

Bonnemaisonia hamifera

Overview

Short description of *Bonnemaisonia hamifera*,

A branched red seaweed, growing to 20-30 cm high with an erect main axis one mm in diameter and characteristic curved hooks. Branching is opposite and branches are arranged spirally, one of each pair being longer than the other. A small (2-3 cm) filamentous tetrasporophyte phase (*Trilliella*) also occurs.

Description of *Bonnemaisonia hamifera*, status in GB

Well established in GB; most common in the southwest but occurs north to Shetland. Uncommon on the east coast of England.

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Habitat summary: *Bonnemaisonia hamifera*,

Found in the shallow subtidal, to depths of 15-20 m where it grows attached to rocks, or epiphytically on other seaweeds to which it attaches by its characteristic hooks. *Trilliella* occurs in shaded rock pools on the lower shore and in the subtidal zone.

Overview table

Environment:	Marine
Species status:	Non-Native
Native range:	Eastern Asia, Northwestern Pacific, North-Central Pacific, Kazan-retto, Nansei-shoto, Ogasawara-shoto
Functional type:	Algae (macroalgae)
Status in England:	Non-Native
Status in Scotland:	Non-Native
Status in Wales:	Non-Native
Location of first record:	Isle of Wight
Date of first record:	1896

Invasion history: *Bonnemaisonia hamifera*,

Origin

Native to Japan.

First Record

First recorded in GB from the Isle of Wight in 1890.

Pathway and Method

It is unclear how this seaweed was introduced to GB, but shipping or unintentional transport with shellfish have been suggested as possible vectors.

Species Status

The *Trilliella* phase has spread northwards to Iceland and southwards to the Canaries,

and from Labrador to Virginia. Today, it is so widespread and abundant in Europe that it can be regarded as fully established, with no possibility of eradication.

Ecology & Habitat: *Bonnemaisonia hamifera*,

Dispersal Mechanisms

Microscopic reproductive propagules are easily transported by water currents. Entire detached drifting plants and fragments of plants which are reproductively viable are also dispersed by currents whilst they remain buoyant, and may also become entangled in flotsam or fishing nets/anchor gear.

Reproduction

Plants can be male or female; female cystocarps are spherical, up to two mm in diameter and borne on stalks, male structures are club-shaped, 1.5 mm in length and 0.4-0.6 mm in diameter. The life history involves alternating generations between morphologically different sexual and asexual phases. These two phases are thought to be maintained mainly by asexual reproduction in the non-native range, through stem fragmentation.

Known Predators/Herbivores

Herbivorous fishes and invertebrates including sea urchins.

Resistant Stages

None known.

Habitat Occupied in GB

Found in the shallow subtidal, to depths of 15-20 m where it grows attached to rocks, or epiphytically on other seaweeds to which it attaches by its characteristic hooks. *Trailiella* occurs in shaded rock pools on the lower shore and in the subtidal zone.

Distribution: *Bonnemaisonia hamifera*,

Native range from the Pacific Ocean, around Japan. In GB it is found north to Shetland, most common in the southwest and rare on the east coast of England.

Impacts: *Bonnemaisonia hamifera*,

Environmental Impact

None known.

Health and Social Impact

None known.

Economic Impact

None known.

References & Links: *Bonnemaisonia hamifera*,

Identification

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General

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