

# **CellMate**<sup>™</sup>

#### **SOIL & FOLIAR APPLIED LIQUID NUTRIENT**

**CellMate™** is a premium, soil- and foliar-applied calcium product containing boron and molybdenum. The formulation is built with complexed organic matter (COM) and nutrient chelators that resolve calcium and boron deficiencies through improved foliar uptake and movement. While calcium and boron may be present in the soil, they are often tied up and unavailable. CellMate bypasses these tie ups by promoting the rapid uptake, absorption, and translocation of nutrients within the plant.

## **Guaranteed Analysis (w/v%)**

Nitrogen (N) as Nitrate Nitrogen	4.0%
Calcium (Ca)	11.0%
Boron (B)	0.7%
Molybdenum (Mo)	0.3%

The product features and benefits may vary based on uses and registrations per country. Please reach out to your sales representative for more information including approved usage and best application.

### KEY BENEFITS





Increases pollination & fruit set



Improves sugar transfer



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## **Recommendations and Compatibilities**



- Avoid spraying in the heat of the day or when the plant is under moisture stress to achieve optimal product performance.
- DO NOT spray to the point of runoff.
- Recommended mixing sequence: water, adjuvants, pesticides, Valent BioSciences nutrient products, other fertilizers, balance of water while agitating.
- When mixing with high phosphate fertilizers, add a citric acid buffer until the pH is 4.5 to 5.0 to improve compatibility and uptake.
- · A standard jar test is recommended before tank mixing.
- DO NOT store below 5°C.
- RATES & TIMING: Apply 2.5-10 liters per hectare anytime during the growing season.

#### **Nutritional Information**

The nutrient and organic compounds in CellMate<sup>™</sup> address calcium and boron deficiencies commonly present in many soils and are formulated with the ideal ratio for maximizing crop health.

#### CALCIUM

Calcium is essential for respiration, cellular strength, and rooting of a plant. Calcium is critical in cell division and cell wall integrity, which in turn, strengthen the plant structure. Uptake of calcium is primarily through the new root hairs and the root tip and promotes stalk strength and standability. The new growth and rapidly growing tissues of the plant are affected first by calcium deficiency, which can leave the plant vulnerable to other disease-causing organisms. Calcium deficiencies in plants are associated with reduced height, fewer nodes, and less leaf area.

#### BORON

Boron is an immobile element that is essential in the synthesis of structural carbohydrates in the cell wall which promotes cell wall formation and strengthening. It is crucial for stages of rapid growth within the plant, such as pollination, seed production, and protein formation. It preserves the production and concentration of auxins, and is therefore vital in the formation of all new growth including roots, stems, leaves, flowers, fruit, and the vascular system. Boron also supports a balance between sugar and starch and translocation of water and nutrition within the plant.

#### MOLYBDENUM

Molybdenum is important for phosphate metabolism and is also required by plants for the utilization of nitrogen. Nitrate-nitrogen is converted to amino acids by the nitrate reductase enzyme; this enzyme requires molybdenum.

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