A PRELIMINARY MORPHOLOGICAL STUDY ON THE DIVERSITY OF THE SPIDER GENUS *MALLINELLA* (ZODARIIDAE) IN SRI LANKA

D.N.G. DAYANANDA[1], S.P. BENJAMIN[1*]

[1]National Institute of Fundamental Studies, Kandy, Sri Lanka.
[*]suresh.benjamin@gmail.com

The zodariid genus *Mallinella* Strand, 1906 is represented by 228 species globally, including a single species, *Mallinella redimita* from Sri Lanka, which is indicative of underestimated species diversity. This study aims to identify and describe species of *Mallinella* on the island based on their morphology. Fieldwork was conducted from 2023 to 2024 in 20 localities across 12 districts, covering all climatic zones of Sri Lanka. All spiders were collected from litter by sieving and hand collection. The collected spider specimens were preserved in 70% ethanol, identified, photographed, and illustrated using Olympus SZX7, Leica M205C, and Leica DM3000 microscopes using standard methodology. A total of 34 males and 33 females were collected. Five new species of *Mallinella* were recognized based on the differences in their genital morphology (Provisionally named *Mallinella* sp. A, *M.* sp. B, *M.* sp. C, *M.* sp. D, and *M.* sp. E). *Mallinella* sp. A is widespread, found across Central, Eastern, Northern, North Central, and North Western provinces, whereas *Mallinella* sp. B was specifically recorded from Galle District. *Mallinella* sp. C, *M.* sp. D, and *M.* sp. E were reported from Kandy, Badulla, and Rathnapura Districts, respectively, suggesting localized distributions for these species. The five new species belong to three currently recognised species groups of *Mallinella* called *redimita* (*M.* sp. A), *annulipes* (*M.* sp. B, *M.* sp. D, and *M.* sp. E), and *fasciata* (*M.* sp. C). All five species of *Mallinella* are new to science and will be formally described in a future publication.

Keywords: Diversity, Morphology, Spiders, Sri Lanka, Zodariids