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A PRELIMINARY PHYLOGENY OF BALLINI JUMPING SPIDERS IN SRI LANKA (ARANEAE: SALTICIDAE)

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Jumping spiders (Salticidae) is the largest family of spiders with 6139 species worldwide placed in 640 genera and 30 tribes. Members of the tribe Ballini have unusual, varied body forms that resembling beetles or ants. *Ballus* is a genus currently with nine species distributed worldwide, with four species recorded from Asia. Of them, *Ballus segmentatus* and *B.sellatus* are morphologically very similar to the European *Ballus* spp and difficult to identify without expert observation. The Type specimen of *B. segmentatus* is a male, whereas *B. sellatus* is a female, and both have been recorded from Sri Lanka about 127 years ago. Type localities of these two species are identical, thus these two species names may refer to the two sexes of the same species. Hence, the objective of this study was to infer the phylogeny of Ballini in Sri Lanka using a multi-locus molecular phylogeny of species collected from the island. Field sampling was conducted in 60 localities in 16 districts of Sri Lanka. Beating vegetation and hand collection were used for collection. Seventy three specimens were preserved in 70% and 100% ethanol. DNA was extracted from two legs of each specimen. Partial fragments of nuclear Histone 3(H3), 28S r DNA (28s) and mitochondrial gene, cytochrome c oxidase subunit I (COI) were amplified. Ten in-group and seven out-group taxa were included in the final analysis. A maximum-likelihood (ML) tree was inferred with RaxML. The analysis of the combined data set (2330 bp) indicated the presence of only one species of *Ballus* in samples collected from montane and sub-monatne forests in Central Highlands of Sri Lanka. A species not closely related to the European *Ballus* spp, but more closely related to the African spider genus *Peplometus*. Thus, the preliminary analysis suggests that *B.segmentatus* of Sri Lanka should be transferred to the genus *Peplometus*.

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Keywords: *Ballus segmentatus*, Molecular, *Peplometus*, Salticidae