



agrichem



Stand SKH

Copyright Agrichem



agrichem × **名方有限公司**



Stand SKH 矽寶



Stand SKH

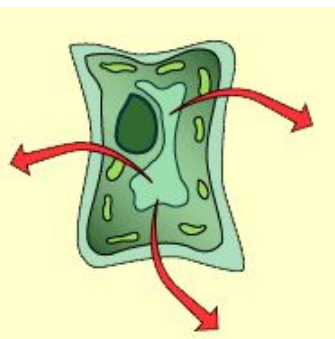
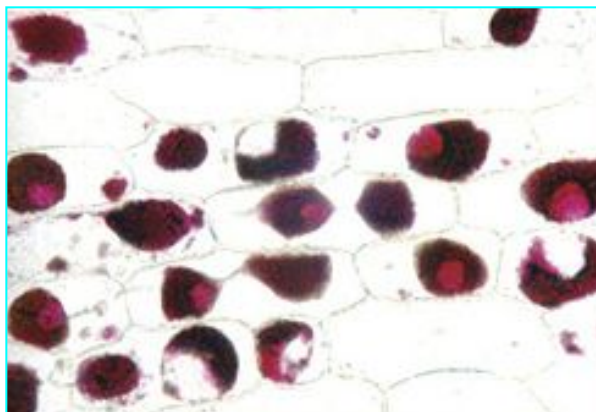
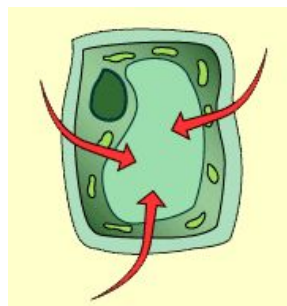
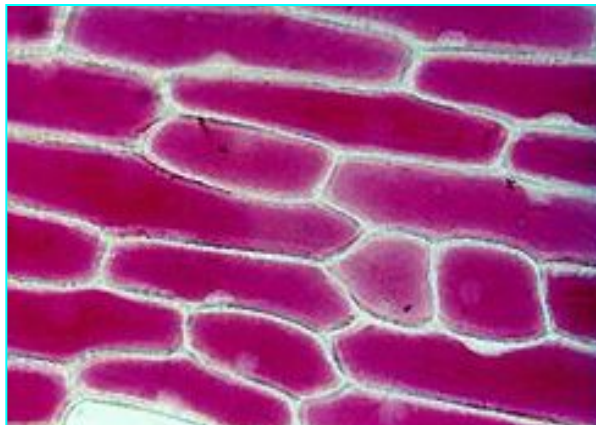
Copyright Agrichem

Do you want to increase yield? 您想提高產量嗎?



- Increase yield...sugarcane, rice etc提高甘蔗,水稻產量
- Increase sucrose content eg cane 例如甘蔗增加含糖量
- Increase stalk strength (anti-lodging)增加莖的強度(抗倒伏)

Are your plants stressed? 您的作物承受逆境?



- Do you want to?
 - Increase resistance to environmental stress
 - 您想作物提高對環境的抗力?
 - Drought乾旱
 - Freezing凍傷
 - Metal element toxicities金屬元素毒害
 - Salinity鹽害

Are your plants pest stressed ? 您的作物受病蟲危害？



- Increase resistance
- to pest stress
- **想增加對病蟲之抗力？**
 - Insects 昆蟲
 - Nematodes 線蟲
 - Diseases 病害



Do you want to?
您想.....?



- Increase shelf life of fruit and flowers?
- 增加水果及花卉的櫥架期?
- Increase rooting?
- 增加發根?

Silicon - the 'all-round' nutrient

矽-是全方位的養分



- Increases yield
- 增加產量
- Increases resistance to all stress factors
- 增加抗逆境
- Increases stalk strength
- 增加莖的強度
- Increases shelf life (fruit and flowers)

The solution – Stand SKH

解決方法—矽寶

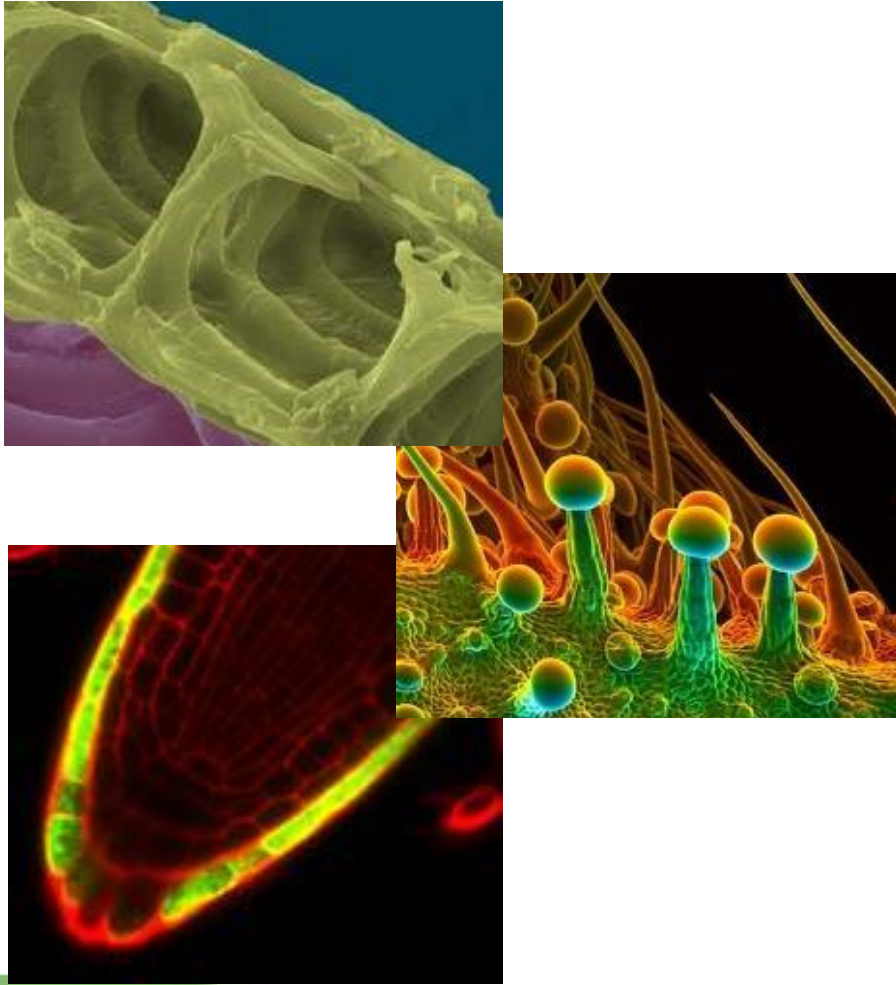


- Analysis成分
 - 20% Silica 20%矽
 - 15% Potassium 15%鉀
 - 1% Humic acid 1%腐植酸
- Formulation type劑型
 - Black clear liquid黑色液體
- Packsizes包裝
 - 20 L, 200 L, 1000L
- Application施用法
 - Foliar葉噴
 - Fertigation澆灌
 - See label for crop rates
 - 看標示之用量

Stand SKH

Where does the Silicon go?

矽跑去那裡?



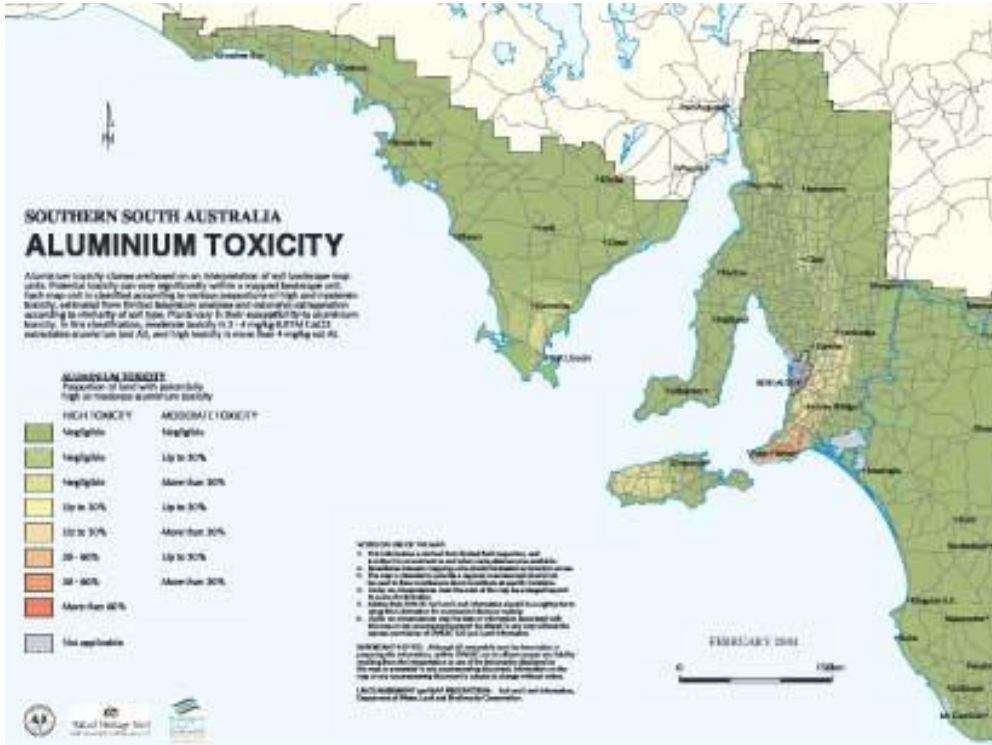
- In higher plants – it polymerises to glass-like platelets
- 在高等植物-它聚合成玻璃狀小片
- Places : cell walls (in and between), and below the cuticle
- 位置:細胞壁和角質層間
- Also laid down in epidermal cells, especially around trichomes and guard cells也沉積在絨毛及保衛細胞

Plants species differ..... 不同植物種類.....



- Plants have a differential capacity for accumulation of silica :
- 不同植物蓄存矽的量也不同
 - Accumulators ($> 1\%$ Si) 積蓄者 ($>1\%$ 矽)
 - Intermediate ($0.5 - 1\%$ Si) 中間者 ($0.5-1\%$ 矽)
 - Non-accumulators ($< 0.5\%$ si) 不積蓄者 ($<0.5\%$ 矽)

Si assisting environmental stress 矽幫助抗環境逆境



- Decreases: 減少
 - Evapotranspiration 蒸散
 - Lodging 倒伏
 - Drought 乾旱
 - excesses of: N, P, Na, Mn, Zn, Al 過量的氮, 磷, 鈉, 錳, 鋅, 鋁
- Heavy metals 重金屬
- P-deficiency 磷-缺乏

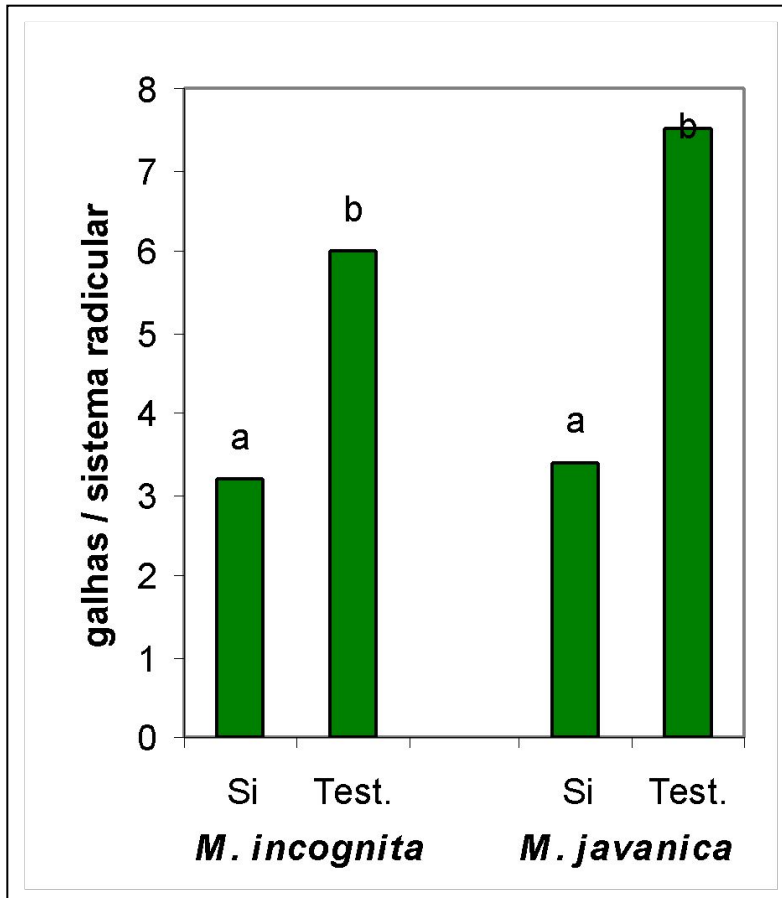
Si overcoming pest stress 矽克服病蟲害之逆境



- Increased resistance to insects
- 增加抗蟲力
- Increased resistance to nematodes
- 增加抗線蟲力
- Increased resistance to diseases
- 增加抗病力

Effect of Silicon on nematodes

矽對線蟲之影響



- Number of branches in Bean plant root system 30 days after the inoculation of *Meloidogyne incognita* or *M. javanica* and grown in the presence of (Si) or absence of Calcium silicate (control)
- 豆類接種兩種根瘤線蟲30天後,含矽的植株被害

The effect of Si on fungal pathogens

矽對病原真菌之影響



PATHOGEN	PERCENTAGE INHIBITION					F Pr.
	5 ml Si/l (pH 10.3)	10 ml Si/l (pH 10.7)	20 ml Si/l (pH 11.2)	40 ml Si/l (pH 11.5)	80 ml Si/l (pH 11.7)	
<i>Alternaria solani</i>	15	52	80	100	100	<0.001
<i>Curvularia lunata</i>	6.3	25	98	100	100	<0.001
<i>Stemphylium herbarum</i>	8.2	24	97	100	100	<0.001
<i>Drechslera spp.</i>	25	42	82	96.7	100	<0.001
<i>Colletotrichum coccodes</i>	100	100	100	100	100	<0.001
<i>Fusarium oxysporum</i>	-26	58	61	100	100	<0.001
<i>Fusarium solani</i>	5.8	0.8	59	100	100	<0.001
<i>Verticillium fungicola</i>	-2	44	87	100	100	<0.001
<i>Sclerotinia sclerotiorum</i>	100	100	100	100	100	<0.001
<i>Sclerotium rolfsii</i>	100	100	100	100	100	<0.001
<i>Phytophthora capsici</i>	23	97	100	100	100	<0.001
<i>Phytophthora cinnamomi</i>	100	100	100	100	100	<0.001
<i>Pythium F-group</i>	0	100	100	100	100	<0.001
<i>Mucor pusillus</i>	100	100	100	100	100	<0.001

- *In-vitro* inhibition of mycelial growth of several phytopathogenic fungi, including *Phytophthora cinnamomi* by soluble silicon
- 在生物體外試驗矽可以抑制許多病原真菌包含柑橘流膠病菌

Testimonial

推薦書



- **Business: Crop Tech**
- **Location: Bundaberg**
- **Person: Andrew Bauer**
Senior
agronomist
- **Date: June, 2006**
- **“I undertake the SAP & Quick soil recommendations for the laboratory at Crop Tech in Bundaberg. I use Stand SKH on a number of crops, as I believe silicon greatly assists disease resistance in crops, including powdery mildew in tomatoes and cucurbits, like rockmelons. Another situation I use silicon for, is to reduce the effects of toxic iron and manganese levels.”**
- **我用矽寶在許多作物上,可以增加如番茄,胡瓜,甜瓜抗白粉病,我**

Stand SKH

Stand SKH - plant available silicon

矽寶 - 植物可以利用的矽



- Science:科學上:
 - Stand SKH also has potassium, and humic acid which aids the uptake of silicon
 - 矽寶也含有鉀肥及腐植酸可以促進吸收
- Utility:利用上:
 - Can be applied as foliar or through the soil
 - 可以葉面噴施或土壤灌施
- Testimony:見證
 - Silicon increases yields, strengthens the plant and enhances the plants' ability to resist a range of stresses 矽增加產量,強壯,抗逆境
 - Agronomists use Stand SKH to enhance disease resistance and overcome mineral toxicities 農藝師用矽寶提高抗病力即克服元素毒害



agrichem



Stand SKH

Copyright Agrichem