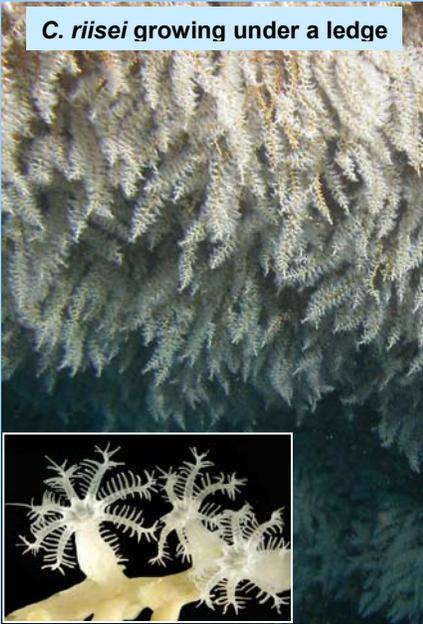


C. riisei growing under a ledge



SNOWFLAKE CORAL

(Carijoa riisei)

Description: *C. Riisei* is an octocoral; its polyps have eight tentacles versus six in most stony corals. It is a non-photosynthetic coral which feeds on zooplankton (tiny larvae of shellfish and crustaceans) and organic particles by capturing them with tentacles upon contact. As a passive filter feeder, it requires moderate amounts of water flow which can be provided by wave surge, tidal currents, or long-shore currents. It cannot grow in direct sunlight and is often found under ledges and under wharves in shallow water. At depths below significant light penetration, it can grow in the open on rocky surfaces swept clean of sediment (requires firm surfaces to which it attaches using stolons – root like structures). There are male, female and hermaphrodite colonies capable of single parent reproduction. It also spreads via vegetative growth using horizontal “runners” or stolons which are used to quickly colonize adjacent territory in all directions.

Snowflake coral was first discovered in Hawaii in 1972 at Pearl Harbor, and has since spread to all the main Hawaiian Islands. It is believed to have been transported to Hawaii on the bottom of a ship (hull fouling), or as larvae in a ship’s ballast water. It grows well on artificial surfaces such as metal, concrete, plastic, rope, and even old automobile tires. This coral is also commonly found on artificial reefs visited by recreational SCUBA divers. A research program is underway to determine the ecology and ecological impact of *C. riisei* on Hawaii’s coral reef communities.



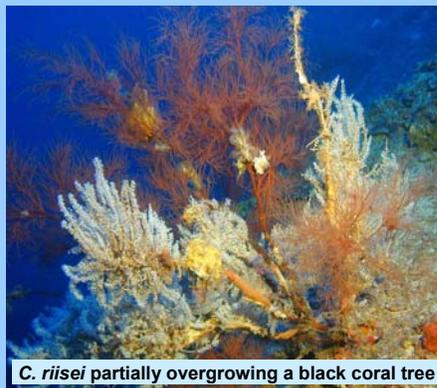
Native Range: Western Atlantic and Caribbean from Florida to Brazil.

Distribution in Hawaii: All main Hawaiian islands (however, very limited population on Kauai)

Ecological Impacts: As a highly successful invasive species, *C. riisei* threatens Hawaii’s biodiversity by monopolizing food and space resources and by displacing native species. Under favorable conditions, it out competes other organisms and saturates the available space. This species can actually settle and grow on other stationary organisms like corals and shellfish. It also appears that it may be resistant to predation in Hawaii; no significant predators have been identified to date. It has a planktonic larval stage that facilitates dispersal via ocean currents, giving it the ability to spread over a wide area. Of the 287 nonindigenous marine invertebrate species found in Hawaii, only four (including *C. riisei*) are known to have spread outside the harbors and proliferated to pest status in coral reef communities.



Healthy black coral tree, no *C. riisei*



C. riisei partially overgrowing a black coral tree



C. riisei completely overgrowing a black coral tree



Information and photos provided by Sam Kahng, Dept. of Oceanography, University of Hawaii