

Wakame

Scan for more information



Species Description

Scientific name: *Undaria pinnatifida*

AKA: Japanese kelp

Native to: West coast of Japan

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

Undaria pinnatifida is a large brown species of kelp which can grow to 1.5m to 3m in length. The seaweed has a branched holdfast (for attachment to the substrate) giving rise to a stipe (stem) just above the holdfast. The stipe has very wavy edges, giving it a ridged appearance. A broad, flattened leaf shaped blade is conspicuous. It has a distinct midrib and the margins of the blade are wavy. Found from low tide level down to 15 or 20 m in clear waters, but the highest biomass is typically between 1 to 3 m in depth.

It occurs in dense, vigorous stands, forming thick canopy over the biota. With its rapid growth rate, this invasive non-native species can outgrow and colonise a wide range of shores and exposures which would not typically be inhabited by native seaweed species. Wakame fouls the hulls of boats and harbour structures and forms detached drifting mats which can clog marinas and recreational areas.

Wakame is present in Northern Ireland at Carrickfergus marina and Carlingford Lough.

***Undaria pinnatifida* is listed on Schedule 9 of The Wildlife (Northern Ireland) Order 1985 and as such, it is an offence to plant or otherwise allow this species to grow in the wild.**



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

Distinctive mid-rib 1-3 cm wide

1-3m long

Branched holdfast

Wavy margins of the blade



Report any sightings via; CEDaR Online Recording - <https://www2.habitas.org.uk/records/ISI>, iRecord app or Invasive Species Northern Ireland website - <http://invasivespeciesni.co.uk/report-sighting>

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.

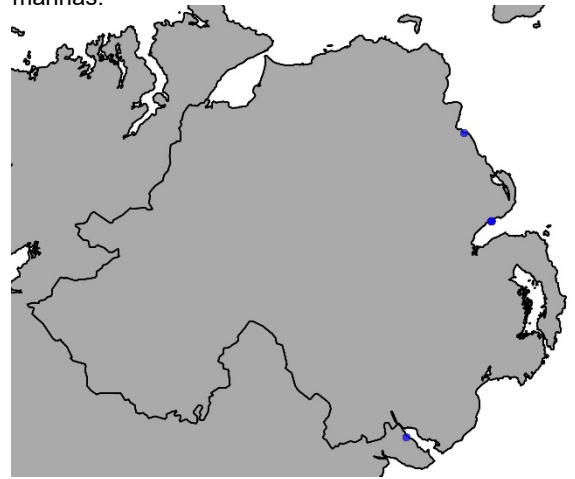
Field Signs

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



Distribution

Recorded in Glenarm, Carrickfergus and Carlingford marinas.



Source NBN atlas:

<https://species.nbnatlas.org/search/?q=Undaria+pinnatifida>

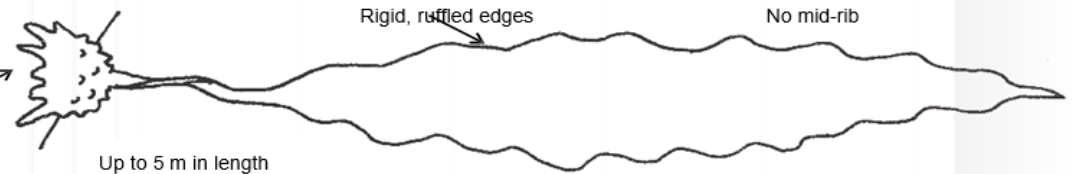
Check website for current distribution

Similar Species

Furbelows

Native
(*Saccorhiza polyschides*)

Knobbly bulbous holdfast



Wakame

Invasive non-native
(*Undaria pinnatifida*)
For comparison

Branched holdfast

Reproductive frills above the holdfast



Sea belt

Native
(*Laminaria saccharina*)

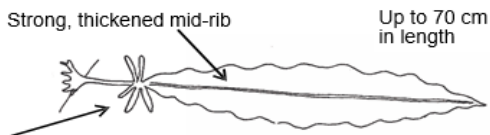
Up to 2 m in length



Dabberlocks

Native
(*Alaria esculenta*)

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



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/

Photos from: Kevin Doidge, Steve Lonhart, Steve Trehwella.

Sustainability at the heart of a living, working, active landscape valued by everyone.

Adapted for Northern Ireland Environment Agency 2020