AquaBoostAG Polymer Coolant
TECH NOTE

AG PC
POLYMER COOLANT

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 Polymer Coolant

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

How it works

AquaBoostAG 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.

Compatibility

Compatible with most ag-chemicals. AquaBoostAG - Polymer Coolant is NOT compatible with oils or calcium-based products. Perform a jar test if unsure of chemical compatibility.

Application

- Rate: 2-5 L/1000 L 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.

Available in sizes:

- **1000 Litre IBC Shuttle**
- **200 Litre Drum**
- **20 Litre Container | 40 per pallet**

TRIAL BACKGROUND

Field Trials

Trials were conducted in Bookpurnong, Renamrk North, Loxton North an d Wood Wood. All locations showed improved fruit set, with some varieties showing significant increases of 39% on average. Trees planted north-south had better results on their west facing limbs. Which retain chill more effectively due to afternoon cooling.

Findings

Bud temperature data confirmed that the polymer coolant lowered bud surface temperatures, enhancing chill accumulation. The results support the role of polymer cooling in improving fruit set in low chill seasons and offer a grower friendly alternative to traditional reflective products.

Figure 1: Leaf Colour Comparison: Untreated (l.) vs treated (r.) Pink Lady trees

ENHANCE CHILL ACCUMULATION IN DECIDIOUS TREE CROPS

Get in Touch

Mike Donkersley
Business Development Manager-
AquaBoostAG
Mobile: 0438 868 944
Mike.Donkersley@biocentral-labs.com
Made in Australia by:
BioCentral Laboratories Limited
22 Phillips Street, Thebarton, S.A. 5031
info@biocentral-labs.com
www.biocentral-labs.com
Contact: +61 8 8234 8886

biocentral laboratories

AquaBoostAG SOIL MOISTURE SOLUTIONS