



# AGRICULTURAL RANGE

W W W . B I O C E N T R A L - L A B S . C O M



**AquaBoost** **AG**  
SOIL MOISTURE SOLUTIONS

**DustChek**  
DUST SUPPRESSION

# AGRICULTURAL RANGE

At BioCentral Laboratories, we are committed to providing innovative, environmentally friendly solutions for today's agricultural challenges.

Our agricultural range, featuring AquaBoostAG and DustChek, offers practical, sustainable solutions that tackle the pressing challenges faced on the field.

Designed to be environmentally friendly and easy to implement, our products help enhance productivity while preserving the land and water that are vital to the future of agriculture. We're committed to providing the tools you need to succeed, right where it matters most.

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## Introduction

AquaBoostAG30 NWS is a unique surfactant, penetrant, polymer blend specifically formulated to overcome Non-Wetting Soils (NWS). AquaBoostAG30 NWS will increase penetration, infiltration and retention of moisture in hard-to-wet soils. The combination of these three benefits develops an environment that produces increased germination rates. AquaBoostAG30 NWS is suitable for all irrigation and liquid delivery systems.

## What are non-wetting soils (NWS)?

NWS are generally soils that do not uniformly wet up. Soil may be hydrophobic-non-wetting for a number of reasons including low clay content, sodicity and excessive drying.

## Key Benefits of AquaBoostAG30 NWS

- ✓ Increased water infiltration leading to increased moisture availability.
- ✓ Increased germination of seeds and emergence of seedlings.
- ✓ Enhanced survival and productivity of plants.
- ✓ Improved availability of essential plant nutrients.
- ✓ Reduction of uneven wetting patterns.
- ✓ Reduced pooling of water on the soil surface.

## Pack sizes:

Available in 20L containers, 200L drums and 1000L IBCs.



AquaBoostAG30 NWS is **unique** in the "wetter" market in that it is a **TRIPLE** action soil moisture solution. **Improving Infiltration, Penetration & Retention**

## Introduction

AquaBoostAG30 is a liquid polymer that promotes soil moisture retention, improves fertiliser efficacy and reduces irrigation frequency in all agricultural, horticultural and turf applications. The liquid biodegrades naturally in the soil and residues generate a food source (carbon) for soil borne bacteria and fungi. AquaBoostAG30 is suitable for all irrigation systems including drip, sub-surface drip, overhead and low-throw sprinklers and centre-pivots.

## Key Benefits of AquaBoostAG30

- ✓ Promotes the lateral spread of moisture and slows moisture through the soil profile.
- ✓ Improves fertiliser efficacy.
- ✓ Reduces irrigation frequency and improves water use efficiency.
- ✓ Limits leaching losses of water and nutrients.
- ✓ Reduces the impact of wet and dry extremes during the irrigation cycle.
- ✓ Reduces evaporation from the soil.
- ✓ Decreases mortality and transplant shock for young nursery plants.
- ✓ Reduces the build up of salts in the soil profile.

## AquaBoostAG30 Liquid is suitable for:

Agriculture, Horticulture, Turf and Landscape applications.

## Application

Introduce AquaBoostAG30 liquid into your irrigation system via your fertigation unit with water or via a dosing pump. AquaBoost 30 liquid will not gel or clog irrigation lines. 5 litres per hectare on most crops. Applied every 6-8 weeks during the irrigation season. Refer to label for specific application rates. For soil types that are hydrophobic or non-wetting soils please use AG30NWS.

## Pack sizes:

Available in 20L containers, 200L drums and 1000L IBCs.



AquaBoostAG30 promotes the **lateral spread** of moisture and slows moisture movement through the soil profile.

## Introduction

AquaBoostAG Fermented Seagrass Extract (FSE) is an extract from seagrasses collected from the shores of South Eastern South Australia. It is blended with other organic sources to increase overall microbial concentration in solution. Following fermentation and extraction, the formulation is polymerised to support the development and growth of a large number of beneficial microorganisms.

The formulation process focuses on using the alginates found in seagrass in conjunction with the microorganisms.

Seagrasses and kelps have long been associated with benefits such as plant growth stimulants, including mitigation of frost events, increased shoot and root growth, disease reduction and improved water and plant nutrient efficiency.

## Key Benefits of AquaBoostAG Fermented Seagrass Extract

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

## Why Fermentation?

The fermentation process used in the AquaBoostAG Fermented Seagrass Extract delivers a more efficacious premium product due to the increased bioavailability of the beneficial microbial populations.

## Why Polymerisation?


Polymers are long chain carbon molecules that are extremely efficient in creating polar bonds which allow water and nutrients to adhere to them, but not so tightly that they are not available to the plant. These bonds reduce the risk of run off and foaming. The polarity of the this also enables water to be attached (hence why the formulations appear to be slightly more viscous, but still user friendly).

## Microbiome

The seagrass extract is dominated by species *Eukaryota*, *Archaea* and bacteria found including *Actinomyces* and *Lactobacillus*, but also includes a wide range of other microorganisms. These bugs and populations have been identified through independent laboratory testing. *\*Analysis available upon request\**

## Pack sizes:

Available in 20L containers, 1000L IBCs and bulk.



Locally sourced, naturally  
fermented, unique  
biostimulant.

## Introduction

AquaBoostAG Laminar Flow is a non-toxic, non-corrosive polymer formulation designed to clear colloidal clays from irrigation systems. These clays reduce water flow and increase energy costs for growers. By removing them, AquaBoostAG Laminar Flow improves system efficiency, enhances water flow, and ensures more uniform irrigation and fertigation.

## Key Benefits of AquaBoostAG Laminar Flow

- ✓ Removes colloidal matter and clay particles to improve water flow.
- ✓ Enhances uniformity across the entire irrigation system.
- ✓ Boosts the efficiency of fertigation.

## Unique Application Method

Unlike other cleaning methods, AquaBoostAG Laminar Flow should be applied at the start of the irrigation process. This is important because it helps move the colloidal material through the system. Once the material is loosened, the water flow will push it out of the lines during flushing and cleaning.

This ensures a thorough cleaning of the system, improving performance and efficiency.

## Application

- ✓ 1-3L/ha applied at the start of the irrigation shift.
- ✓ Product is suitable for mixing in fertigation systems and will readily mix in water prior to injection.
- ✓ Undertake a flushing irrigation during the irrigation process and do not leave the product sit overnight in the line.
- ✓ Reapply when flow rates decrease, or sediment loads are high in the source irrigation water. Under normal circumstances a treatment should last for between 4-6 weeks. However, sediment loads are highly variable and seasonal conditions require variable management practices.

## Pack sizes:

Available in 20L containers, 200L drums and 1000L IBCs.



## What is AquaBoostAG30 Fulvic Blend?

A unique combination of patented anionic polymer and high quality fulvic acid. The polymers in AquaBoostAG30 FB are proven to improve water penetration and lateral spread in soils and are a food source for soil biology.

Fulvic acid is the element found in humus, the highly nutritious layer of the earth. Partially decomposed matter is the basis of humus and peat. It is this highly nutritious layer that feeds plants and ensures that they grow strong and healthy.

## The solution?

Fulvic acids stimulate plants biochemical and physiological processes to improve growth and development by penetrating the root and leaf cuticle through fertigation and foliar sprays. Fulvic acid also stimulates plants auxin production and enhances other growth hormones.

## How does AquaBoostAG30 FB assist soils with limited microbial activity?


Fulvic acid is a microbial promotant and teamed with the linear polymer can increase beneficial soil biology. Iron, a poorly transported mineral, is dissolved, complexed and transported into the plant more efficiently. Potassium, present in large reserves in insoluble form, is solubilised and released in the presence of fulvic acid. Silica is also solubilised by fulvic acid and water soluble silica performs a role similar to calcium, strengthening cell walls and building brix levels.

## Key Benefits of AquaBoostAG30 FB to crops

- ✓ Improves brix and drought resistance.
- ✓ Increases root cell division.
- ✓ Improves plant oxygen intake.
- ✓ Increases plant metabolic processes.
- ✓ Restores plant health after heat related stress.
- ✓ Improves uptake of moisture and nutrients.

## Pack sizes:

Available in 20L containers, 200L drums and 1000L IBCs.



A **unique** blend of soil & plant enhancing **polymers & fulvic acid**, (arguably the most valuable input in biological agriculture)

## Introduction

AquaBoostAG Humic Blend is a polymerised humic formulation that increases soil moisture holding capability & nutrient uptake and aids with root system development. It promotes a healthy soil structure increasing microbial activity in the root zone.

## Why Polymerisation?

Polymerisation is a chemical process used to create polymers. In this process, smaller molecules, known as monomers or building blocks, are combined chemically to form larger molecules or a macromolecule. By incorporating polymers into the formulation, BioCentral Laboratories facilitates a more stable and larger molecule; this larger molecule is then capable of increasing water retention and improving fertiliser efficacy. Polymerised products have advantages in field, being easier to handle than non-polymerised products.

## Key Benefits of AquaBoostAG Humic Blend

There are many benefits of using humic acid across a wide range of markets in agriculture, turf and home garden applications. These include:

- ✓ Improved soil moisture and nutrient retention.
- ✓ Plants biomass / root system development.
- ✓ Improved soil structure.
- ✓ Reduction in nutrient lock up in the soil.
- ✓ Increase soil organic carbon levels.

## Pack sizes:

Available in 20L containers, 200L drums and 1000L IBCs.



## Introduction

AquaBoostAG Polymer Coolant has been developed to support chill manipulation in deciduous crops where winter temperatures are insufficient to generate enough chill. The polymer film helps reduce bud temperature, assisting dormancy progression and improving fruit set in marginal chill conditions.

## Key Benefits of AquaBoostAG Polymer Coolant

- ✓ Enhances chill accumulation.
- ✓ Improves bud fertility, fruit set and fruit quality.
- ✓ Easy to apply with no residue issues.

## How it works

AquaBoost AG Polymer Coolant is applied as a foliar spray during dormancy and forms a film over the buds. The polymer cools the bud wood through the endothermic reaction as it rehydrates, helping to lower the bud wood temperatures and support chill accumulation. Unlike reflective products such as zinc oxide or calcium carbonate, the polymer coolant continues to cool over time, making it ideal for regions with marginal or inconsistent chill. This helps reduce the risk of poor fruit set caused by inadequate winter chill.

## Recommended Use

Designed for use on all deciduous tree crops, including stone and pome fruits. It should be applied during the dormancy period, ideally between mid May and mid June, when chill accumulation is most critical. Applying early allows the polymer to support bud cooling during the key window for chill unit development.

## Application

- ✓ 2-5L per 1000L of water
- ✓ Coverage – Ensure buds are coated with a thin, even film
- ✓ Apply during dormancy phase, prior to bud swell. Agitate in the spray tank prior to application. Mix thoroughly due to product viscosity.

## Pack sizes:

Available in 20L containers, 200L drums and 1000L IBCs.



AquaBoostAG Polymer Coolant supports **chill manipulation** through the **dormancy period**.

# DustChek

## DUST SUPPRESSION

### Introduction

DustChek offers an effective solution for dust suppression in agricultural applications. Utilising advanced polymer technology, this innovative product binds dust particles, reducing airborne dust and enhancing air quality. Ideal for use on farm access roads, paddocks, and other agricultural areas, DustChek contributes to optimum soil structure and stability while minimising health risks for workers and livestock.

### Key Benefits of DustChek

- ✓ **Dust Control** - DustChek effectively suppresses dust in agricultural applications.
- ✓ **Disease Management** - DustChek reduces mite flare.
- ✓ **Enhanced Visibility & Safety** - DustChek reduces dust enhancing safety during operations such as planting, harvesting, and equipment operation.
- ✓ **Maintain Soil Structure** - DustChek helps maintain soil integrity by reducing erosion caused by wind erosion, preserving soil nutrients and structure.
- ✓ **Environmentally Friendly** - DustChek is biodegradable, non-hazardous and non-toxic.
- ✓ **Reduced Maintenance Cost** - Lower dust levels reduce abrasive wear on farm equipment, extending their operational lifespan and reducing maintenance costs.
- ✓ **Water Conservation** - DustChek makes water last longer.
- ✓ **Compatibility** - DustChek effectively forms a stable crust, even when mixed with other products.
- ✓ **Crop Safety** - DustChek has minimal impact on soil microbes, ensuring crop safety when used as recommended.

### Application

DustChek is designed for easy integration into agricultural settings. It should be applied at the start of a dust suppression cycle, typically by mixing it in water tanks to ensure thorough distribution across the target area. Reapplication is recommended when dust levels rise or surface conditions change.

### Dosage

We recommend:

- ✓ For low traffic areas (paddocks, stockpile, passenger vehicles): 2kg → 10,000L Water
- ✓ For high traffic areas (heavy vehicles, transport & logistics roads): 2kg → 5,000L Water

For the correct mix ratios tailored to your specific needs, please get in touch with DustChek experts or authorised distributors.

### Pack sizes:

Available in 2kg bottles | 6 bottles per box.



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SOIL MOISTURE SOLUTIONS

**DustChek**  
DUST SUPPRESSION

# Your Crops In Safe Hands



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