

Codium reediae

Silva in Egerod 1952

Codium reediae, or *limu a'ala'ula*, is a common edible seaweed found subtidally on Hawaiian reef flats.

Division Chlorophyta
 Class Chlorophyceae
 Order Bryopsidales
 Family Codiaceae
 Genus *Codium*



IDENTIFYING FEATURES

DESCRIPTION

Thallus fleshy, erect, composed of somewhat flattened fronds arising from a single discoid holdfast. Fronds are from 1 - 2 cm wide, slightly flattened in lower half, and markedly flattened in upper half. Branching is primarily irregularly dichotomous, expanding above to cuneate, flattened dichotomies at ends of fronds.

Codium reediae, like other *Codium* species, is soft, velvety and spongy to the touch.

COLOR

Dark green.



© Botany, University of Hawai'i at Manoa 2001

HABITAT

Codium reediae forms erect, dark green upright plants attached to the substrate with a single holdfast. Found subtidally on reef flats and in tidepools.

Do not confuse this species with *C. edule*, which lies prostrate and is attached to the substrate by rhizoids in numerous places along the thallus.

STRUCTURAL

Medullary filaments mostly 26-46 μm diameter, one to several filaments arising from base of each utricle by slender outgrowth, forming a sharp demarcation between utricle and filament. Utricles are long (400-1000 μm) and wide (130-400 μm), many are conical-shaped with a thickened apex wall. These utricles usually have a short bulbous hair or extremely long (2500 μm) hairs attached, with a darkened swollen tip. Gametangia ellipsoidal, elongate-ellipsoidal, or at times ovate, 80-130 μm diameter, 260-330 μm long, borne on short but distinct pedicel at or just above middle of utricle, 1-3 per utricle, extending approximately to apex of utricle.

DISTRIBUTION

HAWAI'I

O'ahu, Mau'i, Kau'i.

WORLDWIDE

South Pacific and Indian Ocean.

MECHANISM OF INTRODUCTION

Indigenous to Hawai'i.

ECOLOGY/IMPACT

Codium reediae is a common shallow subtidal green algae that feels and looks like velvet. This species is fairly scattered on the reef flat, and does not usually form dense communities, but rather occurs as discrete, single plants. *Codium* species are part of the Hawaiian green turtle's diet.

C. reediae is also a popular edible seaweed gathered for market in Hawai'i. It is known by *limu a'ala'ula*, but is occasionally referred to as *limu wawae'iole*, the name more often used for *C. edule*.

REFERENCES

- Abbott, I.A., 1984. *Limu: An Ethnobotanical Study of Some Hawaiian Seaweeds*. National Tropical Botanical Garden. Lawai, Kau'i, Hawai'i.
- Egerod, L.E., 1952. An analysis of the siphonous chlorophycophyta. *University of California Publications in Botany*, V. 25 (5): 325-454.
- Magruder, W.H., and J.W. Hunt, 1979. *Seaweeds of Hawai'i*. Oriental Publ.Co., Honolulu, Hawai'i.
- Russell, D. J., and G. H. Balazs, 2000. Identification manual for dietary vegetation of the Hawaiian green turtle, *Chelonia mydas*. NOAA TM-NMFS-SWFSC-294. 49 pp.
- Vroom, P.S., C.M. Smith, S.C. Keeley, 1998. Cladistics of the Bryopsidales: A preliminary analysis. *J. Phycol.* 34: 351-360.

WEB LINK

- Catalog of Siphonous Algae. <http://www.botany.hawaii.edu/reefalgae/>
- Virtual Herbarium. <http://www.botany.hawaii.edu/reefalgae/greenskey.htm>