REVISITING THE DIVERSITY OF SRI LANKAN OONOPID SPIDERS (ARANEAE): THE GENUS ISCHNOTHYREUS

U.G.S.L. Ranasinghe and S.P. Benjamin

Institute of Fundamental Studies, Hantana Road, Kandy, Sri Lanka Corresponding author: suresh.benjamin@gmail.com

The Oonopid spider genus Ischnothyreus was established by Simon (1891). It currently contains 23 species distributed in Asia, Australia and the Seychelles. Two species have been recorded in Sri Lanka: Ischnothyreus bipartitus (Simon, 1893) and Ischnothyreus lymphaseus (Simon, 1893). Both species are known only from their original descriptions. The genus Ischnothyreus is diagnosed by the presence of the following characters: prominent spines in leg I and II, relatively large eyes compared to other Oonopid spiders and eyes forming a ring touching each other. Males of this genus are easily identified by their heavily sclerotized palp. The main aim of this project was to re-describe and reassess the recorded Ischnothyreus species to verify the genus' true diversity in Sri Lanka. In addition, female I. Bipartitus and I. lymphaseus have recently been collected for the first time in Sri Lanka. Thus, a secondary aim of the project was to analyse and describe the morphological features of these specimens. Sample collection was conducted in thirty seven sites within fourteen districts in Sri Lanka, including eight provinces except Northern Province between 2009 and 2014. Specimens were collected by sifting litter using a random sampling method. The spiders were preserved in 70 % ethanol and then identified using Platnick et al. (2012). Of the 226 specimens collected, fourteen (eight males and six females) belonged to the genus Ischnothyreus. These Ischnothyreus specimens were collected at only three sites in two districts: Ethagala in Kurunagala district and Udawattakelle and Dothalugala in the Kandy district. Type material: Holotype: Specimen (IFS Oon_097), Male, Kandy district, Udawattakelle, 07º17'57"N, 80º38'29"E, 21-VIII-2012, leg. S.P.Benjamin. Paratypes: seven males and one female. Total length 1.44 mm. Carapace and dorsal scutum brown colour and legs are light brown colour. Eyes are well-developed, anterior lateral eyes touch with posterior lateral eyes. Spines are present only in leg I, II, and legs III-IV spineless. Palp is strongly sclerotized, bulb is elongated, and cymbium is not fused with rounded bulb. The embolus is shorter and bears a long distal extension. According to available information, the male specimen (Oon 097) is more similar to *I. lymphaseus*. Future work will focus on the description of female specimens and the re-description of male specimens, as well as the generation of molecular sequence data for phylogenetic analysis.

This study is funded by the Institute of Fundamental Studies

Keywords: Conservation, Diversity, Ischnothyreus, Oonopid