

Diversity and distribution patterns of reef fishes in two fringing reefs in the southern coastal belt of Sri Lanka

Polhena (Matara) and Weligama, lagoon reefs, are two marine habitats of Southern Sri Lanka that are frequently disturbed due to anthropogenic activities. Diversity of fish in these two reefs was studied, as ornamental fish collection is an important activity that affects their diversity. Fish were identified (Allen and Steen, 1994) and their numbers were recorded along 50m transects (English et al., 1997). Length frequency distribution of *Abudefduf vaigiensis*, *Ctenochaetus striatus* and *Acanthurus lineatus* was also studied.

Ornamental fish collection and use of dynamite to catch food fish are common to both sites. Polhena, which is shallow, is also affected by other anthropogenic activities (recreation, collection of live corals, trampling etc). Terrence and Cumaranatunga, (1999) In Polhena and Weligama the most abundant species were *Neopomacentrus azysron*

(18.32%) and *Plectroglyphidodon dickii* (13.08%) respectively and the rare species constituted, (*Caranx melampygus*, *Ostracian melagris*, *Lutjanus fulviflamma* of Polhena and, *Halichoeres holunus*, *Coris aygula*, *Halichoeres scapularis* of Weligama) *Ctenochaetus striatus*, *Neopomacentrus azysron*, *Caesioides cuning* and *Abudefduf vaigiensis* have formed a multi-species group. Large fish of *Abudefduf vaigiensis*, *Ctenochaetus striatus* and *Acanthurus lineatus* were more abundant in Weligama but largest fish of latter were in Polhena.

Weligama shows a higher density of reef fish, which could be due to its higher coral cover higher depth and lesser disturbance due to anthropogenic activities (Fairoz et al. 2000), but diversity didn't show a significantly different from that of Polhena. Higher recruitment rate could be due to higher exploitation of *Abudefduf vaigiensis*, *Ctenochaetus striatus* and *Acanthurus lineatus* at Polhena compared to Weligama,