Crustose, calcareous algal bloom (*Ramicrusta* sp.) overgrowing scleractinian corals, gorgonians, a hydrocoral, sponges, and other algae in Lac Bay, Bonaire, Dutch Caribbean

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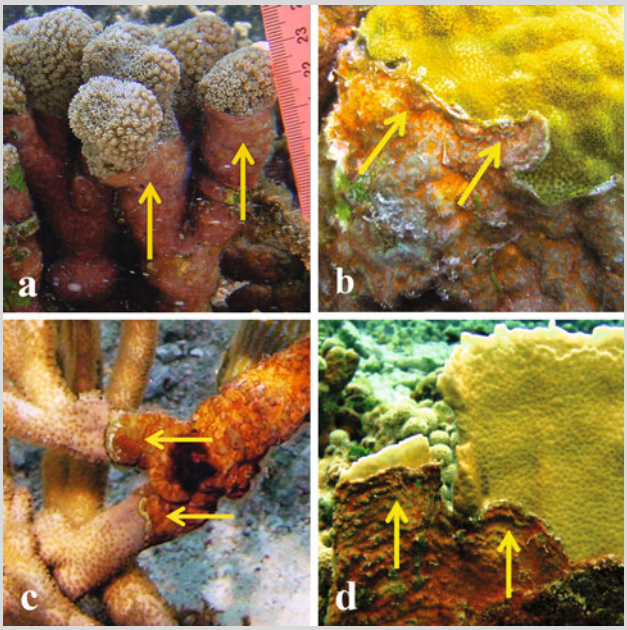

Fig. 1 *Ramicrusta* sp. (indicated by *arrows*) overgrowing **a** *Porites porites*, **b** *Porites astreoides*, **c** *Pseudoplexaura* sp. and **d** *Millepora complanata*. Color of *Ramicrusta* sp. varies from *light orange* to *deep red*

Harmful algal blooms, including invasive algal species, are often related to degraded water quality and are increasing in number and extent (Heisler et al. 2008). Blooms and invasions of fleshy macroalgae are common, but this is not the case for crustose calcareous algae. In Lac Bay, Bonaire, we found an encrusting unidentified species of the calcareous alga *Ramicrusta* sp. (Peyssonneliaceae, Rhodophyta) to be commonly overgrowing at least 14 species of scleractinian corals of the following genera: *Acropora, Agaricia, Diploria, Favia, Montastraea, Porites* (Fig. 1a, b), and *Siderastrea*. The alga also overgrows three species of gorgonians (Fig. 1c), two sponges, a hydrocoral (Fig. 1d), crustose coralline algae, and *Halimeda*. In most cases, *Ramicrusta* sp. grows upward from the base of apparently healthy scleractinians and gorgonians and causes death of the overgrown tissue. Over a period of several months, complete overgrowth of some colonies has been observed. Sponge tissue may survive partial overgrowth.

Ramicrusta has not been reported elsewhere in the Atlantic, apart from Jamaica (Pueshel and Saunders 2009), and little is known about the ecology of this genus. Lac Bay is a small (ca. 8 km^2), semi-enclosed bay with a back reef area (0.4 km^2). *Ramicrusta* sp. may be invasive or, alternatively, stressful conditions in the bay may have caused a cryptic, native algal species to bloom.

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Reef sites

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