



Reg. No. B5511 Act. No. 36 of 1947

Prince of Wales™

Prince of Wales™ forms part of our Bio Innovation™ range



Key function of elements

Description

Prince of Wales™ is a liquid fertilizer containing calcium and magnesium in a unique ratio for optimum foliar uptake. Moreover, the product maintains an ideal pH and contains a patented penetrant that enhances leaf uptake and translocation of nutrients throughout the plant.

Key Benefits

- High content of available Ca and Mg.
- Specific pH for optimum uptake.
- Contains a patented uptake enhancer.

Element Content

Element	Content(g/kg)	Content(g/L)
Calcium (Ca)	78 g/kg	110 g/L
Magnesium (Mg)	22 g/kg	31 g/L
		SG = 1.41

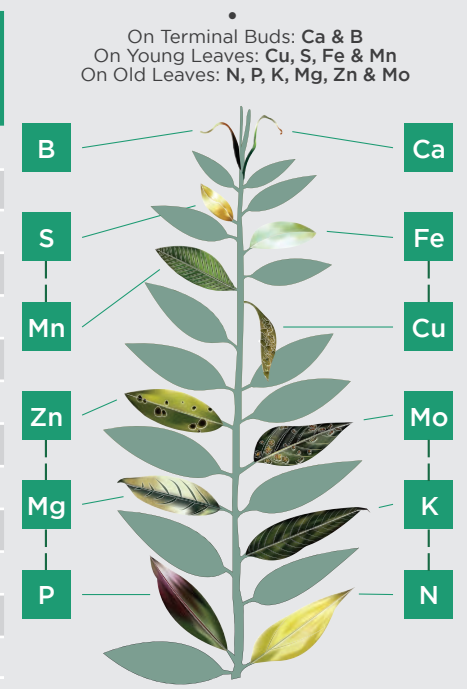
- **Ca** enables nitrogen-fixing bacteria to form nodules on the roots of leguminous plants.
- **Ca** in the form of calcium pectate, it is responsible for maintaining plant cell wall integrity resulting in improved mechanical strength and less lodging.
- **Ca** when Ca is deficient, new tissue such as root tips, young leaves and shoot tips often exhibit distorted growth from improper cell wall formation.
- **Mg** is required by all crops as part of chlorophyll molecules that capture the sun's energy, essential for photosynthesis, growth and yield.
- **Mg** aids in phosphate (P) metabolism, facilitating movement of P compounds as well as carbohydrates through the plant.

Application Rates

Crop	Dosage
Row crops	Foliar spray 1-2 L/100 L water (maximum 5 L/ha) Via irrigation system 5-10 L/ha (maximum 10 L/ha)
Vegetable crops	Foliar spray 1-2 L/100 L water (maximum 5 L/ha) Via irrigation system 5-10 L/ha (maximum 10 L/ha)
Fruit Tree crops	Foliar spray 1 L/100 L water (maximum 10 L/ha)

Average concentration in plant tissue & General deficiency symptoms

mg/kg in dry leaf mass	Element	Deficiency symptoms
15000	N	Yellowing of older leaves & stunted growth
2000	P	Dark green/purple older leaves & stunted growth
10000	K	Yellowing & necrosis of leaf margins for older leaves
5000	Ca	Deformed young leaves & desiccation of growing points
2000	Mg	Interveneal chlorosis of older leaves
1000	S	Yellowing of younger leaves & stunted growth
100	Fe	Interveneal yellowing of younger leaves
20	Zn	Interveneal yellowing and rosettes of young leaves, necrotic spots and twigs die back
50	Mn	Interveneal yellowing of younger leaves with necrotic spots
6	Cu	Yellowing and curling of leaf blades with white tips, die back of shoots
20	B	Thick textured leaves & affect flowering and seed filling.
0,1	Mo	Yellow, wilted and rolled-up leaves with burned margins
0,1	Ni	Small curled older leaves with necrotic tips

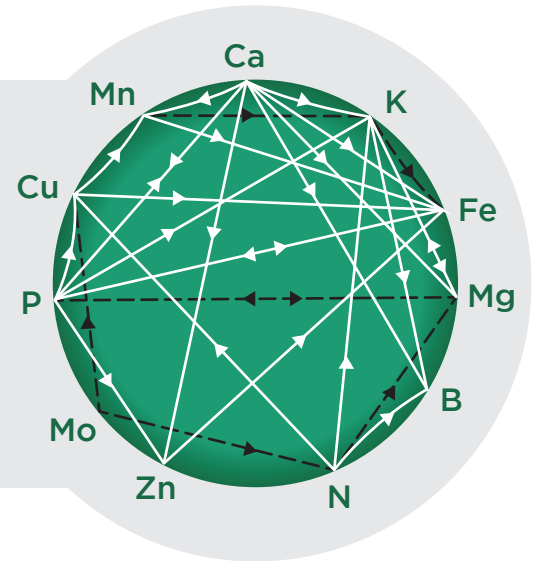


Interactions between nutrients that reduces availability

Macro-elements	Micro-elements
Zn - P	Zn - Fe
Zn - N	Mn - Fe
Fe - P	Mo - Fe
Cu - P	Cu - Fe
Mo - S	Cu - Mo
Zn - Mg	Cu - Zn
B - Ca	

ANTAGONISM →
Decreased availability of a nutrient to a plant due to the action of another nutrient

STIMULATION - - - →
High level of a nutrient increases the demand by the plant for another nutrient



Effect of pH on nutrient availability

