



Potential of Ornamental Marine Stomatopods

Tamil Nadu / Chennai Coasts

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The sea treasures a wealth of animal species. Among them are certain crustaceans which have potential as a sustainable source of ornamental animals. They are a dominant group living on coral reefs. This group is incredibly diverse with

regard to shape, colour and life style. Perhaps the most conspicuous non-decapod crustaceans are the mantis shrimps or stomatopods. These segmented beautiful creatures are voracious predators feeding on

other crustaceans and small fishes as well as molluscs and worms.

Table 1 shows the landing of stomatopods along the Indian coast line, particularly Tamil Nadu/ Chennai coasts during 1981-2006.

Stomatopods of Tamil Nadu / Chennai Coasts



Harpiosquilla annandalei



Harpiosquilla harpax



Harpiosquilla raphidea



Lysiosquilla tredecimentata



Oratosquilla woodmasoni



Oratosquilla gonypetes



Oratosquilla holoschista



Oratosquilla nepa



Oratosquilla quinquentata





Table-1: Landings (t) stomatopods along the Indian coast, Tamil Nadu and Chennai from 1981-2006

Years	India	TN	Chennai
1981	17318	317	38
1982	25519	2096	15
1983	21773	878	10
1984	28852	654	14
1985	31191	287	24
1986	48110	476	22
1987	98614	676	5
1988	68981	1003	27
1989	69276	336	35
1990	65471	145	20
1991	62674	137	43
1992	72688	231	50
1993	86492	229	60
1994	98052	509	136
1995	66330	729	77
1996	72342	973	11
1997	93084	652	18
1998	72603	872	143
1999	49910	496	48
2000	46005	327	70
2001	34944	685	24
2002	36423	415	109
2003	37341	900	14
2004	32071	1054	35
2005	21189	735	48
2006	18935	543	61

Along the Indian coast, a maximum landing of stomatopods was recorded in 1987 (98,614 t), while the present landing is comparatively low (18,935 t). Tamil Nadu recorded a maximum landing in the year 1982 (2,096 t) and a minimum in 1991 (137 t). A maximum of 143 t of stomatopods was landed in 1998 along the Chennai coast and a minimum of 5 t in 1987.

Among the by-catch landed along the Chennai coast, about 30% are contributed by crustaceans which at present are being used for the preparation of fish meal, poultry feed and manure. Of the crustacean by catch, nearly 60% are crabs, 20% shrimps, 15% stomatopods and 5% lobsters. Indigenous and endemic

ornamental crustaceans too can be utilised for the promotion of ornamental fish trade and for creating new employment opportunities in rural areas. At the same time, breeding biology of these crustaceans, however, needs to be studied, so as to avoid wasteful collection of invertebrates for the purpose of trade.

The particulars of the identified ornamental stomatopod species are furnished hereunder.

Family - Harpiosquillidae

Harpiosquilla annandalei (Kemp)

Common Name - Mantis shrimp

Tamil Name : *Peria mandai poochi eral*

Their antennular peduncle is as long as rostrum. Body is brownish pink and antennular somite bears transverse brownish black band. Raptorial claw is white in colour. Three thoracic and five abdominal somites have thin black band. There are prominent large brownish black patches on either side of the median carinae at the base. Uropods are light pinkish in colour. They are caught by trawl and shore seine from October to December and size range is from 108-162 mm in total length.

Harpiosquilla harpax (De-Man)

Common Name - Robber Harpiosquillid mantis shrimp

Tamil Name : *Pacha poochi eral*

They have a white body with green spot on the uropods. Carapace extends till middle of first abdominal somite and the lateral margin bears spinules. They are caught from June to September in trawl and bag net. Total length ranges from 58-225 mm.

Harpiosquilla raphidea (Fabricius)

Common Name - Giant Harpiosquillid mantis shrimp

Tamil Name : *Pacha poochi eral*

Their body is light brownish pink, antennular somite has black band, transverse band on thorax. Abdomen is brownish black. There is a black blotch on median carina near base of telson. Distal half of endopod of uropod is with faint black pigments. They are caught by

trawl and bag net from October to December. Size ranges from 103-155mm.

Family- Lysiosquillidae

Lysiosquilla tredecimdentata (Holthuis)

Common Name - Banded mantis shrimp

Tamil Name : *Vari poochi eral*

They belong to the banded mantis shrimp family Lysiosquillidae. They have dark transverse bands on the body, with dark and white bands at articulation of each somite. The walking legs are black on the dorsal side. They range in total length from 150-278mm and are caught by trawls during October to December.

Family - Squillidae

Oratosquilla gonypetes (Kemp)

Common Name: common mantis shrimp

Tamil Name : *Kadal poochi eral*

They are brownish pink. The fifth abdominal somite has a large black spot on the posterior side and the second abdominal somite possesses a transverse black patch extending laterally. They range in total length from 65-115mm and are caught in trawls.

Oratosquilla holoschista (Kemp)

Common Name : Mantis shrimp

Tamil Name : *Pachai poochi eral*

They have light greenish brown body; thorax and abdominal somite are pinkish in colour; telson is green and dorsal half of proximal segment of exopod of uropod is light blue. They range in size from 59-113mm and are caught by trawl as well as bag net throughout the year.

Ortosquilla neap (Latreille)

Common Name - Small eyed squallid mantis shrimp

Tamil Name : *Cheriyai kannu poochi eral*

Their body is grey in colour and uropods are pale yellow. The uropods have lateral and





intermediate spines. Three black patches are present on all the abdominal somites. They range in total length from 35-130mm and are caught in trawls and shore seines throughout the year.

***Oratosquilla quinquedentata*
(Brooks)**

Common Name - Mantis shrimp

Tamil Name : *Chigappu poochi eral*

These mantis shrimp have pale green rostrum, and second to fifth abdominal somites are pinkish brown. Telson is bluish brown with pink terminal spine. Uropods are orange in colour. They have a total length range of 115-155mm and are

caught in trawls during June.

***Oratosquilla woodmasoni* (Kemp)**

Common Name - Smooth squillid
mantis shrimp

Tamil Name : Neela poochi eral

They have a pale grey body and the uropods have bluish tinge on the tips. Rostrum is relatively slender for a large carapace without spinules. They range in total length from 56-145mm and are available throughout the year as part of trawl catches.

Remarks

The colourful stomatopods are very sturdy and spiny. Hence care

should be taken while handling them in aquarium trade. Feeding in aquarium tanks will not be a problem as they are powerful swimmers and feed on a variety of animals.

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