MARINE PEST:

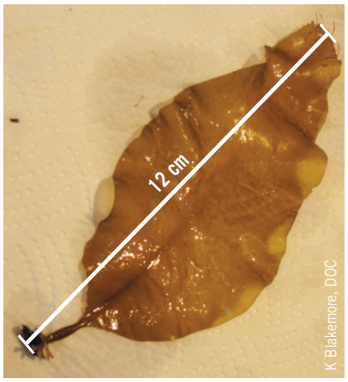
JAPANESE KELP
UNDARIA PINNATIFIDA

THE THREAT: Rapidly forms dense stands that overgrow and exclude native seaweed species.

Mature *Undaria pinnatifida* plant – grows 1–2 metres

Immature *Undaria pinnatifida* plant

Mature *Undaria pinnatifida* plant



Undaria pinnatifida plantlet

Report if found outside the known locations

- Note exact location
- Take a photo or sample where possible
- Seal samples in a plastic bag with a small amount of seawater and chill, or
- Sprinkle with salt and keep moist and cool
- DO NOT FREEZE
- Phone MAF on 0800 80 99 66

Status in New Zealand: Established

Key features

- Brown to yellow green coloured kelp, 1–3 m length
- Frilly sporophyll near base of mature plants
- Strap-like midrib in mature plants
- Smooth thin blades or leaves that stop well short of base

Where are they found?

- Grows best in cold temperate ocean waters
- Low intertidal to approximately 20 m depth
- Highest density occurs between 1 and 3 m depth
- Grows on any hard surface including rocky shores and reefs and artificial structures such as wharves, vessel hulls and aquaculture equipment
- Tolerates a wide range of wave exposures, from sheltered marinas to open coast

Known locations

Latest information on pest locations is at: www.biosecurity.govt.nz/pests/salt-freshwater/saltwater/marine-pest-map

Native species which look similar

Common kelp – *Ecklonia radiata*

Key differentiating features:

- No midrib or frilly sporophyll
- Blades/leaves are rough not smooth
- Young ecklonia is difficult to distinguish from juvenile undaria until the midrib becomes visible
- *Ecklonia radiata* blade is, however, more leathery

Ecklonia radiata
No midrib or frilly sporophyll

Undaria pinnatifida
Clear **midrib** – line up centre frond
Clear **sporophyll** on mature plants – spiral structure at base of stem

Impacts

- Rapidly forms dense stands that overgrow and exclude native seaweed species
- Nuisance fouling can cause problems and increased costs for aquaculture

How you can help

Avoid spreading marine pests by:

- Regularly cleaning your boat's hull – ideally keep fouling growth to no more than a light slime layer
- Applying good thorough coatings of antifouling paint and keep it in good condition
- Ensuring your hull is clean and free of fouling before you go travel to a new region
- Inspecting areas on your boat that retain water in case they're harbouring marine life
- Cleaning and drying any marine equipment (e.g. ropes, lines, pots) before using in a new location
- Checking anchors, trailers and other equipment for tangled weed

Learn more

- Read all about best practice vessel cleaning at:
- www.biosecurity.govt.nz/biosec/camp-acts/marine/cleaning

Information on marine pest species is at:

- www.biosecurity.govt.nz/pests/salt-freshwater/saltwater

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