

Souvenir from west Lombok, eastern Indonesia

Pradina Purwati¹

Holothurians in Lombok, Indonesia have not been sufficiently studied. The few publications that exist include Prahoro and Suprpto (1991), Aziz and Sugiarto (1994) and Yusron (2004), who reported on the presence of holothurian species in Batu Nampar, Kuta and Teluk Gerupuk, and Sekotong, respectively. The latest data from the office of National Statistics in 2002 indicates that 84 metric tonnes (mt) of beche-de-mer (trepan), comes from West Nusa Tenggara Province where Lombok is located. The total national harvest is 3057 mt. The Indonesian provinces of Sulawesi, Maluku and Papua are still the country's major producers of beche-de-mer, accounting for more than two-thirds of the national total (BPS 2002 Report).

When I visited Lombok in late July to early August 2005, a collector at Medana village in west Lombok had 12 huge holothurian individuals. The size was believed to be more than 1.5 kilograms when alive, and sold for 35.000–100.000 Indonesian rupiah (IDR) each (USD 1 = IDR 9000). Most of the holothurians were salted with a long cut on either the ventral or dorsal side. The collector has been buying fresh holothurians from local and Madurese fishermen

(who dive in nearby waters) since early 1990. A compressor is used by the Madurese fishermen who dive mostly at night in depths of up to 30 m.

Approximately 30 species of holothurians are known by local fishermen in west Lombok, while a review of the national records indicate that 26 holothurian species have been involved in the Indonesian trepan fishery (Purwati in prep.). Nowadays, trepan prices are IDR100,000 individual⁻¹ for *Holothuria nobilis*; IDR 30,000–35,000 individual⁻¹ for *Thekenota ananas* or *Actinopyga* sp.; IDR 5000 for species of *Bohadschia*; IDR 300,000 kg⁻¹ for *H. scabra* (5 fresh individuals kg⁻¹); and IDR 1000 per large individual of *H. fuscogilva*.

In general, holothurians are called *bantun* in west Lombok, although one local name may be given to different species (Table 1).

In general, species composition of trepan in the local market is believed to be the same, although the volume has decreased. In the 1990s, as many as 30 individuals of *bantun batu* (*H. nobilis*) could be gathered from the fishermen in less than 15 days, which is rarely the case nowadays.



Figure 1. Sea cucumber species from Medana village.
a: *Holothuria scabra*; b: *Thekenota ananas*; c: *T. anax*; d: *Bohadschia marmorata*; e: *B. similis*

1. Research and Development - Oceanography, Lembaga Ilmu Pengetahuan Indonesia (LIPI – Indonesian Institute of Sciences), Jl. Pasir Putih 1, Ancol Timur, Jakarta Utara 14430

Table 1. Local names of holothurians in west Lombok.

Local names	Scientific name	Possible misidentification
Talengko	<i>Holothuria coluber</i>	<i>H. leucospilota</i>
Bantun batu	<i>H. nobilis</i>	<i>A. miliaris</i>
Bantun kunyit	<i>H. fuscopunctata</i>	<i>H. scabra</i>
Cara hitam	<i>H. atra</i>	
Bantun beras / buang kulit	<i>H. scabra</i>	
Karido polos / bantun getah	<i>Bohadschia vitiensis</i>	
Karido getah bintik / laos	<i>B. similis</i>	<i>B. marmorata</i>
Karido bintik	<i>B. argus</i>	
Kapuk	<i>Actinopyga lecanora</i>	
Bantun kasut	<i>A. miliaris</i>	
Gamat order	<i>A. echinites</i>	
Koro coklat	<i>A. mauritiana</i>	
Bantun donga karang/jepun	<i>Pearsonothuria graeffei</i>	
Bantun capung	<i>Stichopus chloronotus</i>	
Gamat biasa	<i>S. hermanni</i>	
Gamat kacang	<i>S. horrens</i>	
Donga/duyung	<i>Thelenota anax</i>	
Bantun nanas	<i>T. ananas</i>	

**Figure 2.** Boiled trepang from Batu Kijuk village

In another part of west Lombok, Batu Kijuk village, Sekotong, a collector had small, boiled holothurians that were 7–8 cm in length, and these were likely to be *Stichopus*. Collecting holothurians is best in the rainy season at night, during a low tide. In the late 1990s when the fishery began in this village, the collector was able to process 300 kg of fresh holothurians per day, which were harvested by local villagers from the seagrass beds in front of the village.

Local collectors sell *bantun beras* (*H. scabra*) to the larger collectors or exporters for IDR 200,000 kg⁻¹ (35–37 individuals kg⁻¹), and IDR 420,000 kg⁻¹ (8 individuals kg⁻¹). *Gamat* (*Stichopus* spp.) prices range between IDR 150,000 and IDR 350,000 kg⁻¹ (for those that are 15 cm long). The collector at Sekotong reported that the gamat group of sea cucumbers has been harvested for the past three years, following

bantun koro, beras and *nanas*. Unlike in Medana, people at Sekotong consume *H. scabra* (*bantun beras*). After being boiled twice, *H. scabra* is dried to be used as crackers or cooked with spices and vegetables.

At both villages, as well as in other areas of Indonesia, including Maluku, processed trepang has never been kept for long periods of time. Most species of all sizes are sold immediately, demonstrating their high market demand. It is unfortunate that most holothurians sold by fishermen are low quality and sell for low prices. This encourages them to collect as many as they can, so they can compensate for expenses they incur while they are sailing.

Indonesian fishermen have been involved in the trepang fishery for more than 500 years. People of Makassan, Bugis, Bajo, Buton and Madura are well

known as trepang hunters. Their hunting areas reach as far as Australian waters (Dwyer 2001; Macknight 1978; Fox 2000; Stacey 2001). Such a long history does not draw enough attention from the government, the standard quality of processed holothurians has not been acknowledged/introduced, and there is no sustainable harvest strategy. The government and researchers have considerable work ahead of them in addressing conservation issues.

Acknowledgements

My visit to Lombok was part of the LIPI-Competitive Project 2005 on holothurian studies. Thanks are given to the members of the research team of P2O-LIPI. I also thank Prof. C. Conand for her valuable suggestions on this manuscript.

References

- Aziz A. and Sugiarto H. 1994. Fauna ekinodermata padang lamun di Pantai Lombok Selatan. Ed. Khusus. Proyek Pengembangan Kelautan/MREP 1993–1994, 52–63.
- Dwyer D. 2001. Fishers of the people: From reef fishing to refugees, the changing role of Indonesian sailors and their perahu at Ashmore reef, north Australia. *Altered state, material culture transformations in the Arafura Region*, 31–54.
- Fox J.J. 2000. Maritime communities in the Timor and Arafura region: Some historical and anthropological perspectives. p. 337–356. In: O'Connor S. and Veth P. (eds). *East of Wallace's Line: Studies of past and present maritime cultures of the Indo-Pacific region*, Rotterdam: A.A. Balkema.
- McKnight C.C. 1976. The voyage to Marege': Macassan trepangers on northern Australia. 7. When did the Industry Begin?. Melbourne Univ. Press, 93–99.
- Prahoro P. and Suprpto 1991. Keanekaragaman jenis teripang di perairan Batu Ekas, Batu Ampar/Lombok (Nusa Tenggara Barat). *Journal Penelitian Perikanan Laut* 60: 67–73.
- Purwati P. 2005. Teripang Indonesia: komposisi jenis dan sejarah perikanan. In preparation. *Oseana*, 30(1):12 p.
- Stacey N. 2001. Crossing borders: Implications of the memorandum of understanding on Bajo fishing in Northern Australian waters (draft). Symposium in Understanding the cultural and natural heritage values and management challenges of the Ashmore Region, Darwin. 9 p.
- Yusron E. 2004. Beberapa catatan fauna ekinodermata dari perairan Teluk Sekotong, Lombok Barat, NTB. Seminar Riptek Kelautan nasional, 42–71.