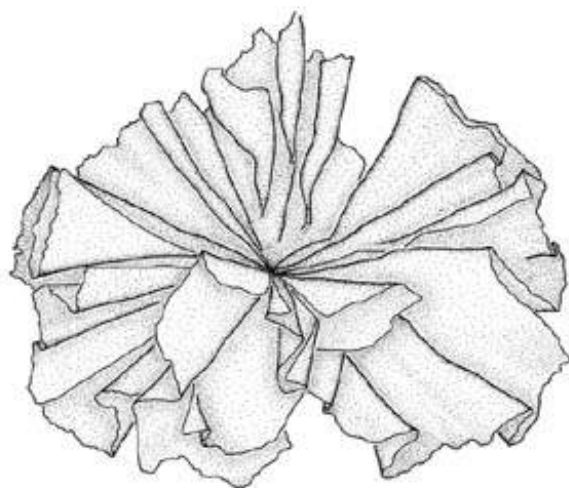




Species Fact Sheets

Porphyra tenera (Kjellman, 1897)



Porphyra tenera:



Porphyra tenera:

Synonyms

- *Phyllona tenera* (Kjellman) Kuntze, 1898
- *Porphyra umbilicalis* f. *purpurea* (Wahlenberg) Jadin, 1935

FAO Names

En - Laver (Nori), Fr - Algue nori, Sp - Lechuga nori.

3Alpha Code: PRT Taxonomic Code: 7872000208

Scientific Name with Original Description

Porphyra tenera Kjellman, 1897. Japanska arter af släktet *Porphyra*. Bihang til Kongliga Svenska Vetenskaps-Akademiens Handlingar. 23: 34.

Diagnostic Features

A small red alga with thallus small, irregularly shaped, foliaceous (leaf-like) and membranaceous but tough attached to the substrat (e.g. rocks) by small discoid hold-fast. Frond more or less divided, crinkled and undulate at edges. Colour green in its earlier stages, becoming brownish purple, or purplish-red.

Geographical Distribution

NW Pacific: Japan, China. Indian Ocean: Mauritius.

[Launch the Aquatic Species Distribution map viewer](#)

Habitat and Biology

Inhabit rocks, and sometimes even settled on molluscs and on other seaweed species. It inhabits between the tide levels, midtidal to splash zone. It is generally abundant, especially on exposed coasts. Primary producer. *Porphyra* has a trimorphic life history, comprising a thallus stage, carposporophyte stage and a filamentous *Conchocelis* phase. This last phase, a stage in the life history of *Porphyra*, was attributed til 1949 as pertaining to *Conchocelis rosea* as an independent algae species. Spores of *Porphyra* settle during autumn. *Porphyra tenera* inhabits from the midtidal level to splash zone, being adapted to exposed coasts. The alga flourishes in winter at temperatures between 4-9°C. Warm water temperature limits its distribution in tropical regions.

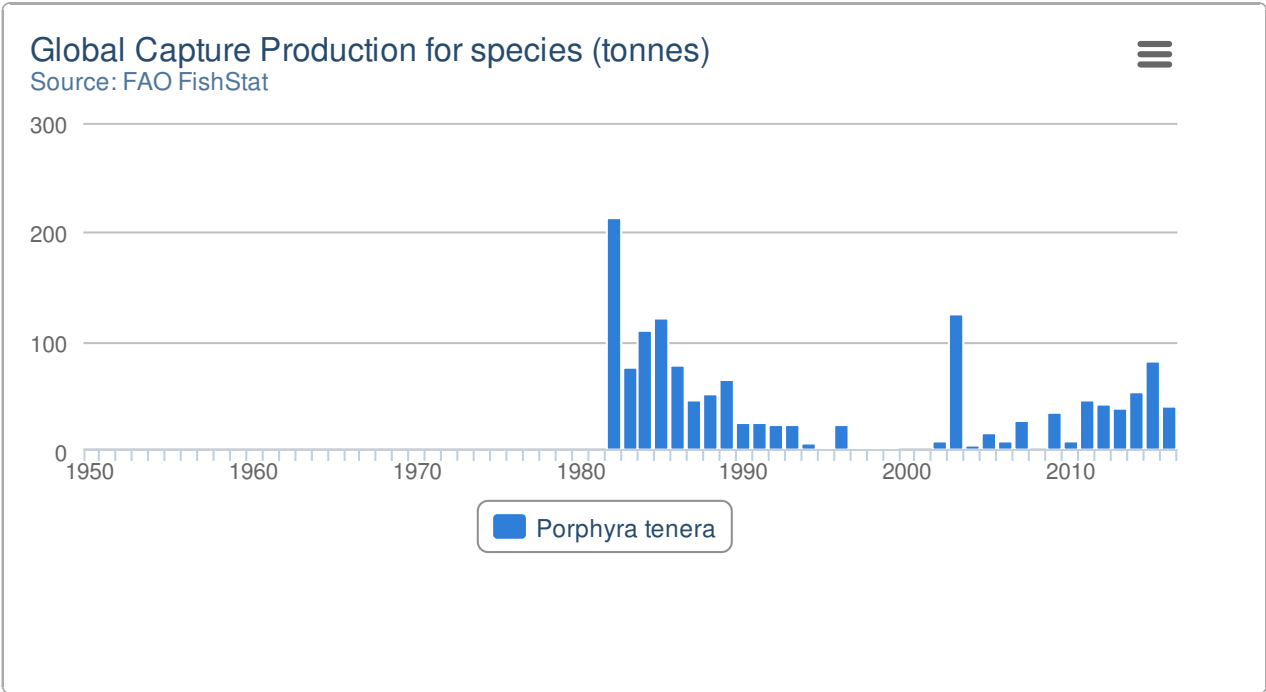
Size

Small, up to 20 cm.

Interest to Fisheries

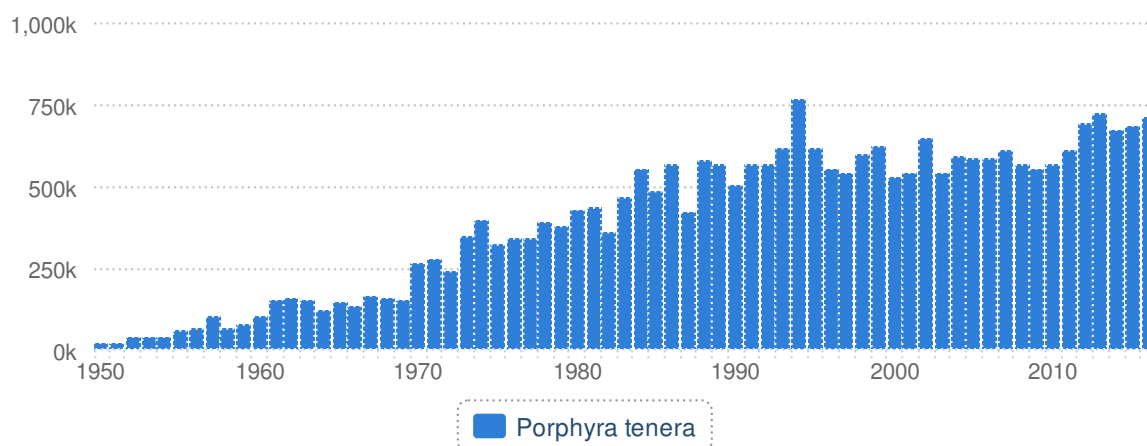
For many centuries traditionally cultivated in Japan and other coastal areas as nori. Fishermen planted bamboo in shallow waters to increase the substratum for nori cultivation. Modern cultivation of *Porphyra* did not occur until the 1960's, as a result of the discovery of the *Conchocelis* phase. In China and Japan, there are 7 main species used in commercial cultivation (*Porphyra yezoensis*, *Porphyra tenera*, *Porphyra haitanensis*, *Porphyra pseudolinearis*, *Porphyra kunideai*, *Porphyra arasaki*, and *Porphyra seriata*). Some available statistics data from the 1960's, give a dried annual production of cultivated *Porphyra tenera* around 5000 tons. In 1977, some 300,000 t wet weight of *Porphyra* spp. were harvested in Japan and the production volume increased by 25% per annum in the 1970s.

For food, consumed in a variety of forms. Nori is, for instance, sold in sheets, once toasted they are flaked and added to sauces, soups and broths. It have a high protein content (25-35% of dry weight), vitamins (e.g. vitamin C) and mineral salts, especially iodine.



Global Aquaculture Production for species (tonnes)

Source: [FAO FishStat](#)



Local Names

CHINA : Amanori , Nori , Asakusa-nori , Chi Choy , Chi Tsai , Hai Tsai , Hoshi-nori , Hung Tsai , Hung Tsoi , Tai Tso , Tsu Tsai , Tsai Tsoi , Tsz Tsai .

JAPAN : Amanori , Nori , Asakusa-nori , Chishima kuro-nori , Tisima , Sushi-nori , Hoshi-nori , Kuro-nori , Natsu-nori .

KOREA : Kim .

RUSSIA : Nuru .

Remarks

Estimates of 70 to over 200 species have been made for *Porphyra* genus. It is very difficult to distinguish between the individual species. Among the more common ones are *P. tenera* and *P. yezoensis* which are cultivated in Asia.

Bibliography

Kjellman, F.R. - 1897a. Japanska arter af släktet *Porphyra*. Bihang til Kongliga Svenska Vetenskaps-Akademiens Handlingar . 23: 34..

Levring, T., H.A. Hoppe & O.J. Schmid - 1969. Marine Algae. A survey of Research and Utilization. Cram, De Gruyter and Co., Hamburg, Germany. .

