Proliferation of macro alga *Chaetomorpha linum* in shallow coral reef areas of Shingle Island, Gulf of Mannar, Southeastern India

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In May 2015, during summer, macro alga *Chaetomorpha linum* was seen entangled in high density on coral colonies at northern part of the Shingle Island (09°14'607"N 078°13'863"E) in Gulf of Mannar, Southeastern India. Underwater assessment revealed that *C. linum* bloom has proliferated on coral colonies of *Acropora* and non-acropora species. Filaments of *C. linum* formed larger mats and got entangled with coral colonies reducing light making hypoxia. The inter tidal zone of northern part of the Shingle Island has rich coral cover with about 23.5% at 0.5 to 3.0 meter depth (Patterson et al., 2007). Live coral cover decreased from 23.5% to 18.5% due to the sudden proliferation of *C. linum*. Maximum coral mortality was observed in branching corals such as *Montipora divaricata*, *Acropora cytherea* and *Pocillopora damicornis*. Other coral species under stress were *Acropora intermedia*, *A. muricata*, *Montipora foliosa*, *Echinopora lamellosa*, *Porites solida* and *Favia pallida* (Fig. 1 A to D).

The present observation can be useful for further investigations regarding the spreading rate, algal biomass, nutrient level, and status of associated biodiversity from the bloom affected reef area.

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Fig. 1 Proliferation of *C. linum* on **A**, *Acropora cytherea*, **B**, *Montipora divaricata*, **C**, *Echinopora lamellosa*, **D**, *Acropora muricata*.

References

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