

Courtship display by a male *Stenaelurillus* sp. from Tamil Nadu (Araneae: Salticidae: Aelurillina)

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Presently 16 species of *Stenaelurillus* Simon 1886 are known from the Indian subcontinent (India and Sri Lanka), 12 of which were described in the last decade (Table 1). With growing interest in this genus, we can expect many more discoveries in the future.

Recently (SEP 2021) the senior author (M) found a new *Stenaelurillus* on a canal near a village in Erode District, Tamil Nadu (11°21'22.15"N, 77°32'38.17"E), one that does not agree with published descriptions for any of the previously known species from India (Figure 1). He was able to document important features of their remarkable courtship display in their natural habitat by following them during the ensuing weeks (Figures 2-4). Their courtship display begins with some up and down movement in position with the chelicerae covered by the pedipalps and legs I extended to display the bright orange colour beneath each femur (Figure 2). This is followed by one of two distinct moves. In the first, the fringed opisthosoma is reared high above the carapace, like a peacock (or a peacock spider, *Maratus*), in a fraction of a second (Figure 3). The second move involves sudden elevation of the whole body with legs I and II extended to the front, supported only by legs III and IV (Figure 4).

In the future more detailed studies of this display behavior may reveal the relationship of these displays to the interaction of a male of this species with a female. In the absence of studies of the courtship of any *Stenaelurillus* species, we hope that these observations will raise the level of interest in this subject.

Table 1. Species of *Stenaelurillus* from the Indian subcontinent, based on WSC (2022), sources listed in the table, and verified iNaturalist records.

ref.	species	description	sex	distribution
1	<i>S. albus</i>	<i>S. albus</i> Sebastian, Sankaran, Malamel & Joseph 2015	♂♀	Karnataka, Kerala
2	<i>S. arambagensis</i>	<i>Marpissa arambagensis</i> Biswas & Biswas 1992	♂♀	West Bengal
3	<i>S. belihuloya</i>	<i>S. belihuloya</i> Logunov & Azarkina 2018	♂	Sri Lanka
4	<i>S. gabrieli</i>	<i>S. gabrieli</i> Prajapati, Murthappa, Sankaran & Sebastian 2016	♂♀	Gujarat, Maharashtra
5	<i>S. ilesai</i>	<i>S. ilesai</i> Kanesharatnam & Benjamin 2020	♂♀	Sri Lanka
6	<i>S. indicus</i>	<i>S. indicus</i> Logunov 2020	♂♀	Andhra Pradesh
7	<i>S. jagannathae</i>	<i>S. jagannathae</i> Das, Malik & Vidhel, in Vidhel et al. 2015	♂♀	Delhi
8	<i>S. lesserti</i>	<i>S. lesserti</i> Reimoser 1934	♂♀	Andhra Pradesh, Karnataka, Kerala, Maharashtra, Sri Lanka, Tamil Nadu
9	<i>S. marusiki</i>	<i>S. marusiki</i> Logunov 2001	♂♀	Maharashtra
10	<i>S. metallicus</i>	<i>S. metallicus</i> Caleb & Mathai 2016	♂♀	Andhra Pradesh, Tamil Nadu, Telangana
11	<i>S. sarojinae</i>	<i>S. sarojinae</i> Caleb & Mathai 2014	♂♀	Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu, Telangana
12	<i>S. shwetamukhi</i>	<i>S. shwetamukhi</i> Marathe, Sanap & Maddison in Marathe et al. 2022	♂♀	Andhra Pradesh, Karnataka, Tamil Nadu
13	<i>S. tamravarni</i>	<i>S. tamravarni</i> Marathe & Maddison in Marathe et al. 2022	♂♀	Andhra Pradesh
14	<i>S. tettu</i>	<i>S. tettu</i> Logunov 2020	♂♀	Andhra Pradesh
15	<i>S. vyaghri</i>	<i>S. vyaghri</i> Sanap, Joglekar & Caleb in Marathe et al. 2022	♂♀	Maharashtra
16	<i>S. wandae</i>	<i>S. wandae</i> Logunov 2020	♂♀	Odisha



Figure 1. Comparison of the relatively well-known male *Stenaelurillus lesserti* (1) with the male *Stenaelurillus* sp. that were observed in Erode District, Tamil Nadu (2-6). Although both species have bright orange colour on the underside of each femur I, the new *Stenaelurillus* has a bright white stripe on the inside (prolateral side) of each pedipalp, a tuft of bright, light blue setae that are displayed between the pedipalps, tufts of long, black and white setae on each side of the opisthosoma, and a distinct line of three bright white spots, each on a dark black background, across the dorsal opisthosoma.

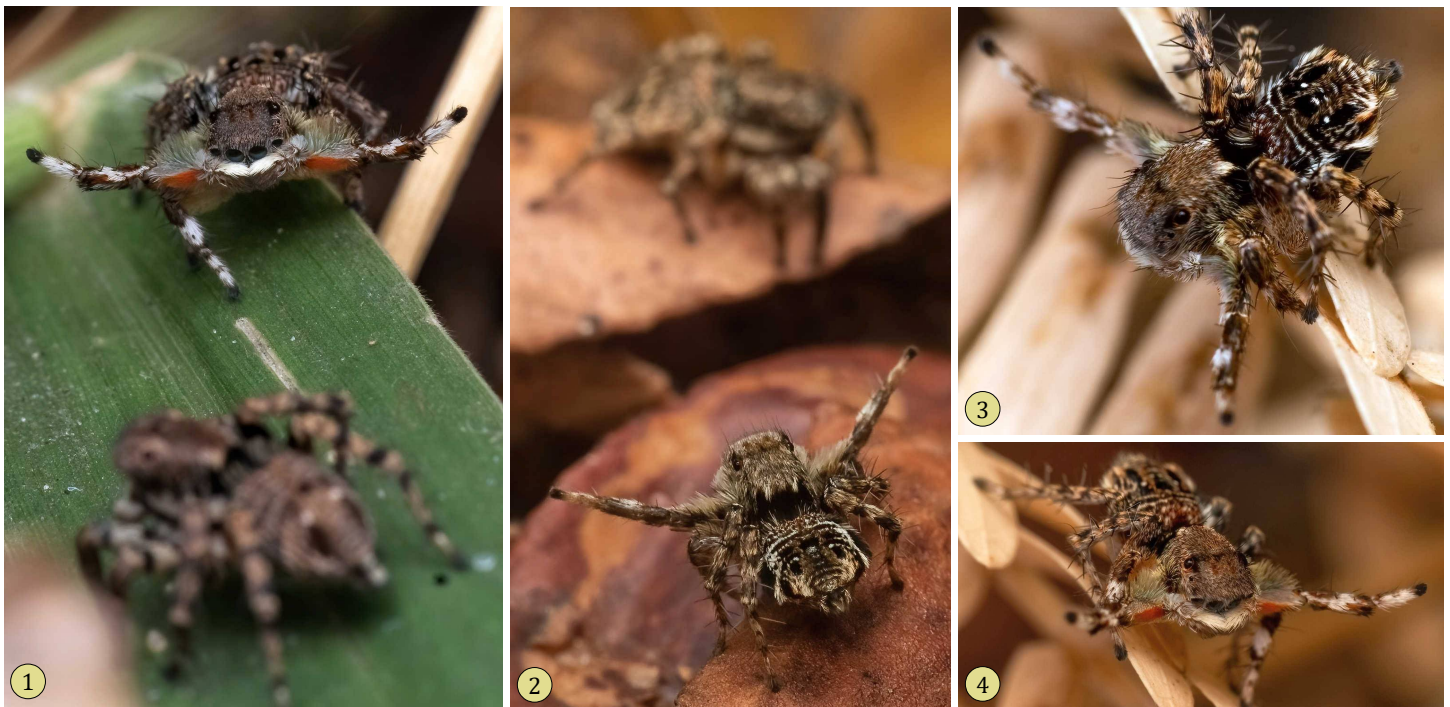


Figure 2. Initial displays of male *Stenaelurillus* sp. in front of courted females, with pedipalps held together in front of the chelicerae and legs I elevated and extended to the sides.

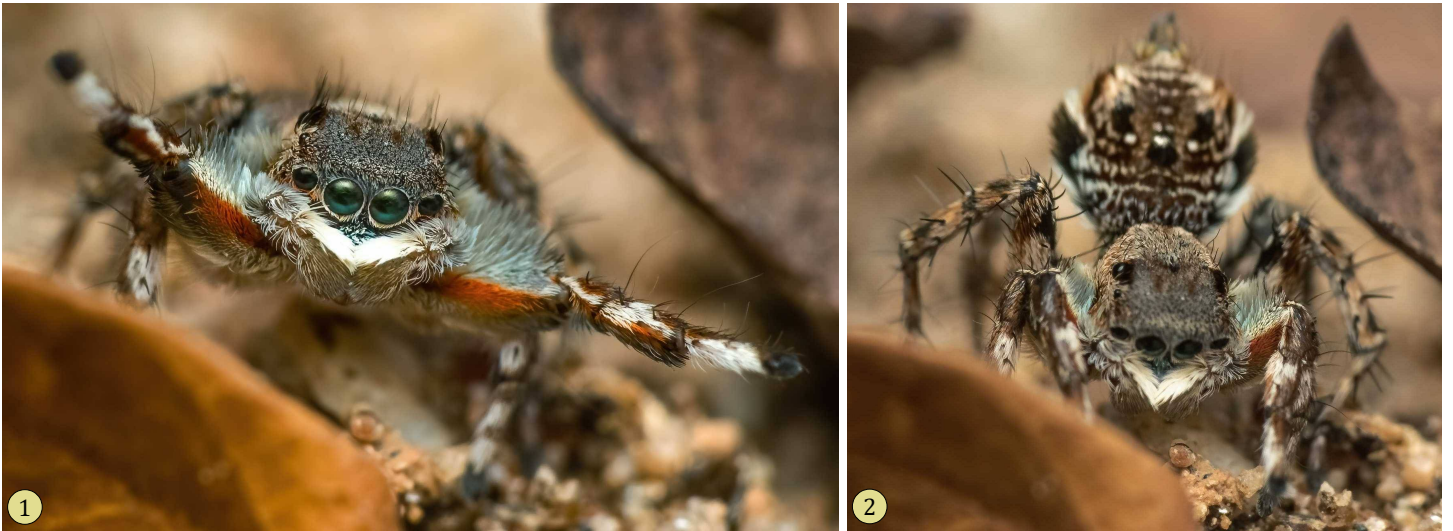


Figure 3. Sequence showing sudden transition from the initial display (1) to lateral expansion and elevation of the fringed opisthosoma (2) by a male *Stenaelurillus* sp. in front of a courted female.



Figure 4. Two sequences (1-3, 4-6) showing sudden transition to a fully elevated position by a male *Stenaelurillus* sp. in front of a female, with legs I and II, both with bands of bright white setae, fully extended. In this remarkable display, the pedipalps are rotated down to expose the chelicerae, but still held together to fully expose the bright white setae on the upper side (prolateral side) of each pedipalp. The fringes on the anterior side of legs I and legs II are also fully extended in this position. The dark black colour of the underside of the opisthosoma (visible in 3) provides a strong contrast to the bright white setae of the pedipalps.

Acknowledgements

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