paper, detailed diagnostic illustrations and a distributional map of the species is presented.

Keywords: Lynx Spider, New Record, Neyyar Wildlife Sanctuary, Taxonomy

Introduction

The genus *Oxyopes* was established by Latreille (1804) with *O. heterophthalmus* (Latreille, 1804) as its type species. It is the most speciose lynx spider genus, presently comprising 288 described species (World Spider Catalog, 2021), of which 54 species are known from India (Caleb & Sankaran, 2021). While studying the spiders from Neyyar Wildlife Sanctuary of Kerala, we recognized the lynx spider *O. fabae* Dhali, Saha and Raychaudhuri, 2015, which was previously known only from its type locality (Jaldapara Wildlife Sanctuary, West Bengal). The objective of the present communication is to record the presence of the species for the first time from Western Ghats, Kerala. The species has been diagnosed and illustrated, and the distribution has also been mapped.

Material and Methods

The specimens were stored in 70% alcohol and later examined and photographed by the Leica M205 stereomicroscope. All images were then processed with the aid of LAS core software (version 3.8.0). All measurements are in millimetres. Leg measurements are given in the following order: total length (femur, patella, tibia, metatarsus, tarsus). The studied specimens have been deposited in the National Zoological Collections at

the Zoological Survey of India, Western Ghat Regional Centre (WGRC), Kozhikode, Kerala.

Results

Class ARACHNIDA
Order ARANEAE
Family OXYOPIDAE

Genus *Oxyopes* Latreille, 1804

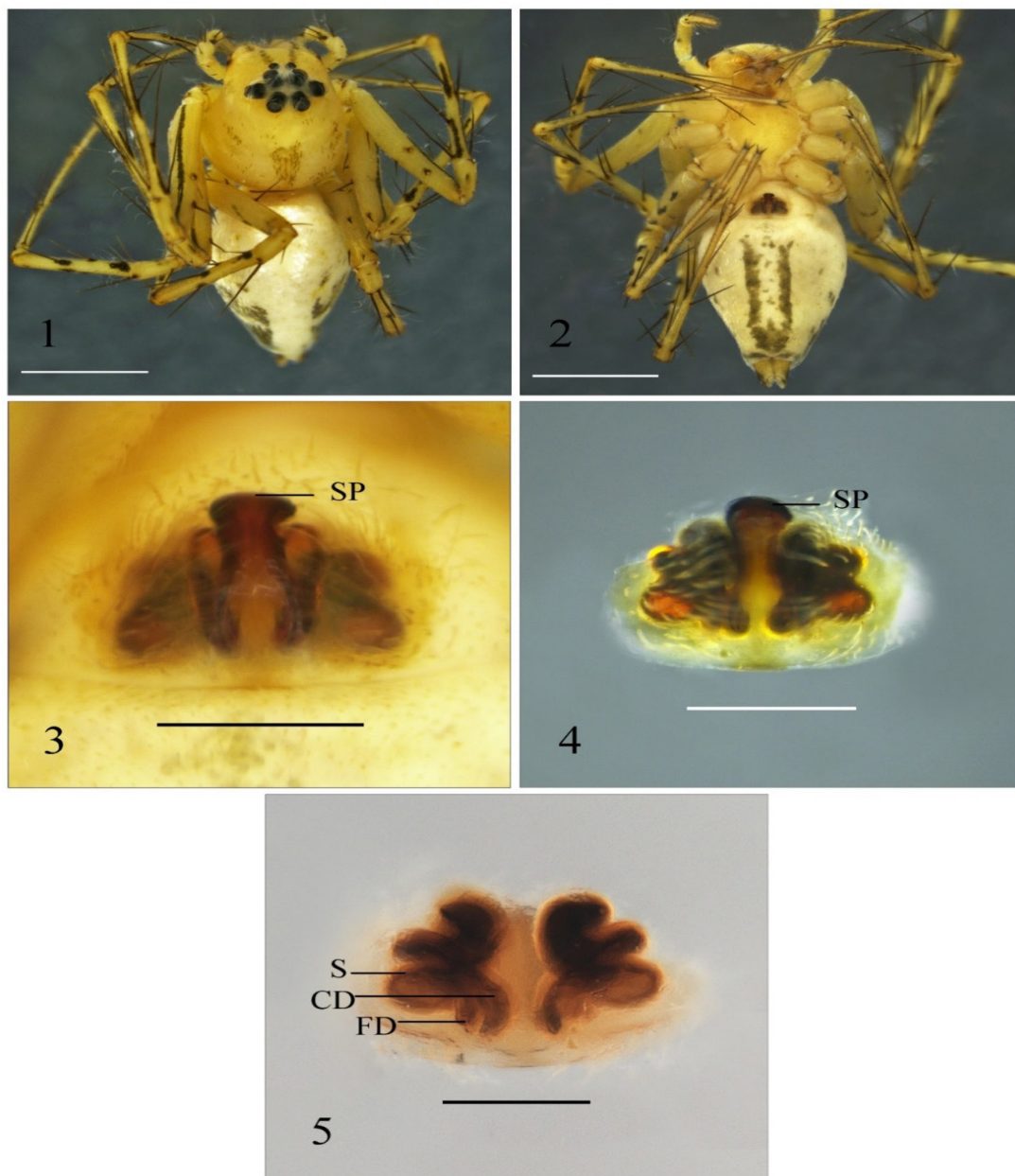
Oxyopes fabae Dhali, Saha and Raychaudhuri, 2015
(Figures 1-5)

2015. *Oxyopes fabae* Dhali, Saha and Raychaudhuri, *Species*, 12(32): 26.
2017. *Oxyopes fabae*: Dhali, Saha and Raychaudhuri, *World Sci. News*, 63: 65.

Materials examined: INDIA, Kerala, Thiruvananthapuram district, Neyyar Wildlife Sanctuary, (08°32'02"N 77°08'56"E, 111m), 2♀, 16.i.2019, leg. P. M. Sureshan (ZSI/WGRC/IR.INV.15193-15194).

Diagnosis: Females of this species are similar to *O. mirabilis* Zhang, Yang and Zhu, 2005 in genital morphology. But they can be separated from the latter by the following combination of characters: anterior portion of sclerotized plate fairly broad (Figures 3-4) (anterior portion of sclerotized plate much wider and broad in *O. mirabilis*); spermatheca nearly bean shaped and copulatory ducts twisted one time (Figure 5) (spermatheca nearly globular

* Author for correspondence



Figures 1–5. *Oxyopes fabae* female (ZSI/WGRC/IR.INV.15193): **1.** Habitus, dorsal view; **2.** Same, ventral view; **3-4.** Epigynum, ventral view; **5.** Internal genitalia, dorsal view. Scale bars= (1,2) 2 mm, (3, 4) 0.5 mm, (5) 0.3mm. Abbreviations: SP= sclerotized plate, S= spermatheca, CD= copulatory duct, FD= fertilization duct.

and copulatory ducts twisted three times in *O. mirabilis*); spermatheca much thicker than copulatory ducts (Figure 5) (spermatheca nearly as thick as copulatory ducts in *O. mirabilis*).

Measurements: Total length- 5.32, Cephalothorax length - 2.41, Cephalothorax width - 1.90, Abdominal length -2.91, Abdominal width -2.21.

Legs: **I** 8.09 (2.53, 0.60, 2.65, 1.56, 0.75); **II** 7.48 (1.63, 0.56, 2.29, 2.21, 0.79); **III** 6.54 (1.72, 0.56, 1.26, 2.00, 1.0); **IV** 6.96 (1.87, 0.64, 1.78, 2.14, 0.53). Leg formula 1243.

Remarks: *Oxyopes fabae* is reported for the first time from Western Ghats, Kerala. Its distribution has now been extended to the southwestern part of West Bengal. The currently examined specimens agree well with the original

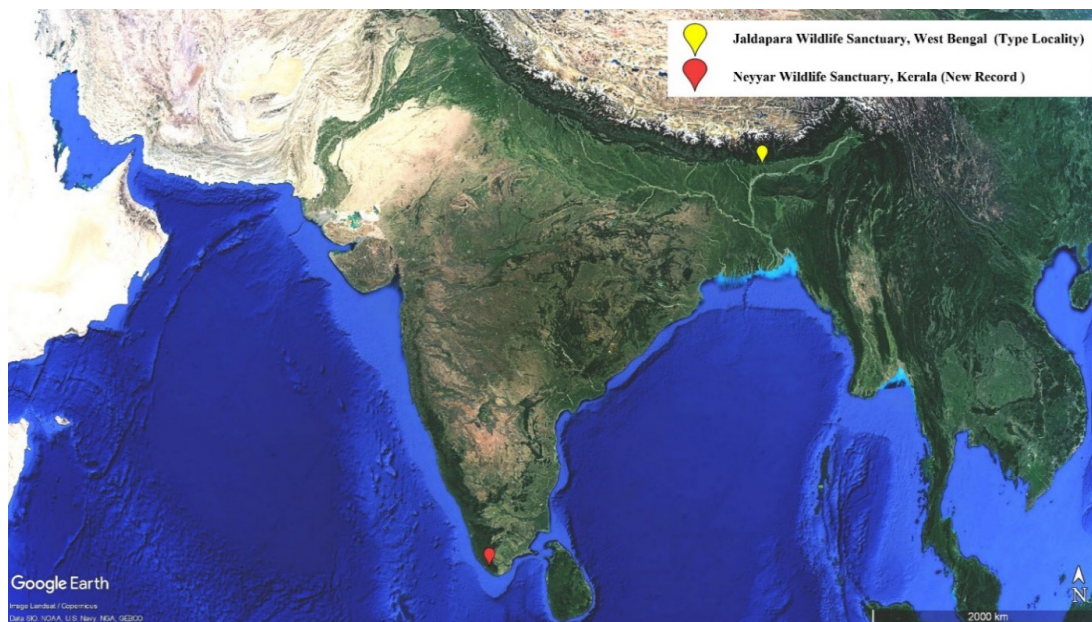


Figure 6. Map of India showing distribution of *Oxyopes fabae* in India.

description of *O. fabae* by Dhali *et al.*, 2015, especially in female genitalic structures. But there are some variations in the coloration pattern of the cephalothorax and abdomen from the original description. In the currently examined specimen dorsum of the cephalothorax and abdomen is yellow and yellowish-white, respectively (Figure 1), whereas the dorsum of the cephalothorax and abdomen has a reddish-brown and greyish brown colour in the original description of *O. fabae* by Dhali *et al.* (2015). These minor differences seem to be due to individual variations in populations occurring in different biogeographic regions of India.

Distribution: India: Kerala (new record) and West Bengal (Figure 6).

Acknowledgements

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