

Wakame

Species Description

Scientific name: *Undaria pinnatifida*

AKA: Japanese kelp, Gwymon wacame (Welsh)

Native to: West coast of Japan

Habitat: Any hard surfaces below high tide to 15m deep, usually in marinas, rarely beyond low tide

This brown seaweed was introduced to France in 1971, probably on imported Pacific oysters. Later it was deliberately imported into France, where it is still cultivated as a food plant. It was first found in Britain attached to pontoons in the Solent, Hampshire in 1994, probably having been introduced from France on the hulls of ships. It spreads rapidly through the production of millions of spores which are quickly able to attach to the surfaces of objects in the water. Its rate of expansion along the coastline is predicted to be hundreds of kilometres per year.

Wakame is a large brown seaweed or kelp reaching 1-3 m in length with a branched holdfast (root-like structure anchoring the seaweed to the sea bed) giving rise to a stalk with very wavy edges between the holdfast and the long blade, giving it a corrugated appearance. The blade is broad, flattened, with wavy edges, lance-like in shape with a distinct midrib.

Wakame fouls the hulls of boats and harbour structures and forms detached drifting mats which can clog marinas and recreational areas. Due to its rapid growth rate, it may out-compete native species especially on infralittoral rocky reefs, the lowest part of the shore exposed only at the lowest tides. It is commercially valuable as a food plant.

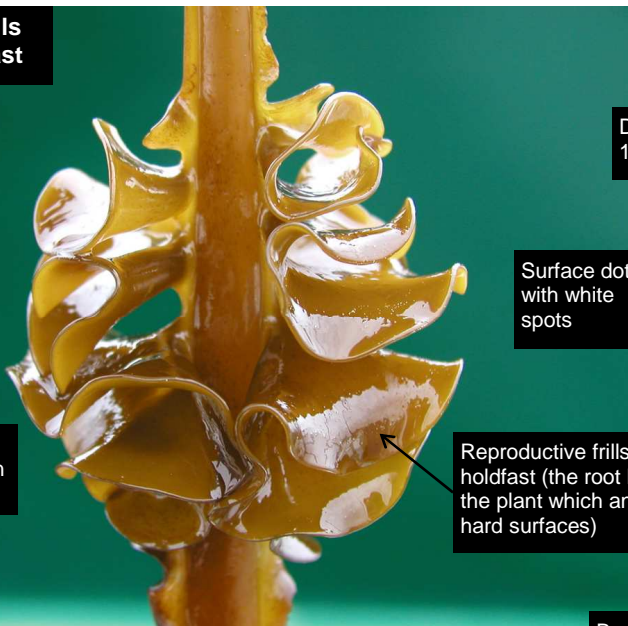
Wakame is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England, Wales and Scotland. As such, it is an offence to plant or otherwise allow this species to grow in the wild. For details of legislation go to www.nonnativespecies.org/legislation.



Key ID Features

Reproductive frills above the holdfast

Golden brown in colour when fresh



Reproductive frills above the holdfast (the root like part of the plant which anchors it to hard surfaces)

Surface dotted with white spots

1-3m long

Distinctive mid-rib 1-3 cm wide

Wavy margins of the blade

Branched holdfast



Identification throughout the year

Plants usually die back each year with old plants becoming covered with growths towards the end of their lives in autumn. New plants grow in the spring from microscopic spores.

Field Signs

Pieces of wakame which have become detached may wash up on beaches.



Distribution

Currently in some locations on the south coast of England and Channel Islands.

Source: www.nonnativespecies.org

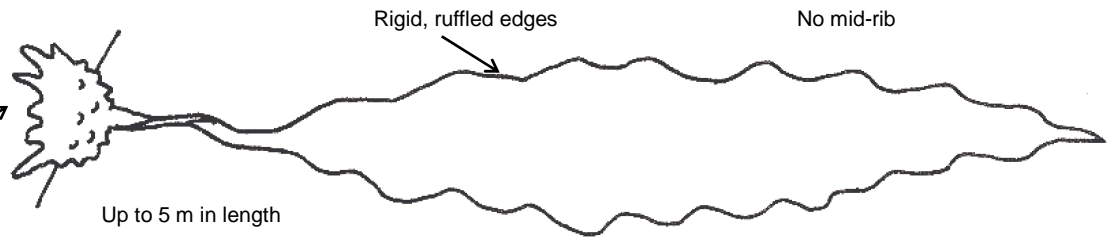


Similar Species

Furbelows

Native
(*Saccorhiza polyschides*)

Knobbly bulbous holdfast



Rigid, ruffled edges

No mid-rib

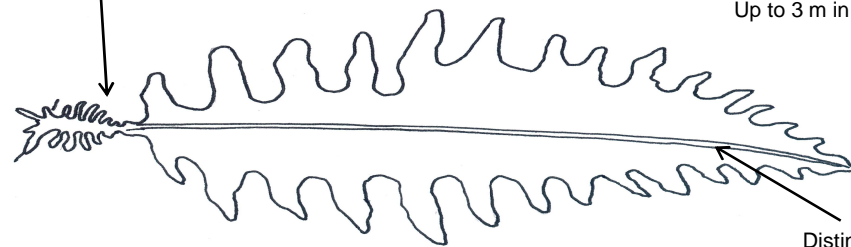
Up to 5 m in length

Wakame

Non-native
(*Undaria pinnatifida*)
For comparison

Branched holdfast

Reproductive frills above the holdfast



Up to 3 m in length

Distinctive mid-rib

Sea belt

Native
(*Laminaria saccharina*)

Up to 2 m in length

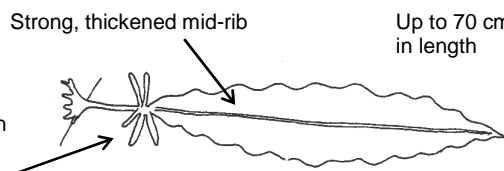


No mid-rib

Dabberlocks

Native
(*Alaria esculenta*)

No leafy appendages, but can have finger like appendages at the top of the stalk



Strong, thickened mid-rib

Up to 70 cm in length

References and further reading:

MarLIN (undated). "Identification Guide for Selected Marine Non-native Species". www.marlin.ac.uk

Morton, O. & Picton, B.E. 2009. Encyclopaedia of Marine life of Britain and Ireland www.habitas.org.uk/