# 2021
# Seaweed Catalogue

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- **Quality**, **diversity** and **excellence** are **seaExpert's** main priorities.

We work with species that are harvested in the middle of the **Atlantic Ocean** in the pristine and clear waters of the **Azorean** sea. We work through responsible choices and procedures in order to ensure minimum impact on the Azorean marine ecosystem.

- After manually harvested through scuba diving, the seaweeds are dried in greenhouses or solar dryer, being monitored throughout the whole drying process. Once dried, the seaweeds are carefully weighed, packed and stored in a dry environment.

This is how we are able to provide you with an **exceptional and exquisite product**, through an **efficient and excellent service**.

# Our species

## *Asparagopsis armata*

- ***INCI Name: Asparagopsis armata extract***
- ***CAS Nº: 174393-71-6***
- ***China List 2015 Index Nº: 01708***

- Antibacterial [1]
- Antifungal [2]
- Anti-HIV [3]
- Anti-inflammatory [4]
- Antioxidant [5]
- Antiprotozoal [6]
- Antiviral [7]
- Cytoprotective [8]
- Cytotoxic [9]

## *Asparagopsis taxiformis*

- AChE inhibitory [10]
- Antialgal [11]
- Antibacterial [12]
- Anticoagulant [13]
- Anticyanobacterial [14]
- Antifungal [15]
- Anti-leishmanial [16]
- Antioxidant [17]
- Antiprotozoal [18]
- Antiviral [19]
- Cytotoxic [20]
- Profile [21]

# Our species

## *Cystoseira humilis*

- ***INCI Name: Cystoseira humilis extract***

- Antibacterial [22]
- Antifungal [23]
- Anti-inflammatory [24]
- Antioxidant [25]
- Cytotoxic [26]
- Tyrosinase inhibitory [27]
- Urease inhibitory [28]

## *Halopteris scoparia*

- ***INCI Name: Halopteris scoparia extract***
- ***China List 2015 Index Nº: 08637***

- AChE inhibitory [29]
- Amoebicidal [30]
- Antibacterial [31]
- Antifungal [32]
- Anti-inflammatory [33]
- Anti-leukemia [34]
- Antioxidant [35]
- Cytoprotective [36]
- Cytotoxic [37]
- Profile [38]

# Our species

## *Padina pavonica*

- ***INCI Name: Padina pavonica extract, Padina pavonica thallus extract***
- ***China List 2015 Index Nº: 2228, 2229***

- Amoebicidal [39]
- Antibacterial [40]
- Antifungal [41]
- Anti-hyaluronidase [42]
- Antioxidant [43]
- Cytoprotective [44]
- Cytotoxic [45]
- Profile [46]

## *Pterocladiella capillacea*

- ***INCI Name: Hydrolyzed Pterocladiella capillacea extract***

- Antibacterial [47]
- Antifungal [48]
- Antihypertensive [49]
- Anti-inflammatory [50]
- Anti-leukemia [51]
- Antioxidant [52]
- Antiviral [53]
- Cytotoxic [54]
- Profile [55]

# Our species

## *Treptacantha abies-marina* *(syn. Cystoseira)*

- AChE inhibitory [56]
- Antibacterial [57]
- Antioxidant [58]
- Cytotoxic [59]
- Profile [60]

## *Zonaria tournefortii*

- ***INCI Name: Zonaria tournefortii extract***

- Antibacterial [61]
- Antifungal [62]
- Antioxidant [63]
- Cytotoxic [64]
- Profile [65]

# Harvesting seasons

Scarcely abundant  Moderately abundant  Very abundant

| Month/Species | *Asparagopsis armata* | *Asparagopsis taxiformis* | *Cystoseira humilis* | *Halopteris scoparia* | *Padina pavonica* | *Pterocladiella capillacea* | *Treptacantha abies-marina* | *Zonaria tournefortii* |
|---|---|---|---|---|---|---|---|---|
| January | | | | | | | | |
| February | | | | | | | | |
| March | | | | | | | | |
| April | | | | | | | | |
| May | | | | | | | | |
| June | | | | | | | | |
| July | | | | | | | | |
| August | | | | | | | | |
| September | | | | | | | | |
| October | | | | | | | | |
| November | | | | | | | | |
| December | | | | | | | | |

**Note:** Orders to be made one month before ideal harvesting season. Nevertheless, seaweed recruitment and consequent availability may vary inter and intra annually.

# Harvesting

Harvesting is performed by scuba diving, through land or with the support of a vessel, by suitably qualified personnel with legal diving and harvesting permits, as well as trained to use specific harvest selective techniques.

This harvesting technique, in addition to being safer for divers, allows to reach low by-catch rates (up to 5%, mainly of other seaweed species and gastropods) and selection of biomass at their maximum growing development.

# Processing

Immediately after harvesting, the seaweeds are transported in proper boards to our facilities.

Depending on weather conditions, the seaweeds take an average of 3 days to dry completely in our greenhouses. It is also possible, with the support of our solar dryer, to ensure a single and continuous drying process by controlling seaweed and air humidity levels, in order to maintain their biochemical properties and full potential for biotechnology uses.

# Packaging

In order to keep the quality of our products, the seaweed is carefully packed in sturdy dark bags and placed in moisture resistant cardboard boxes.

Each package is properly labeled with the species name, harvest and package date, harvesting site, weight and certifications.

According to EU regulation REACH and CLP, no SDS (Safety Data Sheet) is needed for our seaweeds. Nevertheless, for best handling our products, seaExpert provides each shipment with a SDS.

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## new equipment

A solar container to increase our capacity to dry seaweed In the dark using clean energy only, while assuring a single

Insdustrial grinder to supply any amount of powdered seaweed in several granulometries.

Vacuum packaging to safely store and ship seaweed In powser form.

# Nagoya Protocol

Always defending our Oceans and natural resources sustainability, seaExpert is proud to announce our full commitment and compliance to the Nagoya Protocol requirements, according to the current regional legislation, namely the Regional Law Decree 9/2012 and the Regional Regulation Decree 20-2012-A.

This is, without a doubt, another major step towards seaExpert ’s good practice acknowledgement when it comes to the defense of the local genetic resources sustainability, biodiversity, access and associated benefit-sharing, topics established by the Nagoya Protocol and regulated by the Regional Government of the Azores.

# EU Organic Certification

***Certification by:***

***Certiplanet – PT-BIO-04***

Certiplanet®

To strength the confidence on our seaweed's quality, as well as their sustainability management through annual stocks control, harvesting locations selection and handling procedures implementation, seaExpert decided to certify its product with the Organic Farming seal regulated by the European Union Commission.

It will be possible to see the Organic Farming logo on the labels of every seaweed species presented in this catalogue, certifying their Nature's origin while respecting their conservation, security and biological quality policies.

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# Certifications

Azores Brand badge, promoted by the Azores Regional Government represents an origin certificate for seaweeds, wisch allows immediate product promotion considering link between Azores and the best that Nature has to offer.

the QualatyCoast programe, promoted by the coastal communities that stand for values like sustainable development and biodiversity, and at the same time maintaining high standards in the quality of their tourism.

Friend of the Sea is currently a project of the World Sustainability Organization, an international NGO whose mission is t o promote environmental conservation.

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