

# **Biotechnologies towards Sustainable Development in Malaysia**

**Zarina Zainuddin**

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*Zarina Zainuddin*



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## Chapter 4

### *Holothuria (Mertensiothuria) leucospilota* (Brandt, 1835) in the Marine Environment of Malaysia

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#### Sea Cucumbers (Echinodermata: Holothuroidea) in Malaysia

Sea cucumber – or well known by the Malaysians as *gamat* (specific local name for the commercial species of family Stichopodidae), *timun laut* (general local name for all species), *bat*, *balat*, or *brunok* – has been accepted as a marine heritage of Malaysia. This marine animal is also called *hoi sum* or *hai shen* by the Malaysian Chinese community which means sea ginseng - a reference to its healing properties. Due to its commercial values and medicinal properties, sea cucumber has been exploited as traditional medicine, food and health supplement in Malaysia. Pangkor Island, Perak Darul Ridzuan and Langkawi Archipelago, Kedah Darul Aman in Peninsular Malaysia are the main production sites for *gamat* fluid extracts (*air gamat*) and *gamat* lipid extracts (*minyak gamat*), while Sabah in Borneo Island, East Malaysia is well known in food industries of beche-de-mer or *trepang* (i.e. dry tunics) which have contributed a lot to its economic growth.

A lot of studies on the species diversity and distribution of sea cucumbers in Malaysia have been recorded since 1985. Until now, it is estimated that more than 80 species of sea cucumbers inhabit the marine environment of Malaysia (Kamarudin *et al.*, 2010a). Kamarudin *et al.* (2009, 2010a) suggested that order Aspidochirotida in general and genus *Holothuria* in