

On rare occurrence of pronghorn spiny lobster, *Panulirus penicillatus* (Olivier, 1791) off Tuticorin coast, India (08°35.912'N and 78° 25.327'E) (25 M).

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Editorial

The present investigation of berried spiny lobster *Panulirus penicillatus*, very rare occurrence off Tuticorin coast on 10th March, 2016. Along the Indian coast, this species it has been rare occurrence of Tuticorin coast, only occasional capture of the species from south-east-coast India. *Panulirus penicillatus*, the occurrence of this species between 08°35.912'N and 78°25.327'E at a depth of 25M off Tuticorin coast. In Tuticorin coast, all spiny lobsters have been to conserve the population of berried spiny lobsters and juvenile lobsters less than 50 g, the protect and conserve the rich biodiversity of Gulf of Mannar.

The spiny lobsters such as *Panulirus homarus*, *P. ornatus*, *P. versicolor*, *P. penicillatus*, *Panulirus longipes* and *P. polyphagus* have been reported Southeast-coast and west coast of India. All the species have been identified based upon the external features and color markings. There are currently recognized six families, 55 genera and 248 species (with four sub-species) of living marine lobsters [1]. The six families of extant lobsters are Enoplometopidae, Nephropidae, Glypheidae, Palinuridae, Scyllaridae and Polychelidae. The spiny lobster family Palinuridae contain eleven genera. They are *Jasus*, *Justitia*, *Linuparus*, *Nupalirus*, *Palibythus*, *Palinurellus*, *Palinurus*, *Palinustus*, *Panulirus*, *Projasus*, *Puerulus* and *Sagmariasus*. The annual lobster landing in India, the peak landing was 1985/4075t, the present annual average of 1,546t. An average, the fishery was contributed by Gujarat (43.7%), Maharashtra (25.4%), Tamil Nadu (14.6%) and Kerala (13%) [2,3]. Costliest seafood in spiny lobsters in India, the live spiny lobster has been export along with crabs and reef fishes. Revenue of Indian fisheries market to export of spiny lobsters the sum of amount Rs.74 crores. The price of live lobster in domestic market ranged from a minimum of Rs. 500-2,800/kg. *P. penicillatus*, the rare occurrence of specimen have been recorded off Tuticorin coast, Gulf of Mannar, the few information has been available on the reproductive biology of the species, only occasional capture fisheries from Tuticorin coast. Ministry of Commerce and Industry, Government of India were implemented minimum legal size for export of lobsters during 2003, still juveniles are caught and exported illegally which fetch very low price. This study has been reported earlier from southeast and west coast of India [4-8]. The present record of this specimen, off Tuticorin coast, extending its distribution to the Southeast coast of India.

- Phylum: Arthropoda
- Class: Malacostraca
- Order: Decapoda

- Family: Palinuridae Latreille, 1802
- Genus: *Panulirus*
- Species: *penicillatus*
- English name: Pronghorn spiny lobster



Figure 1. *Panulirus penicillatus* (Olivier, 1791) Dorsal View.

Body greenish, ranging from yellowish-green through brown-green to blue-black. Antennular plate with 4 strong spines which are fused at the base forming a single bunch of 4 diverging points, the anterior pair shorter than the posterior. Transverse grooves over the abdomen uninterrupted.

This species has the widest distribution of any of the spiny lobsters. It occurs in the Indo-west Pacific and East Pacific regions, South Red sea to South and East Africa; Madagascar and surrounding islands, through the Indian Ocean and South China sea to Japan, the Philippines, Indonesia, Hawaii, northern and eastern Australia, Islands of north west coast of

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US and Mexico. Along the Indian coast, it has been rare occurrence off Tuticorin coast, only occasional capture of the species from south-east-coast and south west coast, Lakshadweep and A & N Islands.

The female berried specimen was measuring 36.5 cm in total length and 680 g in weight (Figure 1). 08°35.912'N and 78°25.327'E, off Tuticorin coast; at a depth of 25 m.

The present investigation of spiny lobster population, if any further stressed that strict management measures is being mandatory, to be undertaken to conserve this species and further avoid exploitation and to searching and restore the enrich of population of biodiversity of spiny lobster population of Tuticorin coast of Gulf of Mannar in particular.

References

1. Chan TY. Annotated checklist of the world's marine lobsters (Crustacea: Decapoda: stacidea, Glypheidea, Achelata, Polychelida). *The Raffles Bulletin of Zoology*. 2010;23:153-81.
2. CMFRI. Annual Report. Central Marine Fisheries Research Institute, Cochin. 2005;13.
3. Holthuis LB. Marine lobsters of the world. An annotated and illustrated catalogue of species of interest to fisheries known to date. FAO Fisheries Synopsis No. 125.1991;(13): 151-52.
4. Meyyappan MM, Kathirvel M. On some new records of crabs and lobsters from Minicoy, Lakshadweep (Laccadives). *J Mar Biol Ass India*. 1978;20(1-2):116-19.
5. Nair RV, Soundararajan R, Dorairaj K. On the occurrence of *Panulirus longipes longipes*, *Panulirus penicillatus* and *Panulirus polyphagus* in the gulf of Mannar with notes on the lobster fishery around Mandapam. *Indian J Fish*. 1973;20(2):333-50.
6. Pillai CSG, Mohan Madan, Kunhikoya KK. Observations on the lobsters of Minicoy atoll. *Indian J Fish*. 1985;32(1): 112-22.
7. Prasad RR, Thampi PRS. The distribution of palinurid and scyllarid lobsters in the Indian Ocean. *J Mar Biol Ass India*. 1968;18(1):78-87.
8. Shanmugam S, Kathirvel M. Lobster resources and culture potential. *CMFRI Bull*. 1983;34:61-5.

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