



Description of a New Spider *Meotipa Sahyadri* Kulkarni, Vartak, Deshpande & Halali, 2017 (Aranae: Theridiidae) in Chhattisgarh, India

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ABSTRACT

The present paper points to a new spider species, *Meotipa sahyadri* Simon, 1886, in Gariaband District of Chhattisgarh state, where the species belongs to the family Theridiidae Sundewall, 1833. This species has been discovered only in Tamil Nadu in India (2017). Almost 8 years later, it was again recorded in Chhattisgarh and this is the first time it has been seen in the state. Now in Chhattisgarh there are total two species of *Meotipa* genera. Chhattisgarh is second state of India where this species was recorded.

Keywords: Spider, Theridiidae, Chhattisgarh, Gariaband, *Meotipa sahyadri*

Introduction

Theridiidae Sundewall, 1833 is the most diverse and globally distributed spider family. This is the fifth largest family in the world (Nayak et al. 2012, Padma et al. 2021). These are known as cobweb spider, comb footed spider etc. Under this family, 131 genera and 2586 species have been discovered so far in the world (WSC, 2025). They are entelegyne and cribellate spiders, because their epigyne is keratinized. The length of their first leg is the maximum and the length of the third leg is the shortest. Their head is quite small while their abdomen is quite large, hence they look like orb weaver spiders of the Araneidae family (Singh et al. 2012). So far, 126 spider species and 41 genera of this family have been discovered all over India. *Meotipa* Simon, 1895 is a cob web spider that belongs to the family Theridiidae Sundewall, 1833. So far 27 species have been documented throughout the world. There are only 7 species in India. *Meotipa picturata* Simon, 1895 was first discovered in Tamil Nadu, India. After that other species like *M. spiniventris*, *M. argyrodeformis*, *M. andamanensis*, *M. sahyadri*, *M. multuma*, and *M. ultapani* were discovered (Kulkarni et al. 2017). five species of family Theridiidae are known in Chhattisgarh. *Ariamnes flagellum* Doleschall, 1858 has been found in Raipur & Sarguja and *Nesticodes rufipes* Lucas, 1886 in Gariaband, Sarguja & Raigarh, *Meotipa multuma* Murthappa, Malamel, Prajapati, Sebastian & Venkateshwarlu, 2017 & *Nohonhimea mundula* Koch, 1872 only in Gariaband district of Chhattisgarh (Nichat et al. 2024a, Chaudhary et al.2024). *Argyrodes argentatus* O.P.-Cambridge, 1880 recorded from Chhura (Nichat et al.2025).

Material and Methods

The sample was collected by direct visual method from Bhuteshwar area in Gariyaband district of Chhattisgarh. After collection, it was preserved in 70% alcohol for further study, and all its body parts were carefully examined. The live photo of the specimen has been taken with Infinix Smart HD camera. All measurements are made in centimetres (cm). It is identified according to its morphological characteristics, body pattern and epigyne arrangement. Some books like 'A field guide to the Spider Genera of India' by Ayan Mondal (2020) and other, were used for identification and some recent Research Articles (2017-2025) were also used.



Figure. 1. Map represent new record of *Meotipa sahyadri* In Gariyaband, Chhattisgarh.

Results and discussion

A new species of spider has been found in Gariyaband District of Chhattisgarh. After carefully examining the sample, it was found that it is *Meotipa sahyadri* Kulkarni, Vartak, Deshpande & Halali, 2017 and belongs to the family Theridiidae. This species has been observed very rarely only in Tamilnadu (2017) but it has been seen for the first time in Chhattisgarh (present study 2025).

***Meotipa sahyadri* Kulkarni, Vartak, Deshpande & Halali, 2017**

Taxonomy

Phylum – Arthropoda

Class – Arachnida

Order- Aranae

Suborder – Araneomorphae

Family: Theridiidae Sundewall, 1833

Genus – *Meotipa* Simon, 1895

Species – *Meotipa sahyadri* Kulkarni, Vartak, Deshpande & Halali, 2017

Type Material

Holotype, Female (Examine sample), preserved in Shradha Public School Gariyaband, Chhattisgarh, India. Sample collected from Bindranavagarh (Bhuteshwar) Gariyaband, Chhattisgarh, India, pin code 493889. Lat. 20.60298° & Long. 82.048596°. 11.ii.2025, (11:22 AM, GTM +05:30), collected on leaf of Tendu Tree (*Diospyros melanoxylon*). By @ **Jashavant Nayak**

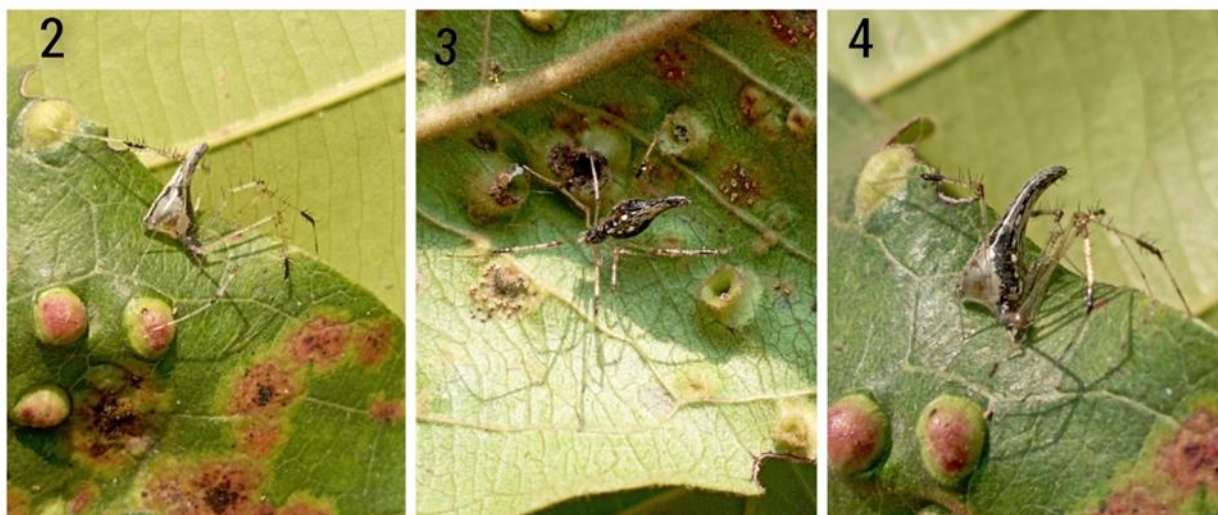


Figure. *Meotipa sahyadri* Kulkarni, Vartak, Deshpande & Halali, 2017, 2. Lateral view, 3. Dorsal view, 4. Transparent abdomen & abdomen projection. © Jashavant Nayak

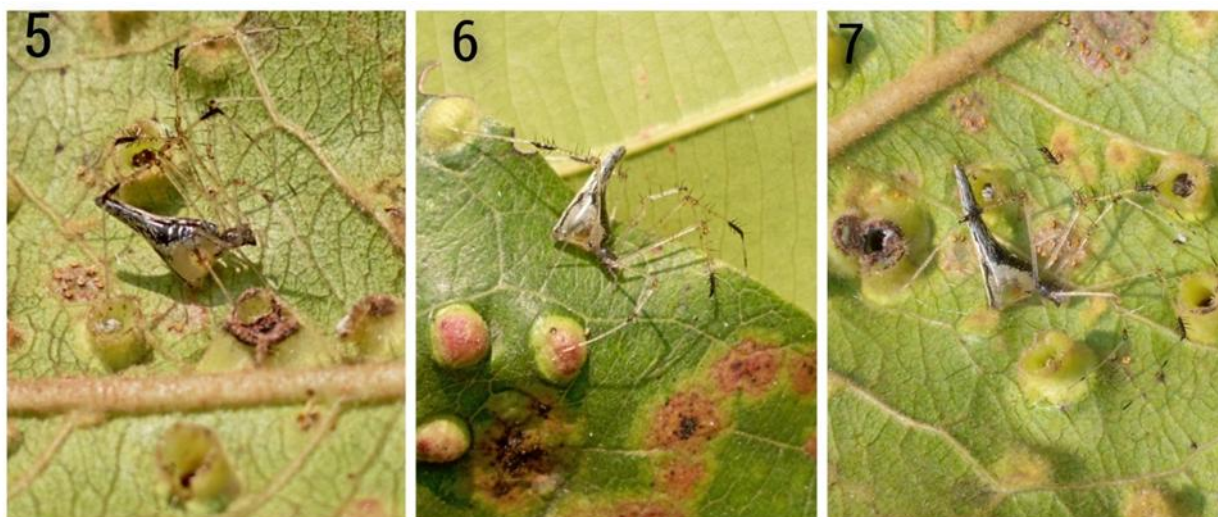


Figure. *Meotipa sahyadri*, 5. Black colour joints, 6. Legs of spider, 7. Transparent abdomen. © Jashavant Nayak

Diagnosis

Cephalothorax small and black, eight eyes present, all equal size. Pedipalp small and white in colour. Chelicera black and pointed terminally. Sternum triangular. Coxa and trochanter small and transparent, setae absent. Femur are long and transparent. Patella is smaller than femur. Femur – Patella joint is brown, patella- tibia joint is thick and black, most numbers of setae present. Tarsus, Metatarsus & accessory claw are small and transparent, small hairs present.

Abdomen laterally flattened, Dorsal part is light black and covered with small hairs, abdomen is thick and projection terminally form tail like structure, venterolateral abdomen is transparent, white blackish strip present on dorsal part and over the length of tail, posteroventral abdomen region is completely white. Thick vertical black band on both side.

Measurement

Length of whole body (with leg I & IV) is 3.2cm, body length (without legs) is 0.8 cm, vertical length of abdomen 0.5cm. The length of the spider's legs is measured in centimetres (cm). The first leg is the longest, followed by the fourth, second and the shortest is the third leg. They follow the 1423 leg formula. (fig.8)

Legs	Leg I	Leg II	Leg III	Leg IV
Length of legs in cm.	1.9	1.0	0.6	1.5



Figure: Measurement of specimen by scale. © Jashavant Nayak

Habitat

These species are found in green leaves of trees and shrubs. They avoid sunlight. Attached laterally to the leaf.

Distribution

India (Tamilnadu), present study in Chhattisgarh (Gariaband district).

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