



A new observational record of jumping spider (Aranae: Salticidae: Aelurillini: Aelurillina) *Stenaelurillus metallicus* Caleb & Mathai, 2016 in Chhattisgarh, India

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Abstract

Jumping spiders belong to the family Salticidae Blackwall, 1841, they are famous throughout the animal kingdom for their predatory and jumping locomotion. *Stenaelurillus* Simon, 1886 is a jumping spider which is distributed throughout the world. There are 58 species of *Stenaelurillus* accepted all over the world but till now only 17 species have been recorded in India. This study states that a jumping spider species *Stenaelurillus metallicus* Caleb & Mathai, 2016 has been recorded for the first time in Gariyaband district of Chhattisgarh. There are also new species and genera for Chhattisgarh. Through this discovery, a new jumping spider has been added to the spider fauna list of Chhattisgarh.

Keywords: Gariaband, Chhattisgarh, salticidae, *stenaelurillus metallicus*, spider, new record

Introduction

Spiders belong to phylum Arthropoda. They are small, predatory, air-breathing and terrestrial creatures (Nichat et al. 2024a) [8]. Family Salticidae is the most fascinating, large and diverse group of spiders. The family represents 689 genera and 6808 species in world wide. It is 13% all over the world. Allurillinae is a subfamily of Salticidae (Maheshwari et al. 2017) [7], (WSC, 2025). *Stenaelurillus* Simon, 1886 is a large, medium-sized, tropical jumping spider in ground. (Hill et al. 2024) [4]. Till now 58 species of this genera are accepted all over the world. Only 20 species of this genera have been recorded in India. Simon first discovered two species of *Stenaelurillus*, *S. nigricaudus* and *S. striguttatus*, then discovered many species of *Stenaelurillus* in the all over the world. Most recently, two species *S. solapur* and *S. naldurg* have been discovered in India in 2024 (Kuni et al. 2024) (WSC, 2025). *Stenaelurillus* has been documented twice only in Tamil Nadu and not in any other state (Caleb et al. 2016) [1]. Many spiders have been discovered in many places in Chhattisgarh (Nichat et al. 2024) [9] (Kujur et al. 2016a) [5] and till now 222 spider's species have been discovered in Chhattisgarh, which belong to 96 genera and 23 families (Chaudhary et al. 2024) [3]. Recently 13 jumping spiders are documented in forest region of Chhura (Nichat et al. 2025) [10]. *Stenaelurillus metallicus* Caleb & Mathai, 2016 [1] has been seen for the first time in Chhattisgarh and this is the second state of India where this species is found.

Material and Methods

A study was conducted in the forest area of Gariaband. The Bhuteshwar region, the most famous place of Gariaband for this study, was chosen. It is the largest Shiva Linga in the world, which has great importance in Hinduism and culture. The study found a spider which was quite different from other spiders. The sample was collected by direct visual method and preserved in 70% alcohol to better study its body parts and morphology. The sample has been kept at Shraddha Public School Gariaband, Chhattisgarh.

All the parts of the sample have been studied with proper equipment and tools. Some recent research papers (2027-25) were used, Spider Genera of India by Ayaan Mandal and some websites such as Inaturalist Mobil App were used to identification of the sample. The sample was photographed by infinix smart HD camera.

Results and discussion

A spider species, *Stenaelurillus metallicus* Caleb & Mathai, 2016 [1] has been described for the first time in Chhattisgarh, India. All morphological characteristics revealed the species that is described in the paper.

Stenaelurillus metallicus Caleb & Mathai, 2016 [1]

Figure (2-6)

Taxonomy

Class – Arachnida

Order – Aranae

Suborder – Opisthothele

Infraorder - Araneomorphae

Family – Salticidae Balckwall, 1841

Subfamily – Allurillinae

Genus – *Stenaelurillus* Simon, 1886

Species – *Stenaelurillus metallicus* Caleb & Mathai, 2016 [1]

Habitat

These are ground jumping spiders, which are found in dry leaves, leaf piles and curly leaves. They never live in trees, bark of trees and green leaves.

Type Material

Collected sample 3 male & 2 female.

Holotype male (Shraddha Public School Gariyaband, Chhattisgarh, India), from Bindranavagarh (Bhuteshwar) Gariaband, Chhattisgarh, India, pin code 493889, 11. ii. 2025, (09:41 AM, GTM + 05:30) by Jashavant Nayak & Premlal Sori, Latitude 20.60298° & Longitude 82.048596°, sample collected from dry leaves on forest.

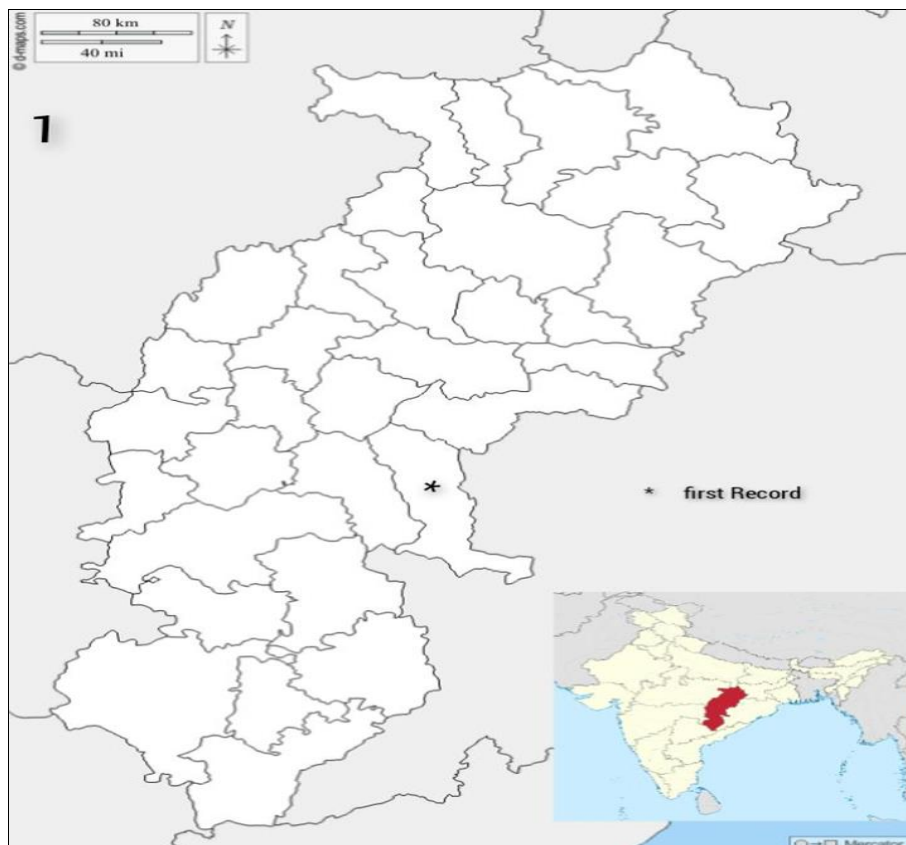


Fig: Map represent area (Gariaband & Chhattisgarh) where new spider recorded

Diagnosis

Male

Carapace golden with a transverse white band and form 'U' shape. Covered with small brown hairs. Clypeus and eye region with black stripe. Black lateral margin run both side of carapace, chelicera silvery white, eye with horizontal, transverse white stripe. A large fovea present on the central region of carapace, Black stripe posteriorly inviginate on carapace. Pedipalp are large and white colour. Large and rounded Anterior Median Eye. Abdomen is small, slender, and golden-brown colour with small hairs. Spinnerets are black colour; proximal end of abdomen is black. Leg I, II

and III femurs are black, leg I is large, long and slender than other legs, prograde legs. (Fig. 2-4)

Female

Carapace small, brown, covered with small hairs, large black band on each side. Clypeus small and white colour, covered with small bristles. Abdomen is larger than male, brown and silvery brown, large, blackish brown pattern on abdomen, spinnerets are large and pointed. Legs are thicker than male, covered with small, shiny hairs, coxa and femur are white, patella and tibia brown, all joints are black. (Fig. 5&6)

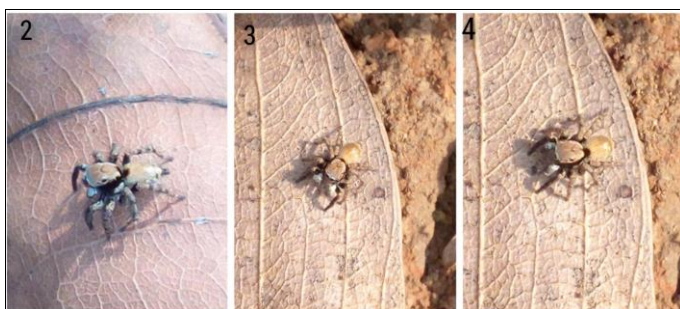


Figure: Holotype male, *Stenaelurillus metallicus* Caleb & Mathai, 2016 © Jashavant Nayak

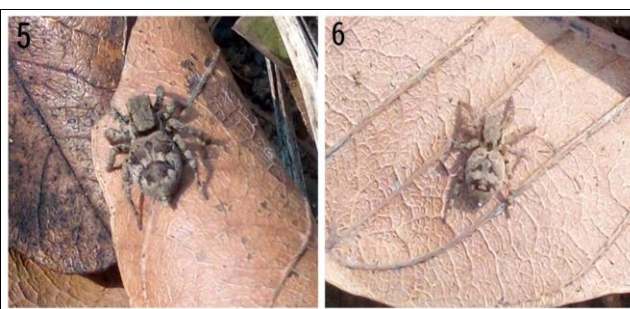


Fig: female, *Stenaelurillus metallicus* Caleb & Mathai 2016^[1] © Jashavant Nayak

Reference

1. Caleb, Mathai. A new jumping spider of the genus *Stenaelurillus* Simon, 1886 from India (Araneae: Salticidae: Aelurillina). *Zootaxa*, 2016;4103(2):185-188.
2. Caleb. Spider (Arachnida: Araneae) fauna of the scrub jungle in the Madras Christian College campus, Chennai, India. *J Threat Taxa*, 2020;12(7):15711-15766.
3. Chaudhary SR, Nirmalkar Y, Singh AK, Anand A. Spider fauna of Chhattisgarh: An updated checklist of spiders of Chhattisgarh, India with new additions. *Serket*, 2024;20(3):311-334.
4. Hill DE, Menezes AK, Pai AV, J. Notes on jumping spiders of the genus *Stenaelurillus* from the Indian Subcontinent (Araneae: Salticidae: Aelurillini: Aelurillina). *Peckhamia*, 2024;321(1):1-21.

5. Kujur R, Ekka A. Spatial diversity of Spiders of Rose Garden, Raigarh, Chhattisgarh, India. IJARSE,2016a:5(11):139-144.
6. Kujur R, Ekka A. Exploring the Spider fauna of Gomarda Wildlife Sanctuary, Chhattisgarh, India. Int Res J Biol Sci,2016b:5(6):31-36.
7. Maheshwari NR, Chopda MZ. Record of *Stenaelurillus jagannathae* from Jalgaon, Maharashtra, India. Glob J Res Anal,2017:6(6):324-325.
8. Nichat AR, Warte HK, Nayak J. Spider diversity (Arachnida: Aranae) in Deobhog region Gariyaband Chhattisgarh India. Int J Innov Sci Eng,2024a:11(8):39-45.
9. Nichat AR, Warte HK, Saffi SA, Nayak J. A study of biodiversity of Spider species (Arachnida: Aranae: Araneomorphae) in Kokasara region, Kalahandi, Odisha, India. Afr J Biol Sci,2024b:6(15):2663-2187.
10. Nichat AR, Harris KK, Warte HW, Dubey M, Sori M, Nayak J. Spiders Diversity in North East Gariaband Forest Regions of Chhattisgarh, India. Uttar Pradesh J Zool,2025:46(4):119-127. Available from: <https://doi.org/10.56557/upjz/2025/v46i44808>.
11. Tripathi R, Kuni N, Kadam G, Kumaran KP, Sudhikumar AV. Four new species and five new distribution records of the jumping spider genus *Stenaelurillus* Simon, 1886 (Salticidae: Aelurillines) from India. Eur J Taxon,2024:930:124-156. doi:10.5852/ejt.2024.930.2485.