SOIL REFERENCE



Soil Potassium (K⁺)

Potassium is an essential element for plant growth and development. It plays a major role in regulation of plant water relations and it is transported freely throughout the plant.

The role of potassium in IPM

The role of potassium in IPM is controversial. Research indicates that increased potassium can suppress rapid blight caused by *Labyrinthula terrestris* while other studies suggest that the snow molds might be increased in high potassium environments. Moderation seems to be the key in this situation and a target of about 110 mg/kg is a good starting place.

Guidelines

	Low	Normal	Excessive
Mehlich III SLAN	< 110 mg/kg	>110 mg/kg	>300 mg/kg
Mehlich III BSCR	< 2 %	2 - 7%	unknown
Saturated Paste	< 40 mg/l	40 - 100mg/l	unknown

Management

Soil potassium levels can be increased by use of one of the products listed below. Use caution because each product carries a potentially detrimental companion anion (negatively charged molecue such as nitrate sulfate, phosphate, chloride). Leaching irrigation or rainfall will easily remove excessive potassium.

13-0-44 Potassium nitrate

0-0-50 K₂SO₄ Potassium sulfate

0-0-60 KCI Potassium chloride

0-0-22 MgSO₄*K₂SO₄ magnesium sulfate - potassium sulfate (K-mag)

0-52-34 KH2PO5 mono potassium phosphate