

# Biostimulation & prevention

The natural insurance for your crop

# SILIFORCE ®

### **BIOSTIMULATION & PREVENTION – THE NATURAL INSURANCE FOR YOUR CROP**

SILIFORCE is a liquid fertilizer consisting of 100% bio-available silicon with synergetic micro-elements. SILIFORCE meets fertilizing standards and is manufactured from pharma/food grade ingredients regarding GMP standards.

### SILIFORCE:

- Improves resistance to stress
- Improves resistance to drought and salinity
- Improves product quality: brix, firmness, commercial calibre
- Improves production yield: weight, size
- · Improves intake of nutrients: optimized mineralization

### SILIFORCE is a beneficial element for sustainable crop management program.

# SILIFORCE CHARACTERISTICS

- Consists of bio-available silicon (Si) in monomeric form (Si(OH)4)
- Unique synergy between silicon and micro-elements
- Applicable through the root system (drip irrigation) and the leaves (foliar spray)
- Compatible with fertilizers and agro-chemicals
- Environmentally safe and non-toxic
- Applicable on all kinds of crops and all types of cultivation systems



# **PROVEN TECHNOLOGY**

- · Positive results confirmed by international research institutes
- Extensively tested in field trials around the world
- Customers agree:
  - SILIFORCE significantly reduces effects of stress situations
  - SILIFORCE significantly increases quality and yield

# SILICON'S ROLE IN STRESS REDUCTION AND PLANT DEVELOPMENT

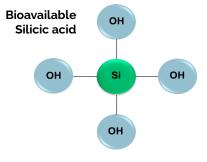
Fertilization with silicon decreases negative impact of stress conditions on quality and yield. SILIFORCE contains high concentrations of stabilized monosilicic acid. Monosilicic acid is the best plant available form of silicon. Once assimilated by plants, monosilicic acid is transported through the xylem to the cells of stems, foliage and fruits. Then it is stored in cell membranes, creating a mechanical barrier strengthening cell walls and increasing crop's natural defense mechanisms.

### Silicon reduces stress and improves plant development in 3 unique ways

- 1. Silicon acts as a physical barrier in cell walls
- 2. Silicon acts as a modulator of metabolic defence reactions to stress situations
- 3. Silicon improves absorption of nutrients in plants

Silicon is a real plant strengthener by providing a natural way of prevention. Crops are often exposed to stresses and silicon's benefits are most obvious during stress conditions.

SILIFORCE contributes in sustainable agricultural practices, including preserved production and quality levels.



# Research on mechanical action of SILIFORCE and influence on quality and resistance stress

- Tests of SILIFORCE on plants show improved mineralisation
- Tests show thicker peel, higher dry weight and extended shelf life
  SILIFORCE improves plant resistance to stress

### **MRI: TOMATO**



The treated tomato contain more fiber in the middle of the fruit. The untreated tomato has dark areas on the outside that indicate advanced ripening and limited shelf life.

Control

# Siliforce

### MRI:STRAWBERRY

Treatments	N concentration (%)		Ca concentration (%)		Fruit yield	
	Jan 14	Mar 11	Jan 14	Mar 11	No/plantl.	b/plant
Control	4.2	4.2	0.6	0.9	24.1	0.81
SILIFORCE	4.2	5.1	0.6	1.2	25.8	0.91



### Control



# BRIX INCREASE: YIELD INCREASE:

+7% MORE BERRIES/ PLANT QUALITY INCREASE: +30% CALCIUM

+15%

+12% LBL/PLANT

**Siliforce** 





### FIELD TRIALS AND SUCCES STORIES

Comparative research confirms SILIFORCE is the best plant available source of silicon on the market. Leading international research centres confirm the beneficial effects of SILIFORCE on crop's stress resistance, product quality and yield. Customers around the world therefore now successfully integrate SILIFORCE in their crop nutrition programs in order to alleviate stress conditions.



# **APPLICATION GUIDELINES**

Product	SILIFORCE	
Product appearance	Liquid suspension: transparent light green color	
Foliar spray	Dosage: 250 - 400 ml per hectare Frequency: Repeat 6 - 8 times every 10 - 15 days, from first visible leaves onwards	
Drip Irrigation	Dosage: 400 - 500 ml per hectare Frequency: Repeat weekly from start, 6 - 8 times during cycle	
Dilution procedure	<ul> <li>Step 1: Fill tank with water</li> <li>Step 2 Add SILIFORCE and mix</li> <li>Step 3: Add other fertilizers and crop protection products</li> <li>It is important to mix SILIFORCE into the tank mix before adding any other fertilizers or plant protection products!</li> </ul>	
Shelf life	Guaranteed: 2 years	
Storage conditions	Store SILIFORCE in the original package, cool and dark	
Packaging	1 / 5 / 25 litre(s)	

# REGISTRATION

SILIFORCE is a CE fertilizer based on micro-nutrients.



AGRO-SOLUTIONS B.V. Industrieterrein de Horsel Daelderweg 22 NL-6361 HK NUTH

+31 (0)45 - 577 87 61 info@agro-solutions.nl



WWW.AGRO-SOLUTIONS.NL