

Current Status of Taxonomy and Biogeography of Family Channidae (Snakeheads) of Sri Lanka

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The freshwater fish family *Channidae* comprises only one genus; *Channa* with five species native to Sri Lanka which includes *C. ara*, *C. striata*, *C. orientalis*, *C. punctata* and *C. gachua* (*C. kellaarti*). All members of this genus are restricted to freshwater habitats. Some members are commercially harvested in significantly large numbers as food fish (*Channa striata*) and for aquarium trade (*C. ara* and *C. orientalis*). The objectives of the current study are to, (1) examine the current status of taxonomy of Channidae of Sri Lanka (2) explore the current knowledge on the biogeography of Channidae in Sri Lanka. According to available literature on Sri Lankan Channidae, three species of snakeheads are endemic to the island namely; *C. ara*, *C. orientalis* and *C. kellaarti*. However, in global literature on family Channidae, the taxonomic validity of *C. ara* remains ambiguous. Further, repeatedly published records morphologically presumed by authors as *C. orientalis*, from the Indian subcontinent questions its endemic status in Sri Lanka. Interestingly, the name *C. kellaarti* is reported as available for the concurrent synonym for *C. gachua* after a DNA barcoding study, on which a proper taxonomic review is pending. A distribution review on recent field surveys in Sri Lanka (since 1980), including our preliminary work have recorded *Channa ara*, *C. striata*, *C. punctata* and *C. gachua* (*C. kellaarti*) from the South-western, Dry zone and the Mahaweli ichthyological zones. However, the current study reinstates the distribution of Channidae with previous findings where *C. ara*, *C. orientalis* and *C. punctata* were only recorded from the south-western ichthyological zone of Sri Lanka. Our preliminary findings show that a critical taxonomic review using both the morphological and molecular evidence is essential in determining the species status and endemism of Sri Lankan Channidae while their biogeographical affinities would reveal an interesting evolutionary history.

Keywords: biogeography, Channidae, snakeheads, Sri Lanka, taxonomy