

Recent study on *Hippocampus* (Syngnathidae) diversity in the Western and Northwestern coasts of Sri Lanka: remarks on extraordinary species diversity

J. Mallawaarachchi, R.R.A.R. Shirantha* and V.Pahalawattaarachchi

National Aquatic Resources and Research Development Agency (NARA), Crow Island, Colombo 15, Sri Lanka

Hippocampus species or seahorses are attractive marine fish species of family Synagthidae. There are 33 different seahorse species in the world, and all are threatened species listed in Appendix II of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). They are being traded in both live and dead forms, but the majority in dried and destined for use in traditional medicine. Sri Lanka is also in international trade of seahorse but do not know exact species diversity as there had not been exclusive studies on them. Therefore, present taxonomic study was carried in 2016 and 2017 with the specimens collected from Western to North-western coastal region and the dry specimens detained by Sri Lanka Custom Department in 2015. The objectives were to explore exact species diversity and to propose conservation strategy. They were identified to species level using their morphological features. Present results confirmed the occurrence of five different species in the coastal region studied. They were identified as *H. histrix*, *H. kelloggi*, *H. kuda*, *H. spinosissimus* and *H. trimaculatus*. Of them *H. kuda* and *H.kelloggi* was respectively found as the most common and the rarest species respectively. All these species are well known inhabitants of the Bay of Bengal region. Therefore, present records may be due to extension of their range to the Northern Sri Lanka due to coastal current of the Bay of Bengal or presence of their most preferable seagrass meadows habitats in this region. However, record of West African, Australian and North American seahorse spp. viz. *H. angustus*, *H. angustus* and *H. reidi* among the detained specimens observed is questionable. This may be due to their actual occurrence in our coastal areas or in neighboring sea area. If not it can be predicted that Sri Lanka acts as the hub for illegal trading of seahorses. Therefore, it is important to conduct further studies on the *Hippocampus* species in all coastal areas around Sri Lanka to get a precise idea on their species diversity. This would help for effective implementation of the CITES as well for conservation and management of the seahorse species in Sri Lanka.

Keywords: *Hippocampus*, species diversity, CITES, coastal Sri Lanka

*Corresponding author – email: shiranthha@nara.ac.lk