

Biotechnologies towards Sustainable Development in Malaysia

Zarina Zainuddin

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Chapter 3

Diversity and Exploitation of Sea Cucumbers in Malaysia and Its

Neighbouring Countries

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Malaysia's Sea Cucumbers – Species Diversity and Commercial Values

Sea cucumber (Echinodermata: Holothuroidea) is a marine heritage of Malaysia (Figure 2.1). It is estimated that more than 80 species of sea cucumber inhabit the seawaters of Malaysia (Kamarudin *et al.*, 2010). A number of 53 species of this marine animal recorded in Malaysia are listed down in Table 3.1. In terms of common names of the local sea cucumbers, there are at least five names i.e. *timun laut*, *gamat*, *bat*, *balat*, and *brunok*. *Timun laut* refers to all species of Malaysia's sea cucumbers. Meanwhile, *gamat* – the most well known name of the soft-bodied animal among Malaysians – is a specific local name for all species of family Stichopodidae e.g. *Stichopus herrmanni* Semper, 1868; *Stichopus chloronotus* Brandt, 1835; and *Stichopus ocellatus* Massin, Zulfigar, Hwai & Boss, 2002. Species of genus *Thelenota* e.g. *Thelenota anax* H.L. Clark, 1921 are also regarded as *gamat*. *Gamat* is well known in the traditional medicine industry in Peninsular Malaysia especially in the Langkawi Archipelago, Kedah Darul Aman and Pangkor Island, Perak Darul Ridzuan in the west coast. *Gamat* has been exploited for its commercial body fluid extracts i.e. *air gamat* and lipid extracts i.e. *minyak gamat*. *Gamat*-based dietary supplements or health food produced by the modern technologies are also available in the Malaysia's market and overseas. Among the Malaysia's companies that sell high quality