

PhytoGreen®-Silicon Fertilisers

PK-FERTILISER LIQUID 5-13 with silico/ Plant adjuvant

Composition:

PhytoGreen®-Silicon: 7% SiO₂ (94 g/l water soluble silicon dioxide), 5% P₂O₅ (67 g/l water soluble phosphate), 13% K₂O (174 g/l water soluble potassium oxide) complexed with carboxylic acids; with 3% humic + fulvic acids

PhytoGreen®-Bio-Silicon: Suspension with plant available silicon made out of micronized vulcanic stone meal

Mode of action and advantages:

- ◆ Silicon deposits within the cells and hardens the leaves
- ◆ Enhance tolerance against abiotic stress situations (drought and heat), rises mechanical resistance to insect bites and fungus penetration
- ◆ For thicker, more stable stalks in cereals and high pod resistance in rapeseed

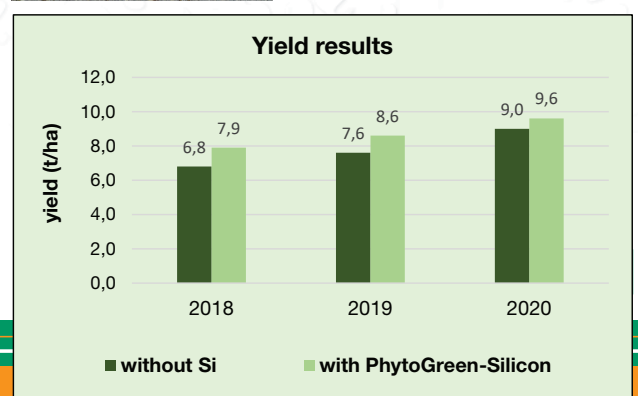
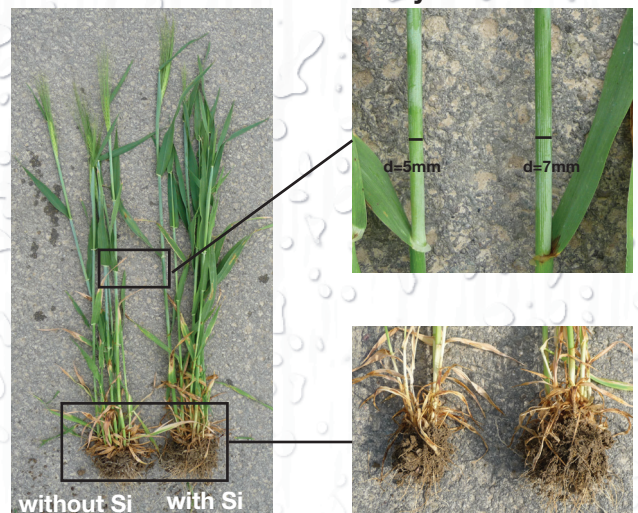
Recommendations for use and application rates:

Foliar application:	PhytoGreen®-Silicon/ Bio-Silicon can be applied in all cultures, whereby foliar application guarantees highest efficacy. 1-3 treatments with 1 l PhytoGreen®-Bio-Silicon or 2 l PhytoGreen®-Silicon/ha from beginning of vegetation are recommended, winter cultures should receive the first treatment in autumn.
Soil application (with irrigation systems):	PhytoGreen®-Silicon/ Bio-Silicon can be used for all cultures. Several treatments with 5-10 l/ha from beginning of vegetation are recommended.

A list of some plant diseases that have had their intensities reduced by silicon application is summarized in the following table (according to Rodrigues, F. A. & Datnoff, L.D. (2015): Silicon and Plant diseases. Springer-Verlag):

Crop	Diseases
Barley	Black point, Powdery mildew
Bean	Anthracnose, Angular leaf spot
Corn	Pythium root and Stalk rot, Corn smut
Cucumber	Powdery mildew, Anthracnose, Leaf spot, Crown and Root rot, Grey mold rot, Black rot, Fusarium wilt
Lettuce	Downy Mildew, Fusarium wilt
Melon	Powdery mildew, Fusarium root rot, Alternaria
Rice	Blast, Brown spot, Sheat blight, Leaf scald, Stem rot, Root knod nematodes, Grain discoloration
Rye	Powdery mildew
Strawberries	Powdery mildew, Anthracnose
Soybean	Rust, Phytophthora root rot, Stem cancer
Tomato	Fusarium crown and root rot, Pythium root rot, Bacterial wilt
Wheat	Powdery mildew; Septoria leaf and Spot blotch, Leaf blast, Eyespot, Bacterial leaf streak, Foot rot

Field trial results in winter barley 2018-2020



Technical details:

PhytoGreen®-Silicon: Density: 1,25 kg/l; pH = 12

PhytoGreen®-Bio-Silicon: Density: 1,3 kg/l; pH ca. 8

Pack sizes:

1 l • 10 l • 200 l • 1000 l

More pack sizes upon request.