

Readily available nitrate free calcium and boron solution

5% Ca, 1.7% B

Benefits of Growforce® Cal Bor

- Readily available nitrate free calcium and boron solution ideal for soil and foliar applications
- Boron is complexed with non-reducing stable sugars and the low molecular weight lignosulphonate molecule for its effective uptake and translocation when applied through soil or as foliar applications
- Boron application with calcium ensures better uptake of calcium and its fixation in the cell wall to improve the shelf life of fruit
- Boron helps in pollination, sugar movement, nucleic acid biosynthesis, potato skin lignification and lignification of shoots especially in vines
- Important for improving fruit set and quality
- Contains physiologically ideal ratio of calcium and boron to promote fruit firmness, fruit growth, spud development and bulking
- Supply calcium to the crops especially in situations requiring no or minimal amounts of nitrate nitrogen, such as at fruiting.
- Eliminates calcium and boron deficiencies/disorders in crops

THE ROLE OF CALCIUM

Calcium is required for the cellulose precursors for cell wall formation. It also stabilises cell membranes and protects them – an important attribute under stress conditions. In fruit crops it is required in high quantities and is important for fruit quality and shelf life. It is also known that when plants are threatened by infection, calcium binds to a protein called calmodulin that prompts plants to manufacture salicylic acid (SA), a close chemical relative of aspirin. SA acts as a signal molecule that kicks off a series of reactions that help defend against external threats (SAR response).

THE ROLE OF BORON

Boron is needed for sugar movement within the plant, as well as formation of new cells at growing points. Boron also affects pollination and seed development.

Deficiency Symptoms of Calcium

- Bitter pit in apples - slight indentations in the skin which become brown as does the flesh beneath
- Tip burn in strawberries and lettuce - death and puckering along the edge of the youngest leaves
- Blossom End Rot in tomatoes and cucurbits
- Growing point can die where roots become stunted and brown, while leaf stalks develop brown lesions and collapse
- Generally, softer fruit with lower shelf life

Deficiency Symptoms of Boron

- Brittle tissues that crack or split easily
- Corkiness
- Root split
- Hollow stem
- In severe cases, symptoms maybe seen in shoots and leaf growth, but generally symptoms are seen in the fruit.

Product Characteristics

Specific Gravity: 1.20 - 1.22 **Color:** Clear dark brown to black liquid

Analysis	International (w/w%)
Calcium (Ca)	5.0
Boron (B)	1.7

Directions for Use

Agitate contents well before dilution. Suitable for application by:

 Foliar Spray	 Fertigation
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CROP	Rate/A	COMMENTS
APPLES - Foliar	1 - 1.5 qts.	Apply to newly hardened spring flush or during active growing period and post harvest
AVOCADOS - Foliar - Fertigation	1 - 1.5 qts. 4 - 6 qts.	Apply to recently hardened spring flush or during active growing period and post harvest
ROW CROP - Foliar Canola, Corn Grain Legumes, Triticale, Lupins & Wheat Cotton	1 - 2 qts. 1 - 2 qts. 1 - 2 qts.	Best applied at the late cabbage stage, can also be used at other stages Apply at 3 - 4 leaf stage Apply from first flowering until 2 weeks before harvest.
CITRUS - Foliar	1 - 2 qts.	Apply to newly hardened spring flush or during active growing period and post harvest
CUCURBITS - Foliar	1 - 2 qts.	Apply at regular intervals post flowering until harvest
NUT CROPS - Foliar Almonds	1 - 2 qts. 1 - 2 qts.	Apply at early stages of growing season when sufficient leaf cover present. Apply with compatible crop protection sprays
POTATOES - Foliar	1.5 - 3 qts.	Regular applications from hooking until spray-off
STONE FRUIT - Fertigation	3 - 4 qts.	DO NOT apply on foliage. Best applied through soil
STRAWBERRIES - Foliar	1 - 2 qts.	Spray from early vegetative until final harvest. DO NOT spray if fruit to be harvested within one week.
VEGETABLES - Foliar	1 - 2 qts.	Apply from early vegetative until a week before harvest
VINES - Foliar	1 - 2 qts.	Apply when shoots 10 cm long. Second application: 5% flowering. Bunch finish for table grapes