www.nonnativespecies.org

Green Sea Fingers

Codium fragile subsp. fragile

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Pathway • Hull fouling • Aquaculture

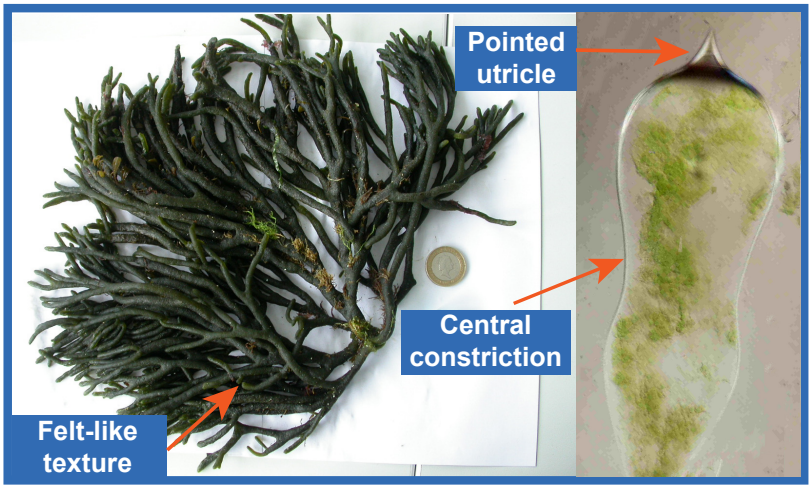
Impacts

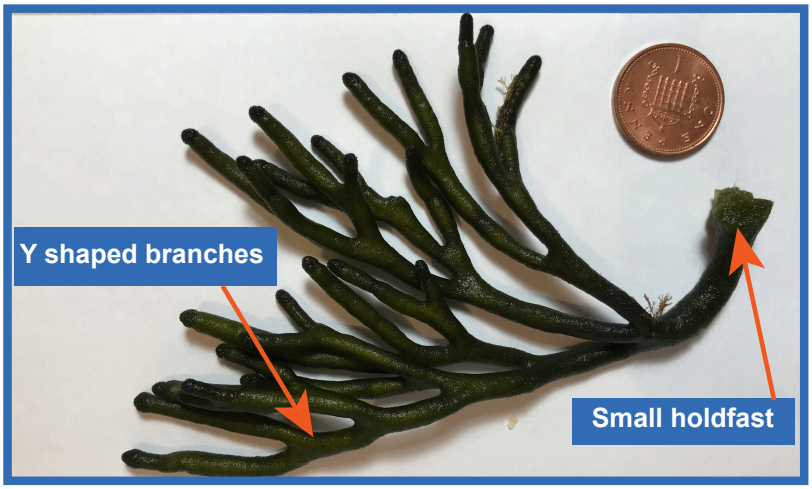
Biodiversity
Can become a new dominant member of the benthic community and outcompete native populations.

Human Health
None known.

Economy
Increases cost of aquaculture industries by fouling fishing nets and scallop dredges, smothering mussel beds, and reducing the biomass of oysters. Fouls wharf pilings, jetties, ropes and beaches. When rotting it produces an unpleasant odour which can reduce tourism.

Key ID Features





Description

Common name “Dead Man’s Fingers” or “Green Sea Fingers” for its swollen, finger-shaped branches that float in the water, or hang down the sides of rocks and cliffs when the tide is out. These “fingers” consist of plump, rounded branches, which originate from a central fleshy mass.

Composed of densely intertwined Y-shaped branches.

Felt-like / velvety texture.

Small holdfast ~1 cm diameter attaches it to the substrate.

Pointed utricles with central constriction.

Size
Up to 100 cm in length (branches are 0.3 - 1 cm in diameter).

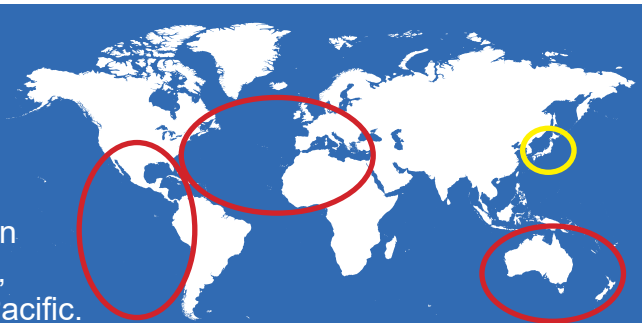
Colour
Dark green.

*Note: Images not to scale

Distribution

Native range: East Asia (Japan / Korea)

Non-native range: Global, including northeastern and northwestern Atlantic, the Mediterranean, Australia, New Zealand, the eastern central Pacific, and southeastern Pacific.



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Habitat and Ecology

Habitat: Found in sheltered bays and open coasts in a range of habitats including estuaries, intertidal pools and in the subtidal zone to depths of 18 m. Found on rocky substrates as well as attached to rocks, bivalves and artificial structures on sandy and muddy bottoms. Can be covered by other species growing on the surface. Predators include sea urchins, sea slugs and sea snails.

Environmental preferences: Tolerates wide ranges of temperature and salinity but preferred temperature range is of 10 - 20 °C and preferred salinity of 35 - 36 PSU.

Reproduction: Can reproduce sexually but spreads most rapidly by asexual reproduction and fragmentation; dispersed by surface currents. Rapid growth rates.

Confusion with similar species

Distinctive features to distinguish from other *Codium* species include the small holdfast, felt-like / velvety texture and Y-shape branches.

Can be distinguished from other subspecies of *C. fragile* by microscopic examination of pointed utricle with a central constriction (see image in Feature Description) – the points are clearly visible by viewing with a x10 hand lens.

If you think you have seen this species, please contact the person below who will confirm its identity.

Please also refer to the mitigation strategies guidance document, provided as part of the Marine Biosecurity Toolkit.

Further Information

- https://www.cabi.org/isc/datasheet/107769#toidentity
- http://www.iucngisd.org/gisd/species.php?sc=796
- https://www.marlin.ac.uk/species/detail/2143

Images

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NNSS GB non-native species secretariat

JNCC

Marine Management Organisation

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