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Diversity and Distribution of Conidae from the TamilNadu Coast of India (Mollusca: Caenogastropoda: Conidae)

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Abstract

A survey of the marine gastropod genus *Conus* Linnaeus was conducted along the TamilNadu Coast of India to explore the regional geographic distribution and diversity. The 60 species observed increased the number of Indian Conidae from 77 to 81. *Conus imperialis* Linné, *C. mitratus* Hwass in Bruguière, *C. striolatus* Kiener and *C. violaceus* Gmelin are newly recorded from the study area. *Conus amadis* Gmelin was the most widely distributed species. The highest diversity (48 species) occurred in the Gulf of Mannar, followed by 22 species from northern, six from southern, and five from the Palk Bay regions. We suggest that the rich diversity recorded in the Gulf of Mannar reflects the physical conditions, microhabitats and required resources such as food and shelter that favour the occurrence of the large number of *Conus* species.

Key words: Cone snails, Marine biodiversity, Gastropod, *Conus*, Vallapoo

Introduction

History of Indian Conidae

The taxonomy and distribution of Conidae in India were studied as early as the latter half of the 19th century by Ferdinand Stoliczka (1867, 1868) & Ronald Winckworth (1943, 1945) and the diversity of cone snails in Indian Coastal waters is fairly well documented (Kohn 1978). Various studies on the taxonomy and distribution of Conidae along the Indian Coasts carried out during 1835–2007 have recorded about 77 species. Most of these were reported from the TamilNadu Coast (Thurston 1895; Melvill & Standen 1898, 1899a, 1901; Melvill 1904; Gravely 1942; Satyamurti 1952; Kohn 1960, 1978, 2001; Röckel *et al.* 1995; Hylleberg & Kilburn 2002; Franklin *et al.* 2007). The known diversity of cone snails in the neighbouring islands such as Srilanka (Kohn 1960), Maldives and Chagos (Kohn & Robertson 1968) is comparable to that of the mainland with 70 and 64 species respectively. The *Manual of the Living Conidae* (Röckel *et al.* 1995) provides a recent,