## ADVANTAGES OF USING SOLUBOR

- **Rapid dispersion:-** The amorphous particle of solubor facilitates rapid wetting and incorporation in water and more viscous liquids even at low temperatures.
- → **High solubility:** the small particle size of solubor (<75microns) and inherent high solubility even at low temperatures gives rapid solubility properties.
- → Minimum crystallization effect:- Solubor causes minimum changes to crystallization temperatures or density of formulation, hence can be used together with common liquid fertilizer formulations.
- → PH buffering action:- soluble has a slight buffering action and maintain Ph in solutions
- → **High boron content (20.9%):-** relatively small quantities of solubor are needed to correct deficiencies making it an economical source of boron,.
- **→ Compatility:-** solubor is compatible with most fertilizers and agrochemicals
- **→** Premium quality and proven cost effectiveness:- low cost per unit area.
- **→** Can be applied either as foliar spray or directly to the soil





## DISTRIBUTOR (MSAMBAZAJI) IN KENYA:

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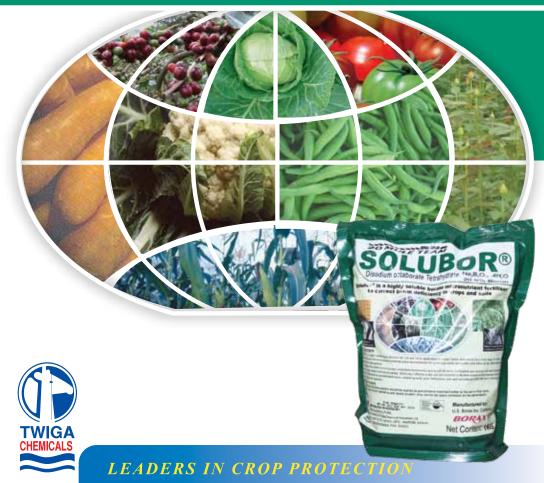
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## Solubor®

Borate fertilizer for soil and foliar application.

**Contains 21% Boron** 



## COMPOSITION AND DESCRIPTION

SOLUBOR is a highly soluble borate fertilizer for soil and foliar application to correct boron deficiencies in a wide range of crops. It contains boron, one of the seven essential elemental plant micronutrients for good crop yields and quality even when all the other nutrients are present in the right quantities.

Boron's primary role in plants is to act as a key component in processes such as cell division, fertilization and seed set, cell wall formation and integrity, sugar transport and calcium uptake. Deficiency of boron in the soil and therefore in the plant results in abnormal growth such as apical shoot abnormalities and deformed leaves, stunted growth, poor fertilization and seedset, reduced yields and poor yield quality especially in fruits and vegetables.

CROP	EFFECFTS OF BORON	RECOMMENDATION	
	DEFICIENCY	Soil application	Foliar application
Coffee	<ul><li>die back/death of growing points</li><li>flower abortion/berry drop</li><li>loss of yield</li></ul>	-	2-3kg/ha(40-60gm/20L of water for 20-25 trees-Two applications per year, before initiation of flowering.
Brassicas	- browning of the curd - cracking of leaves - breakdown of pith - reduced quality of harvest	5-10 kg/ha in 200 litres of water	5-10kg/ha in 200 litres of water
Maize	- Poor filling of the cob - deformed cobs - reduced yields (both quality and quantity)	- 0-15% clay 4kg/ha, 16-30% clay 8kg/ha - >30% clay 10kg/ha	1-2kg/ha-apply between 8 leaf stage and silking
Carrots	- skin blemishes - skin roughening with darkening of the flesh "five o'clock shadow" - splitting of the roots - reduced marketable yield	4-6kg/ha in 200litres of water	4-6kg/ha in 500 litres of water
Other vegetables eg-french beans, tomatoes	- Flower abortion - reduced yields-poor quality of produce	-	2-3kg/ha (40-60gm/20lites of water. Apply prior to flowering
Fruits	- Dieback and death of growing points - Flower abortion - Fruit drop - Reduced yields	-	2-3 kg/ha(40-60 gm/20 L waterApply before flowering and fruit set.
Flowers / carnation	<ul> <li>reduced internode length</li> <li>increased calyx splitting</li> <li>pale yellow zone along the midribs which later turns purple.</li> <li>Failure of flower buds to reach anthesis</li> </ul>	-	Apply after leaf analysis- adequate levels should be 25-100ppm

CROP	EFFECFTS OF BORON DEFICIENCY	RECOMMENDATION	
		Soil application	Foliar application
Roses	- Leaves distorted-elongated with irregular serration - loss of apical dominance leading to multiple branching - petals with serrated margins and show irregular pigmentation.	-Depend on soil analysis	Routine foliar sprays, 2-3kg/ha
Chrysanthemum	Brittle and down curled leaves     Tips pale green and turning upwards     Petals become quilled or fail to unroll properly	-Depend on soil analysis	Routine foliar sprays, 2-3kg/ha







"five o'clock shadow"







Solubor is compatible with

most fertilizers and agrochemicals

**COMPATIBILITY** 



- To correct boron deficiency solubor should be applied as preventative treatment either to the soil or foliar spray.
- Once symptoms of boron deficiency are clearly evident, they cannot be easily corrected during the same season.





Brown discolouration of curd