

BROWN SEAWEED

Phylum: Phaeophyta

This group of seaweed is strictly marine. They vary greatly in form, complexity of structure and range in size from microscopic, filamentous form less than 1/16 of an inch in length to massive plants up to 300 feet long. Many of these larger forms, known as kelps, have highly complex tissue structures.

In general, brown algae develops to its maximum size in the cooler waters of the northern and southern hemispheres. However, there are some species in warmer seas, such as the conspicuous algae found on rocky shores in the mid- to lower intertidal zones. Typically, these seaweeds are rich brown in color due to fucoxanthin pigment, which masks the green chlorophyll. Other species of brown seaweed may be tinged with green or a shade of olive green.

Brown seaweeds are economically important. Some species can be eaten, while others are used for fertilizer. Algin, a cell wall component, is extracted for use in the manufacture of soaps, paints, leather finishes, insecticides, toothpastes, lipsticks, medicines, stabilizers in food products, and as clarifying agents in the production of beer. These seaweeds also provide food, spawning sites, and habitats for numerous marine organisms.

Rockweed (Bladder Wrack, Black Tang)

Family: Fucaceae

Fucus vesiculosus

Description

Size: 12-24" long, up to several feet.

Characteristics: Attached to rocks by sucker-like or irregularly-lobed holdfasts, where they hang like fringe when the tide recedes; those growing in sheltered waters may have many paired air bladders (vesicles) on each side of the branch mid-rib, those subjected to strong currents or ocean waves may not; these bladders vary from spherical to an elongated shape, 1/2" or more long, and pop when squeezed in freshly collected specimens; the blades are broad and flat; the mid-ribs and spore chamber receptacles give the plant a rough appearance; these oblong or pointed receptacles grow up to 1" long and are filled with gelatinous matter that produces mucilage if squashed while fresh; fruiting occurs throughout the winter.

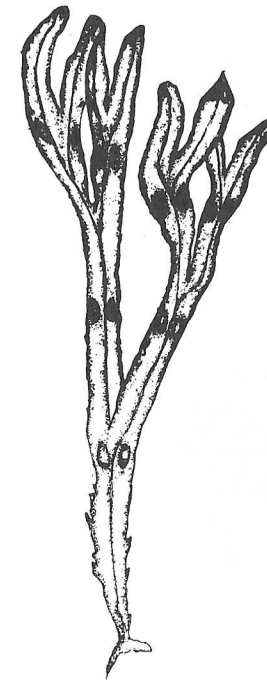
Color: Olive green, golden yellow to deep green.

Habitat

Found around pilings, on rocks, at the base of salt marsh grasses and floating free in ditches and pools.

Edibility

Poor; has been used in the treatment of goiter, obesity, and as fertilizer.



Rockweed