# ENDEMIC MARINE GASTROPODS

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A frequently asked question when talking about any group of animals—or plants—is "how many endemic species do we have?" That is a question difficult, or impossible, to answer when dealing with many marine species. Many animals found in the sea lay eggs that hatch and liberate larvae that join the drifting plankton population. They are carried here and there and when they are mature enough to become adults settle on the bottom and grow—if they have found a bottom that suits their mode of life. If not, they perish. Being at the mercy of ocean currents planktonic larvae drift far from where they were "born" and are therefore distributed over a wide area. Considering the small Island of Sri Lanka many larvae would reach maturity far from the place of their origin. For this reason, marine organisms tend to be distributed on a regional basis and none have the status of endemicity, restricted to a small area.

But we know that some families of animals produce not drifting larvae, but creeping larvae. The species that have creeping larvae can, therefore, be found distributed over small areas and may therefore be considered "endemic" to that locality. The marine family Volutidae, commonly termed volutes, have such creeping larvae and we have two beautiful species off our shores, in deep water. They come up in bottom-set fishing nets.

***Harpulina arausiaca* (Lightfoot, 1786)**, the vexilate volute, was first described in 1786 from "Ceylon and S. India". This location was thought incorrect and corrected in 1849 by Reeve who designated the type location as "Ceylon, here restricted to waters in Nilaveli, Trincomalee, northeast Ceylon". Weaver and du Pont[1] comment that it is a rather rare species found on sandy bottoms 12 fathoms (+/- 75m) deep, growing to a length of 75 to 105mm.

***Lyria cloveriana* (Weaver, 1963)**, Clover's Lyria. The type locality is given as Tangalle in the publication by Weaver & du Pont[1]. The description and naming was from four (4) dead shells collected from that locality by Callistus de Almeida, a diver and spearfisherman, who collected shells for trade. The shells were supplied to a shell dealer named Clover in the USA. My first speimens were given to me by the late Dr. Ananda Perera of Kirinda, who operated two fishing trawlers as a side-line to his medical work. The shells have been taken on bottom-set nets. Subsequently I discovered that they were often for sale at the Kirinda shell outlets. My speimens are between 75 and 84mm long, with some shells pictured on the Internet being even longer. The locality given for the commercially available shells is "Sri Lanka" and one decribes them being trawled from depths of 75 to 80 metres.

***Canarium klineorum* (Abbott, 1960)**, Kline's Conch. These small (22 to 24mm) shells are conchs, in the family Strombidae. I have no information as to their larval type. My personal collection was from Trincomalee, Kinniya, in water 1m deep on a sand bottom. Many images are available on the Internet, the location for all of them given as Trincomalee, collection by fishermen, at low tide, amongst seaweed. An old publication by Eisenberg (1989)[2] gives the location as Sri Lanka.

I have no doubt that these three gastropod species qualify to be considered as endemic to Sri Lanka.

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1 Weaver, Clifton S. & du Pont, John E. 1970, *The Living Volutes,* Delaware Museum of Natural History, Greenville, DE, USA.

2 Eisenberg, Jerome M. 1989, *A collector's guide to seashells of the world*, Crescent Books, New York.