



Figure 1. Commensalism of jellyfish *Lychnorhiza malayensis* with crucifix crab *Charybdis feriatus*.

carapace widths of the crabs were measured and ranged from 11 to 28 mm. Most of the small crabs (11–18 mm) were found clinging to the jellyfish oral arms in head downward position and few adults were in head upward position.

Maximum aggregation of *L. malayensis* near the seabed was observed during morning hours (0600–0900 hrs) and slowly the aggregation moved up to the middle of the water column by 1000–1100 hrs. *C. feriatus* generally found in the seabed were associated with jellyfish

during morning hours and transported to other pelagic environment during the daytime. It is presumed that the jellyfish provide shelter and protect the crabs from predators. Juveniles of the shrimp scad fish *Alepes djedaba* (12–42 mm length range) were also found to be associated with oral arms of *L. malayensis* and these may also form a feed for the crabs.

The jellyfish associated with crabs were brought to the laboratory and maintained in live condition in glass aquaria

filled with fresh seawater and their behaviour was observed. Laboratory observations showed that the crab was associated with jellyfish for the short period and moved out most of the time. This shows that the association of *C. feriatus* with *L. malayensis* is facultative commensalism.

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How reliable are the data on the recent coral bleaching event in Malvan Reef, India?

De *et al.*¹ have raised concerns about the possible impact on fishery and tourism due to a recent bleaching event in the patch reefs of Malvan, west coast of India. They followed the belt transect method to assess the extent of bleaching in 400 m² area. Hill and Wilkinson² report a method known as ‘bleaching belt transect’ to assess bleaching extent, which is similar to that adopted to study the Malvan reef bleaching event¹. The bleaching belt transect method integrates other survey methods such as rapid visual assessment (RVA) or line intercept transect (LIT), or point intercept transect (PIT) if the survey area is small². However the belt transect survey adopted to study bleaching in the Malvan reef¹ is commonly used for assessing fish and benthic invertebrate density². The study in the Malvan reef shows 15% corals are bleached¹, which does not portray a clear picture on the extent of bleaching in a

0.28 sq. km reef patch³ due to a low resolution method adopted.

Although methodologies in coral-reef monitoring are much debated and still yield similar results, based on specific needs, the appropriate method has to be selected⁴. Nevertheless, high-resolution data collected using PIT and LIT can be much more reliable in a small reef area like Malvan to study the extent of bleaching and severity, allowing better comparison with regional works^{5,6}. It may be useful for De *et al.*¹ to re-examine their data from a rather important data-deficient reef to aid scientists and managers in framing better management practices.

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