Four new records of Conidae (Mollusca: Caenogastropoda) from the Andaman Islands, India

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The Andaman and Nicobar archipelago comprises 572 islands spread over an area of 8,249 sq. km. These islands are within the 'Indo-Malayan region' and near the 'faunistic centre' from which other Indo-West Pacific regions recruit their tropical marine fauna (Ekman, 1953). The topographically complex nature of the nearshore environments of these islands creates a plethora of niches that support a rich and diverse molluscan fauna. Many of the Conus species (e.g., C. geographus Linnaeus, 1758; C. miles Linnaeus, 1758; and C. striatus Linnaeus, 1758) that occupy these islands are broadly distributed throughout the Indo-West Pacific. However, a few Indo-West Pacific species (e.g., Conus andamanensis Smith, 1878; and C. araneous nicobaricus Hwass in Bruguière, 1792) are restricted to small geographic regions (Röckel et al. 1995). Early oceanographic expeditions of the Andaman and Nicobar Islands that began in 1788 report only 10 Conus species from these islands (Smith, 1878; Melvill & Sykes, 1898; Preston, 1908). More recently, Subba Rao (1980) of the Zoological Survey of India (ZSI) reports a total of 51 Conus species from this region. In the past two decades, the Conus fauna has not been studied extensively due to lack of focused studies in the Andaman and Nicobar Islands. Several recent surveys conducted by the Andaman and Nicobar Centre for Ocean Science and Technology investigated the intertidal and subtidal macrobenthic fauna of the Andaman Islands.

The present study reports four Conus species for the first time from this location. The observations of multiple living specimens of each species confirm this report. Three species (Conus leopardus Röding, 1798, C. litoglyphus Hwass in Bruguière, 1792 and C. striatellus Link, 1807) are new records from Andaman Islands and one (Conus coffeae Gmelin, 1791) represents a new record for India. One specimen of each species was deposited in the National Zoological Collections, ZSI/ANRC, Port Blair, India.


Conus leopardus Röding, 1798
Figure 1, 2 and 4

Cucullus leopardus Röding, 1798: 41, no. 520 (representation of lectotype, Martini, 1773: pl. 60, fig. 666 (78 x 43 mm) (Kohn 1975); locality unknown).

Conus millepunctatus Lamarck, 1822: 461–462, no. 45 (representation of lectotype, Cuvier, 1798: pl. 323, fig. 5 (137 x 75 mm) (Walls 1979); "Océan Asiatique").

Conus millepunctatus var. aldrovandi Dautzenberg, 1937: 171–172 (representation of lectotype, Cuvier, 1798: pl. 324, fig. 4 (119 x 66 mm) (Coomans et al. 1980); locality unknown).

Material examined. 12 (living) specimens, SL 80–110 mm; SW 52–68 mm; ZSI/ANRC-7444 (Figure 1); dated 20.08.2011; SL 105 × SW64 mm; 11°40’15.0"N, 92°44’51.4”E; Aberdeen Bay, South Andaman; Collected by J. B. Franklin.