

This product enhances calcium, phosphate, and micronutrient uptake while solubilizing and leaching sodium in high sodium soils. C.A.L.F.A. can help improve nutrient uptake efficiency by increasing nutrient availability and can be particularly effective in cool, wet soil conditions. The addition of C.A.L.F.A. to the soil surrounding the root zone can release these nutrients to be utilized for plant development.



C.A.L.F.A. aids in the conversion and maintenance of soil nutrients during critical plant growth periods.

## **FEATURES**



**INCREASES NUTRIENT UPTAKE EFFICIENCY** 



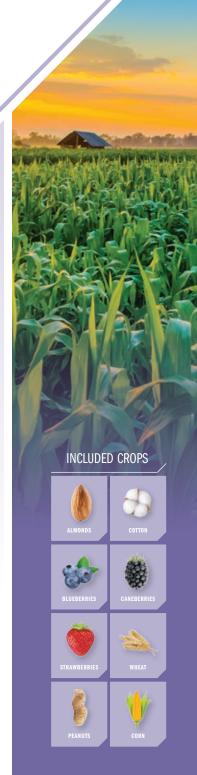
**MULTIPLE DIFFERENT CARBOXYLIC ACIDS** 



**ACTS AS A CHELATING AGENT** 



CAN BE FORMULATED WITH FERTILIZER OR USED ALONE AS A SOIL APPLIED TREATMENT



















## **BENEFITS**



**REDUCES PHYSIOLOGICAL STRESS BY INCREASING THE AVAILABILITY** AND UPTAKE OF **PHOSPHORUS** AND PHOSPHATE-**BOUND** CALCIUM, IRON, ZINC, AND **MAGNESIUM** 



**IMPROVES SOIL** NUTRIENT **AVAILABILITY AND CONDITIONS NECESSARY** FOR ROOT AND **OVERALL PLANT GROWTH** 



**CLEANS DRIP IRRIGATION** LINES



**IMPROVES TOLERANCE TO SODIUM BY SOLUBILIZING** AND LEACHING **BOUND SODIUM. ALLOWING IT TO BE LEACHED AWAY FROM** 

THE ROOT ZONE



**MIXES EASILY WITHOUT DISRUPTING** TANK MIX **COMPATIBILITIES** 

## **APPLICATION**



KEY CROPS INCLUDE, BUT ARE NOT LIMITED TO: BLUEBERRIES, CANEBERRIES, CORN, COTTON, PEANUTS, STRAWBERRIES, WHEAT, ETC.

SOIL APPLIED VIA DRIP **IRRIGATION** 

TANK MIXES EASILY WITH FERTILIZERS, WATER, AND MOST HERBICIDE SPRAYS.



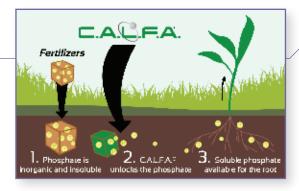
TIME OF APPLICATION: THROUGHOUT THE SEASON STARTING AT FIRST ROOT FLUSH; WITH STARTER POPUP FERTILIZERS THROUGH SOIL INJECTION OR IN THE SEED FURROW



REVIEW LABEL FOR SPECIFIC APPLICATION RATES AND RECOMMENDATIONS.

## **HOW IT WORKS**

Carboxylates are exuded from the root system of growing plants as a function of cell division occurring in the root zone. The plant exudates of most significance are frequently



referred to as P-mobilizing carboxylates and are often found deficient in many different soils across multiple crops. These compounds make soil phosphate more available and prevent the tie-up of added phosphate by sequestering iron, calcium, manganese, zinc and other minerals that bind the phosphate. C.A.L.F.A. aids in the conversion and maintenance of soil nutrients during critical plant growth periods. In soils where sodium and calcium are present, applications of C.A.L.F.A. solubilize these nutrients into soluble forms of sodium carboxylate and calcium carboxylate. The root system has a strong preference for calcium carboxylate and will absorb it while pushing the soluble sodium carboxylate away. These salts are then leached out of the root zone, further reducing plant stress.









