



Epizoic red alga allelopathic (?) to a Caribbean coral

The red macroalga, *Dasyopsis spinuligera* (Collins & Hervey) Howe is epizoic on the reef-building coral, *Madracis decactis* (Lyman 1859). Upper photo = 0.3X, lower photo = 1.0X). During a 1996 expedition to the eastern Caribbean, we observed an epizoic species of *Dasyopsis* colonizing and killing the mound-forming coral, *M. decactis*, 1.5-m deep on the windward seagrass flats off Caicos Island (at 21° 51.161'N, 72° 19.159'W). The alga had recruited and colonized outward from a centrally infected area, growing directly on the living coral tissue, which then died as the *D.*

spinuligera population continued to expand. The cause of the coral death, hypothetically, appeared to be an allelochemical interaction (i.e., a secondary-substance that induced

death), rather than physical interference (e.g., smothering, shading; Lewis 1986), since mortality was observed to occur several centimeters from the algal thalli. The only other example of an epizoic alga chemically lethal to corals is black-band disease (BBD, *Phormidium corallyticum* Ruetzler & Santavy, Cyanophyta), which occurs in Atlantic (Ruetzler et al. 1983), Red Sea, Philippine (Antonius 1985), Australian (Miller 1996), and South Pacific (Littler and Littler 1996) reef systems. However, the microscopic BBD spreads as a continuous band and kills by direct contact.

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