



Black band disease in the South Pacific

During March 1995, our research team photographed, collected and examined several occurrences of black band disease, (BBD, *Phormidium corallyticum* Rützler and Santavy) off Yanuyanu-i-loma Island in the lagoon of the Great Astrolabe Reef, Fiji (upper photograph – note infected coral head in lower center; lower photograph – close up of BBD). The pathogen occurred on massive coral heads exposed to terrigenous sediment stress due to runoff from the overgrazed (by feral goats) adjacent volcanic island. Environmental stresses such as pollution have been implicated (Antonius 1985) in the increased occurrences of BBD. In agreement, we have not previously observed BBD during approximately 1000 person-hours of diving on about 150 pristine study sites of the Great Astrolabe Reef.

BBD is caused by the cyanophyte (Cyanobacterium) *Phormidium corallyticum*, although infections rapidly become colonized by a complex disease community (Garrett and Ducklow 1975; Ramos-Flores 1983). The disease has been documented as a common source of coral mortality (Edmunds 1991) throughout the Caribbean and adjacent waters (Rützler et al. 1983). Published records of BBD (Antonius 1985) also include sites in the Red Sea and in the Philippines. Recently, BBD was reported (Dinsdale 1994; Glazebrook and Streiner 1994, unpublished abstracts) to be prevalent in the northern Great Barrier Reef, Australia. Also see the Reef site by Ian Miller in this issue.

References

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Reef sites

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