# Hypnea Musciformis

#### Identification

H. musciformis is an algae with broad, flattened apical hooks. Color has been described as greenish, strawish, yellowish, reddish, brownish and pale. Specimens found in deepwater off Necker were pale and appeared "anemic".

## Description

Plants are often in clumps or masses 10-20 cm high of loosely intertwined cylindrical axes and branches becoming progressively slenderer distally, infrequently coarser; axes 0.5-1.0 mm diameter below, tapering to apices; branching irregular and variable; ends of many axes and primary branches expanded and with broadened hook, or tendril like, often with twisted around axes of other algae; primary holdfast lacking or difficult to recognize. There are six other native species of algae in the genus Hypnea inhabitinbg the Hawaiian archipelago, but H. musciformis is easily distinguished by the presence of flattened, broad hooks at the tips of the branches. Apices on other species may curve but, but are narrow and not tendril-like. Color of plant is likely affected by light and nutrient levels. [Excerpted from Abbott1

#### Cohabitants

Plants are often epiphytes on *Sargassum*, and other reef algae, including, but not limited to *H. cervicornis*, *Laurencia nidifica* and the alien red-algae *Acanthophora spicifera*.

#### Habitat

Hypnea musciformis is typically found in shallow water attached to sandy hard substrate or as an epiphyte on other algae. Often found on calm intertidal and shallow subtidal reef flats, tidepools and on rocky intertidal benches. Most often found low intertidal to shallow subtidal reef flats. Frequently found as an epiphyte on other algae. Large blooms can occur after inputs of nutrients. In bloom stage, may be found free-floating. *H. musciformis* has not been observed in deepwater habitats; however it was found in large quantities attached to lobster traps deployed around Necker Island and set 30-90 m deep. Plants attached to traps may have been established on benthic substrate or floated down.

## **Impact**

Grows faster and shades out coral and other seaweeds, changing reef ecosystem. Plants are easily fragmented which may aid in spread. Fast growth, small fragments can increase in weight 200% in one week. Large amounts of the plant wash ashore and decompose at some beaches. The large amounts of the seaweed, along with the smell and flies, decreases beach use and property value. Drifting rafts of seaweed deter ocean use in some areas. May cause hypoxic region where large quantities wash ashore due to large quantity of decomposing biomass (Smith pers. comm.). [Parts excerpted from Hawaii Invasive Species Partnership Website]

### More Information

Abbott I. 1999. Marine Red Algae of the Hawaiian Islands. Bishop Museum Press, Honolulu Hawaii.

University of Hawaii, Botany Department Global Invasive Species Database Hawaii Invasive Species Partnership



Jennifer Smith



www.turtle.org



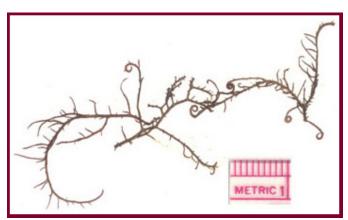
Peter Wirtz



Bishop Museum



Bishop Museum



Jennifer Smith