Nutrient Benefits

CALCIUM

20
Ca
40.078

Antagonism

High Ca levels can reduce the availability of:

- Manganese
- Potassium
- Iron
- Sodium and Aluminium
- Boron
- Zinc
- Magnesium
- Phosphorus

Stimulation

- Ca stimulates Boron uptake and translocation

Functions

- Proper functioning of growing points, particularly roots tips
- Forms compounds which strengthen cell walls
- Aids in cell division and elongation
- Neutralizes organic acids
- Aids in the proper working and permeability of cell membranes
- Regulates protein synthesis and slows aging process

Deficiency Symptoms

- Soft fruit
- Senescent breakdown and poor storage life of fruit
- Internal and external disorders or many fruits and vegetables
- Lodging
- Terminal buds and root tips fail to develop normally
- Stunted root systems
- Leaves of grasses do not open properly, tips stick to the next lowest leaf

Factors Affecting Availability

- Where there is an unfavorable balance of Ca, Mg, and K in the soil (particularly heavy K inputs in sandy soils).
- Where high rates of N have been used
- Low pH soils

Sensitive Crops

- Ca is not easily translocated in plants, so a constant supply is required. It should be foliar applied and in fruiting crops, and be available from after flowering onward
- Tree crops, fruit, and vegetables
- Pod crops, cereals, canola, pulses

Visual Guide