

SM6 Data Sheet

Seaweed concentrate (30%)
Certificated organic by Soil Association
Alginic acid > 5.5%
Mannitol > 2.0%

SM6 improves crop health and increases yield and quality in all crop types. Derived from the *Ascophyllum nodosum* species of seaweed, it contains a range of bioactive compounds which help enable the plant to withstand environmental stress conditions such as moisture stress, pest and disease incidence and mild frost, as well as stimulating plant growth and development. The main components and their activity are summarised below.

Alginic Acid

As the main structural carbohydrate of *Ascophyllum*, this polymer will be liberated from the cell wall of the algae into water-soluble form during the extraction process. These polymeric acids carry bonded sulphur and are strong mineral chelators and can help with nutrient availability/delivery.

Fucoidan/ Laminarin

Fucoidan and Laminarin are polymeric sugars and are well documented in plant immune stimulation processes.

Oligosaccharides

A large percentage of the organic matter fraction of *Ascophyllum* extracts is comprised of various poly- and oligosaccharides. They are recognised as elicitors and stimulators of plant defence mechanisms.





Mannitol

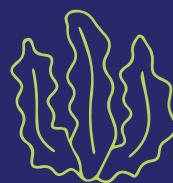
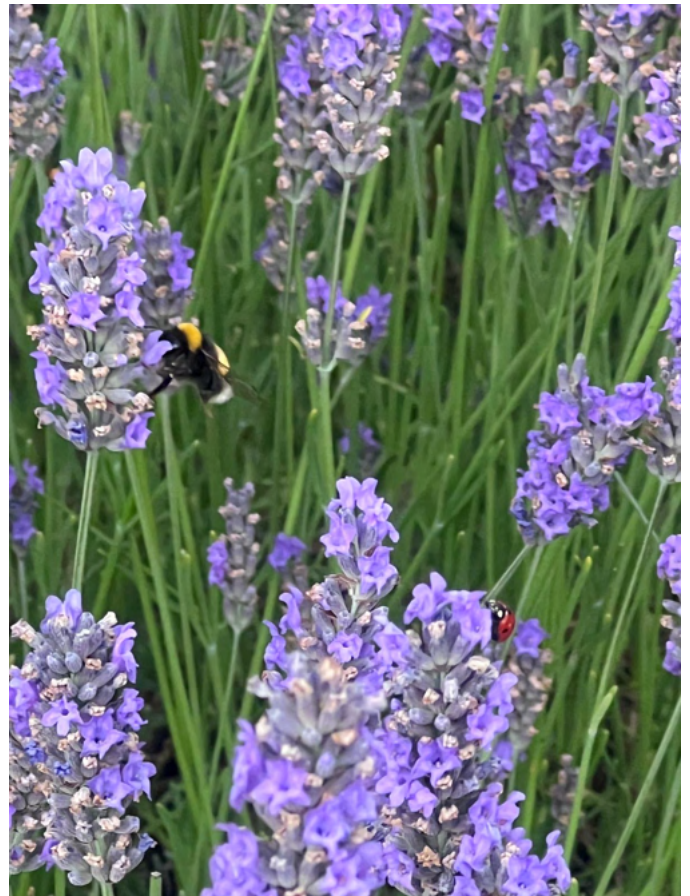
Comprising up to 4.5% of the dry weight of Ascophyllum, mannitol is a sugar-alcohol that has been widely shown to be an osmotic regulator in plants. Mannitol can act to protect and adjust cell-water status in abiotic stress and water-related stress issues. It is also involved in inorganic nutrient chelation and can act to improve nutrient availability similar to alginic acid.

Micronutrients

Many micronutrients including iron, zinc, boron and manganese are present in Ascophyllum. They may be present in organically chelated forms, potentially making them more available to plants.

Macronutrients

Macronutrients and secondary macronutrients such as potassium, calcium, magnesium and sulphur have also been shown to be present in our seaweed extracts. Seaweed extracts can be considered as a "soup" containing many compounds which act individually or in combination to help crops attain their maximum potential.





Aqueous extract of seaweed containing no less than 30% w/v soluble seaweed solids

SM6 is an organic product with no added nutrients, it is not possible to quote a guaranteed analysis. However, a "typical" analysis is as follows:

Bioactive Components

Organic Matter	17%
Soluble Seaweed Solids	>30%
Alginic Acid	5.5-10%
Mannitol	2-4.5%
Fucoidans	4-6%
Laminarins	2-4%

Elemental Analysis

Nitrogen	0.2-0.6%
Phosphorus	0.06%-0.32%
Potassium	0.6-2.3%
Sulphur	3.2%
Calcium	1.6%
Magnesium	0.5%
Manganese	16 ppm
Iron	44 ppm
Copper	2 ppm
Zinc	6 ppm



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