

## **Corallina Officinalis**

Related Ingredients: CONCENTRE CORALLINE

*Corallina* is derived from the Latin *corallum* meaning “coral”. *Officinalis* comes from the Latin *officina*, shortened from *opificina* which originally meant “workshop”, but later came to mean a monastic storeroom, herb-room or pharmacy. This meaning refers to the alga’s medicinal value.

Synonyms: *Coral Weed*, *Corallina compacta*, *Corallina calvadosii*



## BOTANY

Botanical Family: Corallinaceae

*Corallina officinalis* is a calcareous red seaweed. It forms calcium carbonate deposits within its cells which serve to strengthen the thallus. These white deposits cause the seaweed to appear pink to lilac in colour, with white patches where the calcium carbonate is particularly concentrated, such as at the growing tips.

The thallus is from 2 to 12 cm high, erect, bushy attached by a crustose base. This base is disk shaped, holdfast about 70 mm in diameter.

This alga is composed of articulated fronds, generally from 60 to 70 (and up to 120) mm high. Fronds consist of a jointed chain of calcareous segments, each becoming wedge shaped higher up the frond.

Branches are opposite, resulting in a feather-like appearance. They are pinnate, irregular, more or less dense **(A)**.

The axis (calcified branch segment which is extremely rigid) is cylindrical to compressed near the insertion of lateral branches **(B)**: from 2 to 5 mm long and 0.2 mm in diameter.

Reproductive organs **(C)** are urn shaped, usually borne at the tips of the fronds but occasionally laterally on segments.

The growth of *Corallina Officinalis* can be very variable, for example:

- stunted specimens occur in high shore pools
- much branched forms in the lower littoral
- thick elongate forms in sublittoral



Source: [www2.units.it](http://www2.units.it)



Source: [www.theseashore.org.uk](http://www.theseashore.org.uk)

## BIOTOPE

*Corallina officinalis* can be found in rock pools in the middle and lower shore often forming a distinct zone just below the rim of rock pools. It predominantly grows on the lower shore, especially where furoid algae are absent, but is also found further up shore on exposed coasts.

The seaweed also lives on rocks and drainage runnels and in shallow water. It can be found in shallow crevices anywhere on the rocky shore that are regularly refreshed with sea water.

This specie also provides a habitat for small sea creatures which feed on the microorganisms dwelling in its dense tufts, and often has other seaweeds growing on it.

## GEOGRAPHICAL DISTRIBUTION

*Corallina officinalis* is found on the North Atlantic coasts:

- from northern Norway to Morocco
- in the Mediterranean Sea
- in the USA (from Labrador south to Connecticut and Maryland)
- in Canada
- intermittently from Greenland to Argentina.

This alga is also found in Pacific and Indian Oceans:

- some parts of Japan
- China
- Austral Asia

We can even find *Corallina* in South Africa.

## MEDICINAL USES

This species has for long been used in Europe as a vermifuge, although it no longer seems to be collected for this purpose.

The fronds can be dried and converted to hydroxyapatite, which is a major component and an essential ingredient of normal bones and teeth. So *Corallina Officinalis* fronds can be used as bone forming material.

## DIETARY USES

Thanks to its content in enzymes, proteins, high-iron, calcium and magnesium, potassium, phosphorus, sodium and other minerals, *Corallina Officinalis* can be used as an emulsifier in food industry, for a large number of soft drinks, cakes, candy, frozen fresh-keeping etc.

## OTHER USES

*Corallina Officinalis* is used in different industries: textile, printing and dyeing industries for example.

But, since several years, this alga has been particularly used in the cosmetics industry. Indeed, thanks to its anti-inflammatory, slimming, firming and moisturizing properties, and its content in minerals, it is often used as an active ingredient in much products like toners, moisturizers, cleansers, emulsions, astringents, eye creams, wash gels, shower gels, shave balms, hydration sprays and creams, slimming products, masks, etc.