

## QUELANT®-Ca

### *Efficient Delivery of Supplemental Calcium*

Quelant-Ca is formulated with a balanced proportion of calcium and free amino acids to aid in prompt absorption into the plant. Quelant-Ca improves photosynthesis, increases tolerance to diseases, and offers maximum protection from abiotic stress.

Fortified with Boron! Calcium can reduce boron availability in the soil and plant, leading to boron deficiency symptoms. Quelant-Ca is formulated with added boron to eliminate such symptoms. With Quelant-Ca in your fertility program, you can quickly correct and maintain the calcium levels in your turf, even during times of plant stress.

- ◆ Readily available calcium is easily absorbed by leaves and roots
- ◆ Fortified with boron to maximize calcium utilization
- ◆ Formulated with a specific amino acid complex to enhance foliar absorption and translocation of calcium



### Guaranteed Analysis

Total Nitrogen (N).....	5.00%
4.0% Nitrate Nitrogen	
1.0% Other Water Soluble Nitrogen	
Calcium (Ca).....	5.70%
Boron (B).....	0.20%

#### Amino Acid Content

Free Amino Acids (Total) .....	4.50%
Natural Amino Acids (Total).....	6.10%
Organic Matter.....	6.80%

Derived from: Calcium Nitrate, Boric Acid,  
and Protein Hydrolysate

**Rate:** Apply 1–2 oz. per 1,000 sq. ft. every 7–14 days or 3 oz. per 1,000 sq. ft. when needed to correct calcium deficiency. Increase rate and irrigation water when treating unfavorable soil conditions, but do not exceed 8 oz. per 1,000 sq. ft. per application.

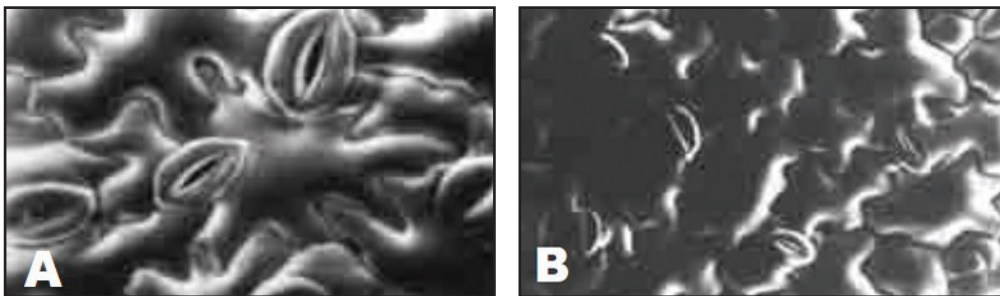


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### WHEN TO USE:

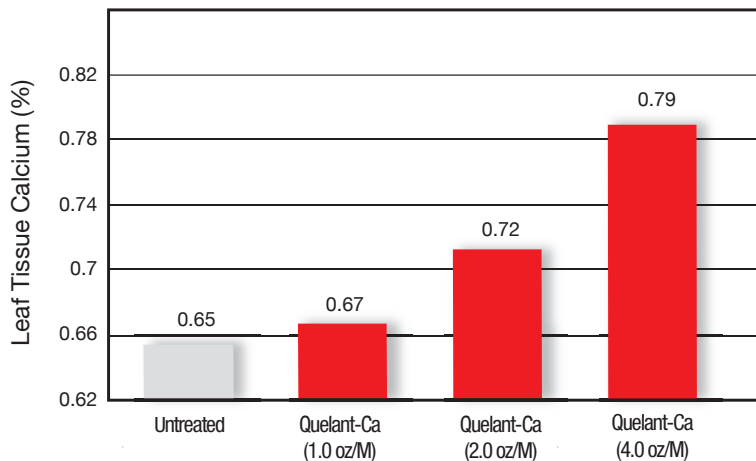
- ◆ When foliar calcium is needed to supplement plant growth or correct deficiencies - the calcium in Quelant-Ca is chelated with L-amino acids and fortified with boron to maximize calcium uptake and utilization by the plant
- ◆ Prior to and during times of abiotic stress - supplemental calcium has been observed to enhance environmental stress tolerance of plants including turfgrass



Transpiration flows out through the stomata. With that flow, other elements like calcium (Ca) and Boron (B) are transported to the cells. Macro-Sorb's amino acid help aid transpiration in adverse conditions by maintaining stomatal aperture.

Stomata from leaf subjected to low relative humidity with (A) and without (B) application of L- $\alpha$ -amino acids from enzymatic hydrolysis.

### Increases Foliar Calcium Concentrations



With the addition of Macro-Sorb amino acids, foliar applications of Quelant-Ca efficiently increases calcium concentrations within leaf tissue. Increasing application rates can be used to increase calcium concentrations to desired levels. Applications of Quelant-Ca provide adequate calcium to strengthen cell walls and membranes in the plant, leading to improved stress tolerance related to heat and drought.

### Transport of Calcium and Boron Through Transpiration

