Ulva spp.

Common name: Sea lettuce.
Irish names: Glasán, Sleaidí.

Phylum: Chlorophyta
Class: Ulvophyceae
Order: Ulvales
Family: Ulvaceae
Genus: Ulva
Species: U. spp.

Fig 1. *Ulva rigida* thalli.

Morphology

- The genus comprises a number of very similar leafy and tubular species. They can only be distinguished reliably by genetic markers.
- The fronds of leafy species consist of thin, grass-green, irregularly shaped lobed sheets that are two cell layers in thickness.
- Individuals can grow up to 45 cm or more in length.
- Common lobed species in Ireland are *Ulva fenestrata* (formerly incorrectly *U. lactuca*), *U. rigida*, and *U. scandinavica*.
- *Ulva* spp. can be confused with the related *Umbraulva olivascens*, which has an olive-green colour, a plastic feel and is much rarer.

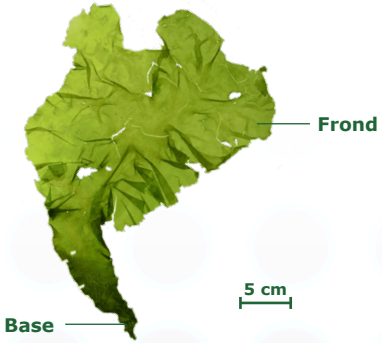


Fig 2. Morphology.

Reproduction

- *Ulva* have two macroscopic phases in their life-cycle (see LC3*).
  - ♀ Female plants have olive green coloured edges before the gametes are released.
  - ♂ Male plants have yellowish coloured edges before the gametes are released.
  - Sporophytes have dark green coloured edges before the spores are released.

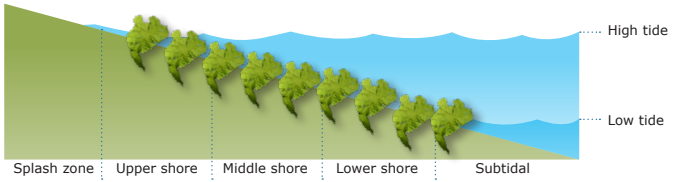
*Note: Life-cycle 3 (LC3) on page 3.

Fig 3. *Ulva rigida* thalli.

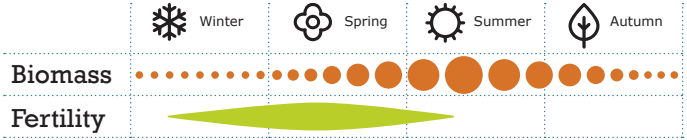
Ulva spp.

Distribution and habitat

- About 100 *Ulva* species are found worldwide.
- It is found in both brackish and marine environments, particularly in estuaries, where the water is warm, and nutrient rich. Some tubular species occur in freshwater.



Seasonality



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

Wild resource and cultivation

interesting facts

- All species of *Ulva* are edible.
- *Ulva* can grow very rapidly. In summer large amounts, called green tides, can accumulate on beaches, mud-flats and salt marshes. They become a nuisance, when the seaweed decomposes and hydrogen sulphide is generated.
- Using genetic markers, green tubular species formerly assigned to the genus *Enteromorpha* have been shown to belong to the genus *Ulva*.

- Some *Ulva* spp. are known to have antibacterial, hypocholesteroelemic and antihelminthic properties.

Ulva spp. can be used as a protein source for fish, shellfish, poultry and cattle and are used in remediation of effluents. in some countries.

Soler-Vila *et al.*(2022). Macroalgae Fact sheets (2nd Edition), Galway, Ireland. 64 pp
www.irishseaweed.com - www.macroalgaeinitium.com