Deep formations (50–80 m) of the solitary coral **Phacelocyanthus flos** *on southern Caribbean reefs*

Accepted: 18 January 2003 / Published online: 15 April 2003

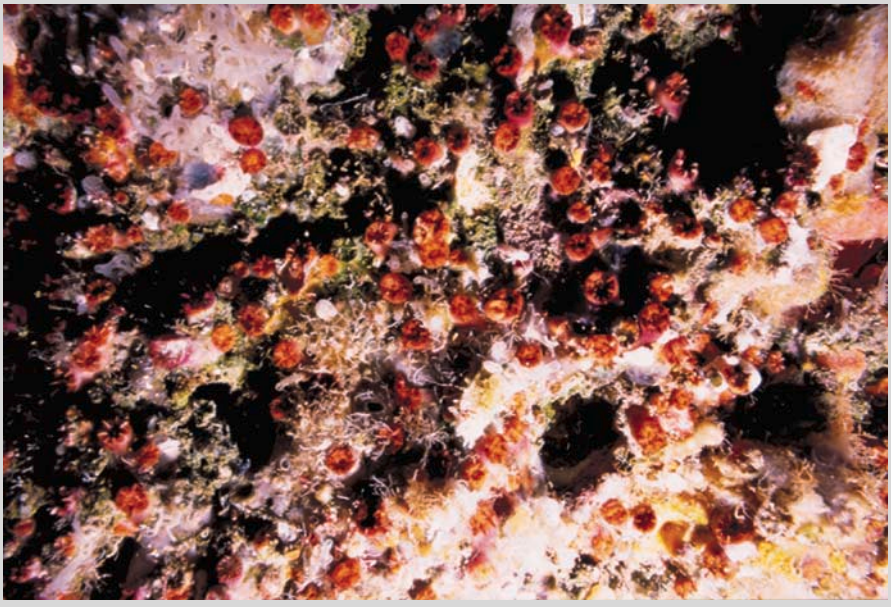

Fig. 1 *Phacelocyanthus flos* corallites that are interconnected by a common base at 65 m depth at Klein Curaçao

Fig. 2 Detail of *P. flos* corallites: this sample was collected from the same location as the *P. flos* polyps in Fig. 1. Note that the living polyps grow on the skeletons of polyps living earlier. Scale bar: 1 cm

The two-tone cup coral (*Phacelocyanthus flos*, *Caryophyllidae*) consists of integrated clusters of small (0.5–1.5 cm) corallites whose skeleton is connected by a common base (Figs. 1 and 2). This species lives attached to and encrusts the underside of overhangs, cave ceilings, and hard structures at depths from 20–355 m (Cairns 1979). *P. flos* is azooxanthellate according to Humann (1993). During various deep dives around the islands of Curaçao and Klein Curaçao (12°N, 69°W), extensive monospecific formations of living and dead *P. flos* were observed between depths of 50–80 m. On Curaçao, near the Caribbean Marine Biological station CARMABI (Van Duyl 1985), coverage of a vertical overhang with *P. flos* was estimated at 40×7 m (width x height) between 65 and 75 m depth. On the satellite island of Curaçao, Klein Curaçao, a *P. flos* wall, approximately 100×10 m between 55 and 65 m was discovered. In between *P. flos* corallites, invertebrates such as sponges, gorgonians, crinoids, and other solitary scleractinian species were observed. Diving restrictions only allowed for limited excavation to investigate the thickness of the *P. flos* layer. Three holes of approximately 10–15 cm deep chiseled through the *P. flos* covered areas indicated layers of new *P. flos* overgrowing old ones. If the structures are constructional, further excavations should reveal that *P. flos* is one of the first reported tropical scleractinian corals at these depths that significantly contributes to active reef formation.

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