

Coral-killing sponge *Terpios hoshinota* invades the corals of Gulf of Mannar, Southeast India

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Abstract

Terpios hoshinota is an encrusting cyanobacteriosponge which grows aggressively over live coral colonies and has been reported to undergo outbreaks and kill corals. In an underwater survey conducted on the reefs of Gulf of Mannar, an outbreak of this coral-invading sponge was witnessed for the first time. It was found invading approximately 5% of the *Montipora divaricata* colonies (n=383) at 1 m depth in Vaan Island. The affected site had a high coral cover (85.13%) dominated by montiporids (79.97%). *T.hoshinota* was confirmed via underwater morphology and microscopic observation of distinctive lobed tylostylespicules. This sponge has been reported to have caused significant damage to many reef regions around the world and hence immediate steps are needed to protect the reefs of Gulf of Mannar. Further studies are needed to assess the extent of *T.hoshinota* invasion in Gulf of Mannar and progression rate over live coral colonies.

Key words: *Terpios hoshinota*, sponge, coral reefs, invasion, *Montipora divaricata*