

Species diversity of sea anemones and their economic value

R.M.S. Priyantha¹, N.Y. Hirimuthugoda² M.M.K. Premakumara² and P.K. Lal²

¹ Fish breeding centre, NAQDA, Udawalawe

² Department of Animal Science, Faculty of Agriculture, University of Ruhuna, Mapalana, Kamburupitiya

Abstract

Sea Anemones are one of the valuable components in protecting coastal biodiversity. As a symbiotic relationship many fish species depend on sea anemones for food and protection from enemies. Numerous studies have been conducted on coastal biodiversity, but very few scientific investigations were carried out on sea anemones. Therefore, a study was carried out to identify the species diversity of sea anemones and their habitats.

Data were collected from coastal areas of Polhena, Kalpitiya, and Trincomalee by field observations as well as from divers of Aqua marine international (Pvt) Ltd., the main sea anemones exporter in Sri Lanka. A structured questionnaire was used to collect information from divers. Some primary data were used to identify the associated sea weeds and other plants.

The results revealed that 8 species of sea anemones were abundant in Sri Lankan coastal areas and out of them 6 species have a good export market. They were *Entacmae quadricolor*, *Macroactyla dorensis*, *Heteractis magnifica*, *Heteractis aurora*, *Cenranthus membranaceus*, and *Stichodactyla haddoni*. *Physobracchia spp* and *Aiptasia spp* were not exported due to custom audience regulation. Carpet anemone (*Stichodactyla haddoni*) was the most abundant species and different colour types such as Green, Blue, Brown, and White were found. Attractive symbiotic relationships such as anemone and crab (*Neoptrosisthes ohshima*), anemone and shrimp (*Periclimenes brevicarpalis*), anemone and fish were identified in their habitats.

According to divers, the sea anemone population has reduced considerably due to over exploitation by exporters. Many areas such as Weligama, Polhena, Galle and Rekawa can be classified as overexploited areas. Therefore, urgent action should be taken to conserve sea anemones as well as their habitats to protect coastal biodiversity.

Keywords: Sea Anemones, Coastal Biodiversity