



Porphyra dioica

Common names: Nori, Laver, Sloke.

Irish names: Sleabhacán, Sleabhan, Sleabhac.

Phylum: Rhodophyta
Class: Bangiophyceae
Order: Bangiales
Family: Bangiaceae
Genus: Porphyra
Species: *P. dioica*



Fig 1. Adult fronds of *Porphyra dioica*.

Morphology

- Red alga with very thin and membranous fronds with a slippery texture. The blades can look like long and shiny ribbons, and can be olive-green to purple-brown or even blackish in appearance.
- The fronds fold in two when held vertically.
- Up to 20 cm long and 3 cm wide.
- Currently, five species of *Porphyra*-like algae (including *Pyropia* and *Wildemania*) are found in Ireland, which are difficult to tell apart.
- Other species are *W. amplissima*, *Pyropia leucostica*, *Porphyra linearis*, *Porphyra purpurea* and *Porphyra umbilicalis*. Identification may require molecular data.



Fig 2. Morphology.

Reproduction

- *Porphyra dioica* has a macroscopic phase in the life-cycle (see LC2*). Depending on the species, male and female structures usually occur on different individuals, and only occasionally on the same one.



A microscope is needed to identify male and female structures.



The sporophyte is microscopic and grows inside shells and is known as the *Conchocelis* phase.

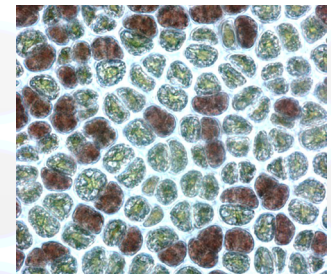


Fig 3. Female individual under the microscope.

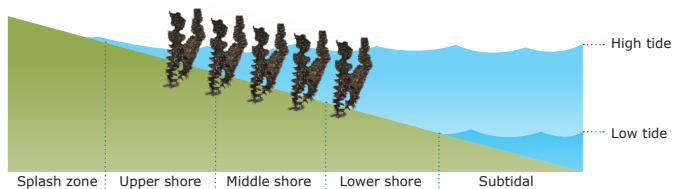
*Note: Life-cycle 2 (LC2) on page 3.



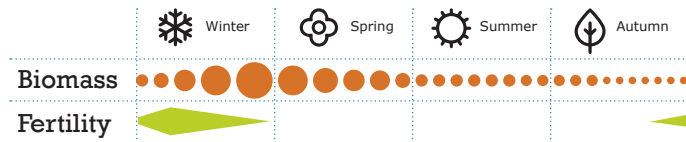
Porphyra dioica

Distribution and habitat

- *Porphyra dioica* is found along the European Atlantic coasts from the Faroes south to the Canary Islands.
- It usually grows on hard surfaces such as stones, rocks and piers and can survive being buried by sand for extended periods.



Seasonality



Note: These seasonal characteristics may vary slightly from year to year.

Wild resource and cultivation



interesting facts

- Recent research has reclassified many species of the old genus *Porphyra*. For example, previously known commercial species *Porphyra yezoensis* and *Porphyra tenera* are now referred to the genus *Neopyropia*.
- *Neopyropia yezoensis* and *N. tenera* are cultivated in Asia from which the traditional nori sheets to make sushi are made.
- In Japan, Korea and China, 3 million tonnes wet weight were produced in 2019 with a value of US\$2.7 billion.



- Its nutritional value mainly lies in the high protein content although it is also rich in vitamins and minerals.
- Its economic value is based on its widespread use in Asian cuisine.

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