# Technical Bulletin September 2023



### **Natural Plant Defence**

How growers can promote plant health and IPM systems

August's weather conditions of rain and periods of sunshine, combined with temperatures over 20°c, has provided an increase in humidity in glasshouses around the country.

This has created ideal conditions for powdery mildew to thrive, even in well ventilated ornamental glasshouses. This can be particularly difficult for growers to manage, especially when using overhead irrigation.



**Nutrition** plays a vital role in a successful IPM (integrated pest management) strategy when dealing with pathogens such as powdery mildew.



#### K50 and IPM systems

**K50** is a liquid form of readily available potassium. Potassium is key to aiding regulation of stomatal movements, helping maintain an effective transpiration stream through the plant, helping calcium mobility,

**K50** also helps create a physical barrier by altering the pH of the leaf surface, creating an environment that disturbs powdery mildew development.

### The role of copper and zinc in plant health

**Zinc** is key to maintainting good plant health, it helps maintain the integumentary system of the plant, which affects skin elasticity, wound healing and the plants natural defence system.

Copper forms part of the phenolic compounds used by plants to maintain plant health. The nutrient is vital to the formation of lignin, organic polymers essential to the strengthening of cell walls and therefore strengthening key structural components of the plant

Zynergy is a unique combination of enhanced bio available copper (2.5% W/V) and zinc (4.5% W/V).



Have a question?

Contact our team

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#### Calciums role in natural plant health and defence

The increased humidity levels earlier described also presents as variability in transpiration rates through the plant throughout the day. Calcium travels via the xylem and requires an active transpiration stream to be taken up by the plant. Being a relatively immobile element deficiencies are usually seen as tip burn on the edges of new leaves and flowers.

**Calmax Ultra** is the ideal remedy for this, patented AXM technology increases uptake and mobility of calcium. Calcium is a key constituent of plants cell walls and membranes, increasing plant cell strength and durability increasing natural resistances.

#### **FACTS Qualified Advice**

The OMEX technical team are here to support growers and distributors throughout the growing season. Our experts have decades of experience within the industry, and have experienced a multitude of growing situations.

With a dedicated in-house R&D facility the OMEX team are **here to help you** this autumn.



## **Timings and Rates**

#### **CalMax Ultra**

Apply 1-2ml/L every 14 days combine with Kelpak at 2ml/L for increased performance

#### **K50**

Apply 2-3ml/L every 10-14 days, up to 4 applications

#### **Zynergy**

Apply 0.5ml/L every 10-14 days
Must be applied with NA13 at 0.1% tank concentration if not applying with PPP

Speak to your OMEX technical manager for full reccommendations



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