

Impact of budding on free-living corals at East Kalimantan, Indonesia

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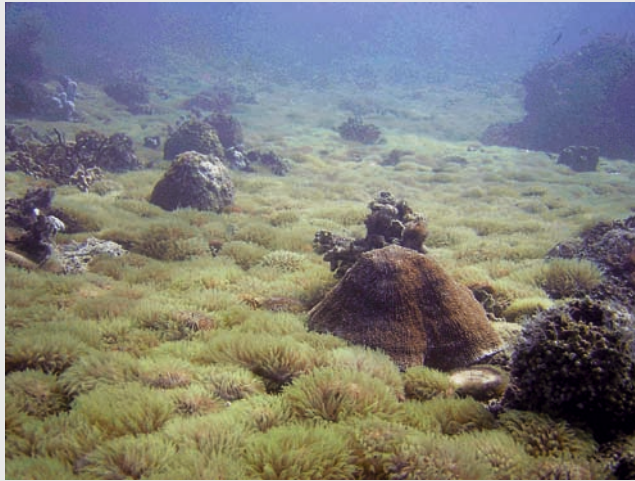


Fig. 1. A field of free-living *Fungia fralinae* corals. The densely and evenly dispersed disc-shaped corals have their large green tentacles extended



Fig. 2 A nearly dead coral of *F. fralinae* with attached buds surrounded by larger detached corals

A reef site named 'mushroom coral garden' was studied south of Derawan Island, Berau Islands (118°15'08.4"E, 02°16'17.5"N) in October 2003. The reef slope (8–10 m) thin coral fragments, covered (est. >95%) by unattached mushroom corals (Fig. 1). Almost all individuals (100 m⁻²) belong to *Fungia fralinae* Nemenzo, 1955 (Hoeksema 1989). The smallest free-living individuals derived from budding and were in the proximity of senescing parent corals with younger buds still attached (Fig. 2). A few overturned individuals showed inflated soft tissue. The coral aggregation also contained fragments of *Zoopilus echinatus* Dana 1846 and some intact corals of *Halomitra pileus* (Linnaeus 1758). The well-developed capacity to expand their bodies enables *F. fralinae* individuals to disperse and to maneuver into optimal positions to catch light and food (Hoeksema 1988). This combination of budding and mobility may be crucial in explaining its local abundance pattern.

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