# Carijoa riisei

### Identification

*C. riisei* is an octocoral which forms erect, branching colonies with conspicuous white polyps.

## Description

Colonies form dense clusters of tangled, branched stems with large, prominent, white polyps. Stems tipped with white single polyps; below, secondary polyps grow in pairs or groups of three at about same level. White to pale pink stalks have eight longitudinal grooves. Polyps usually extended. Stems often encrusted and or overgrown with algae, sponge and other organisms. [Excerpted from Humann and Deloach]

#### Cohabitants

Several skiophilous (shade loving), sessile benthic invertebrates including the colonial cup coral *Tubastrea coccinea*, the solitary cup coral *Cladopsammia eguchii*, the lace bryozoans Reteporellina denticulate, the black coral Antipathes dichotoma, and the wire coral Cirripathes anguina. At depths below 30 m, large black corals and wire corals have been observed coexisting within C. riisei aggregations. At least one survey has shown C. riisei proliferating across a large bed of *Leptoseris* between 65-75 m and colonizing the undersides of ledges and large *Porites lobata* coral heads between 30-60m. [Excerpted from Kahng et al. 20061

#### Habitat

C. riisei, is typically found in a wide variety of habitats that provide shade, but in deeper water (>60 m) is uninhibited by light and can be found on exposed hard substrate. Habitats which provide shade include ledges, under large coral heads, crevices. edges of boulders, lava tubes and sunken ships. Below 60 m C. riisei proliferates on exposed, hard substrata (Kahng et al. 2006). Areas consistently ventilated by current flow or wave surge, but away from areas subject to excessive sediment scour are preferred (Kahng et al. 2006). For example, *C. riisei* is common at the edge, or on exposed boulders and rugose features along the top of steep carbonate slopes that surround insular shelves. These deep submerged habitats are exposed to strong tidal currents (Kahng et al. 2006).

## Impact

Under favorable conditions *C. riisei* forms dense, monospecific aggregations capable of carpeting hard substrata. *C. riisei* appears to exclude virtually all sessile, benthic megafauna via preemptive space competition and direct overgrowth. Among deep reefs *C. riisei* has been observed between 60-115 m commonly growing on black corals – both live colonies and dead black coral skeletons and dominating several areas of hard, rugose substrata [Excerpts from Kahng et al. 2006]

### More Information

Bishop Musuem, www.bishopmuseum.org Sam Kahng, Asst. Prof. Hawaii Pacific University

Global Invasive Species Database, www. issg.org/database

Grigg R.W. 2003. Invasion of a deep water coral bed by an alien species, *Carijoa riisei*. Coral Reefs 22:121-122



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