

# *Calliaster childreni* Gray (Echinodermata : Asteroidea) A new Record from the Indian Ocean

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*Calliaster childreni* Gray is hitherto known only from the southern Japanese and southern Chinese seas. Gray (1840) described this species for the first time from southern Japan. Later Goto (1914) gave a detailed description of it from Japan. Clark and Rowe (1971) stated that the British Museum had six specimens (preserved in a dry form) collected more than one hundred years back from China but without any record of depth of collection. Liao and Clark (1995) just referred to the collections in the British Museum without any further information. The former authors are of the opinion that China as the locality was added to their labels by the fishermen 100 years back to enhance their value.

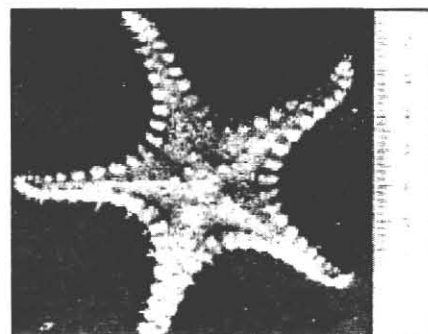
A single specimen of *Calliaster childreni* Gray (Photograph) was collected on board FORV Sagar Sampada off Stewart Island in the Northern Andamans from a depth of 37 metres in 1990. It belongs to the family Goniasteridae where the marginal plates are large and conspicuous. Its 'R' is 53 mm and 'r' 21 mm. R/r is 2.5. ('R' denotes distance from centre of the disc to the tip

of the arm, and 'r' denotes distance from centre of the disc to the edge of the disc). The dorsal side is slightly arched and the ventral side is flat. All the abactinal plates are covered by granules and some of them have a single spine. Some of the abactinal plates are enlarged along the radial region and covered by granules and a single spine on each plate. There are ten supero-marginal plates on each side of the arm on the dorsal side and an equal number of infero-marginal plates on the ventral side. The supero-marginals are hemispherical in shape and covered by slightly enlarged granules. Each supero-marginal plate has a spine mounted on an enlarged granule.

This species appears to live in deeper waters. It is reported off Stewart Island for the first time from the Indian Ocean.

## References

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feeding the larval stage of marine fishes. Successful aquaculture of marine fish requires adequate and reliable production of high-quality, nutritious rotifers. One method of culturing rotifers is to feed them microalgal diets as they promote rapid growth and reproduction. The rotifers used in our aquaculture studies of the tautog and black sea bass were fed the algal strain *Tetraselmis* sp. (PLY 429). This alga not only promotes rapid reproduction of the rotifers, but also contains the n-3 and n-6 polyunsaturated fatty acids that have been shown to promote growth and survival in larval marine fish. *Tetraselmis* was cultured under semicontinuous conditions in three large, open rectangular fiberglass tanks that received constant fluorescent lighting. These tanks were maintained with water between 200-300 L. Rotifers were fed *Tetraselmis* from two of the three tanks on a rotating basis. Initially, for about one week, rotifers showed an increase from 4 to 16 million nos. After that time, the rotifer population declined to five million nos and remained at that level

for 2 weeks. During that time, and for the next 3 months, sporadic measurements of ammonia, salinity, and pH were taken in each of the three algal tanks. High levels of unionized ammonia (>1 mg/l), and abrupt changes in salinity (plus or minus 5 ppt) and pH (plus or minus 1 pH unit) in the algal tanks coincided with decreases in the rotifer population. Those measurements indicated that either individual fluctuations in salinity, pH and ammonia, or a combination of two or more of these factors adversely affected rotifer production. It is concluded that changes in salinity, pH, and ammonia levels, as well as increased numbers of bacteria and ciliates in algal cultures can be counterproductive to maintaining high rotifer populations. It is recommended that algal tanks be monitored daily during high rotifer production times for salinity, pH, and ammonia levels. Also, large open algal tanks should be monitored on a regular schedule for bacteria (*Vibrio*) and ciliates. Some alternatives to using live algae include concentrated algal pastes, baker's yeast and commercial products.



## Visakha Fishermen received Fibreglass Boat Sanction letters

Visakhapatnam Municipal Commissioner N. Srikanth and Mayor Rajana Ramani handed over on 6 July 2004 sanction letters for fibreglass boats to 26 fishermen at a function held at the Visakhapatnam Municipal Corporation (VMC) premises. These fishermen are those displaced at the time of construction of multi-purpose berth by Visakhapatnam Port Trust.

Each fibreglass boat is stated to cost Rs.50,000 of which Rs.25,000 is being contributed by the United Kingdom based Department for International Development (DFID), while Rs.12,500 were given by the VMC Steering Committee. The remaining Rs. 12,500 had been given as loans by the State Bank of India and VMC.

On the occasion, Rajana Ramani asked the beneficiaries to get their fibreglass boats insured and return the loans in time to help others from their fraternity.

