

Fermented Seagrass Extract

TECH NOTE



Product Description

AquaBoostAG Fermented Seagrass Extract (FSE) is an extract from seagrasses collected from the shores of the Southeast of South Australia. It is then blended with other organic sources to increase the overall microbial concentration in solution.

Following the fermentation and extraction process, the formulation is then polymerised to produce a product that enhances the development and growth of a large number of beneficial microorganisms.

The focus on the formulation process is to use the alginates found in the seagrass and couple this with the microorganisms in the fermentation process.

Background

Seagrasses and kelps have long been associated with a number of benefits as plant growth stimulants, these include mitigation of frost events, increased shoot and root growth, disease reduction and increased plant, water and nutrient use efficiency.

Features / Benefits

- Improves stress resilience and increases recovery speed following Abiotic stress events like frost, heat, drought, salinity or moisture stress.
- Enhances seed germination & shoot elongation.
- Stimulates deeper root growth improving the plants ability to access macro nutrients and trace elements
- Stimulates organic activity & assists with unlocking valuable nutrients from within the soil
- Reduces transplant shock

Application

Product is suitable for use in horticultural, agricultural crops and in amenity horticulture.

FERTILISATION	RATE	APPLICATION
Fertigation	5-15 L/ Ha	Higher rates suggested for light textured, sandy soils. Suitable for use with nitrogen fertilizers, but incompatible with calcium nitrate and iron-based products (unless using EDTA chelates). Apply at the beginning of irrigation season or during vegetable crop transplanting/seeding for robust root development. Each application lasts 4-6 weeks; reapply based on seasonal conditions.
Foliar	3-8 L/ 1000L water	Apply directly onto crop leaves as a foliar spray for absorption through the leaf surface.
Seed Coating	10 L/t of seed	Apply directly onto the seed prior to seeding. Apply up the auger into the seeding box.

FERMENTED SEAGRASS EXTRACT

Get in Touch

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Microbiome

The seagrass extract is dominated by species *Eukaryota*, *Archaea* and bacteria including *Actinomycefa* and *Lactobacillus*, but also includes a wider range of smaller numbers of other microorganisms.

Fermented with potassium salts to produce a wide range of microorganisms including the following

- *Gammaproteobacteria*: a dominant soil bacteria that plays a crucial role in plant microbial interactions.
- *Lactobacillus*: enhances root development and nutrient uptake.
- *Pseudomonas*: enhances plant health and protect against pathogens.
- *Spirochaetota*: Increases drought resistance and stress tolerance.
- *Mycoplasmata* (specifically *Paracholeplasma*) are part of a broader, highly selective microbiome that enables plants to survive adverse environmental conditions (subject to root and cellular colonisation)

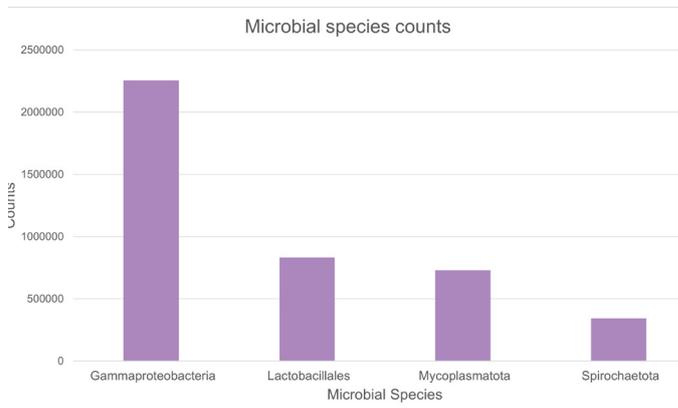


Figure 1: Microbial species count identified through DNA sequencing. Analysis conducted by AGRF (Australian Genome Research Facility), 2026.

There are many other species found these are the dominant ones in the ferment solution.

*For a full microbiome analysis please contact manufacturer.

Available in sizes:

20 Litre container | 1000 Litre IBC shuttle | Bulk

