

SILAMOL

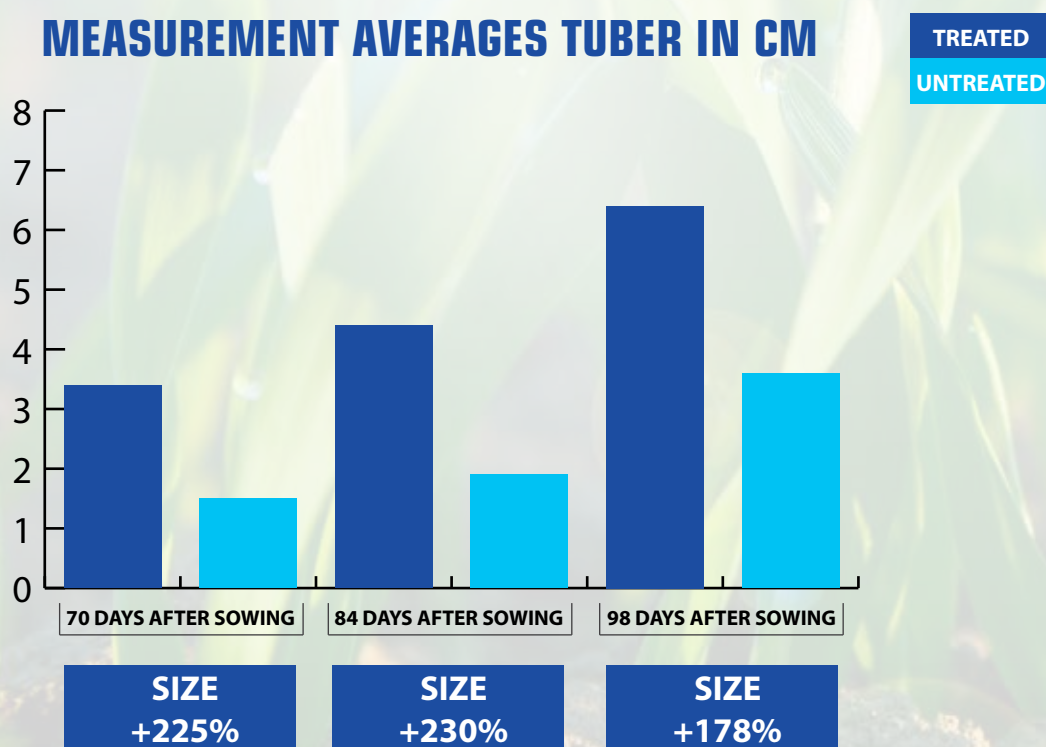
Silicon-based Plant Supplement



SILAMOL EFFECT ON KOHLRABI

CROP: Kohlrabi
LOCATION: Agro-Solutions testing garden, Nederweert, the Netherlands
PRODUCTS: Silamol
DOSAGE: 150 ml/Ha
PROTOCOL: 6 applications in 90 days
RESEARCH: Agro-Solutions
SEASON: Spring 2015

MEASUREMENT AVERAGES TUBER IN CM



SILAMOL

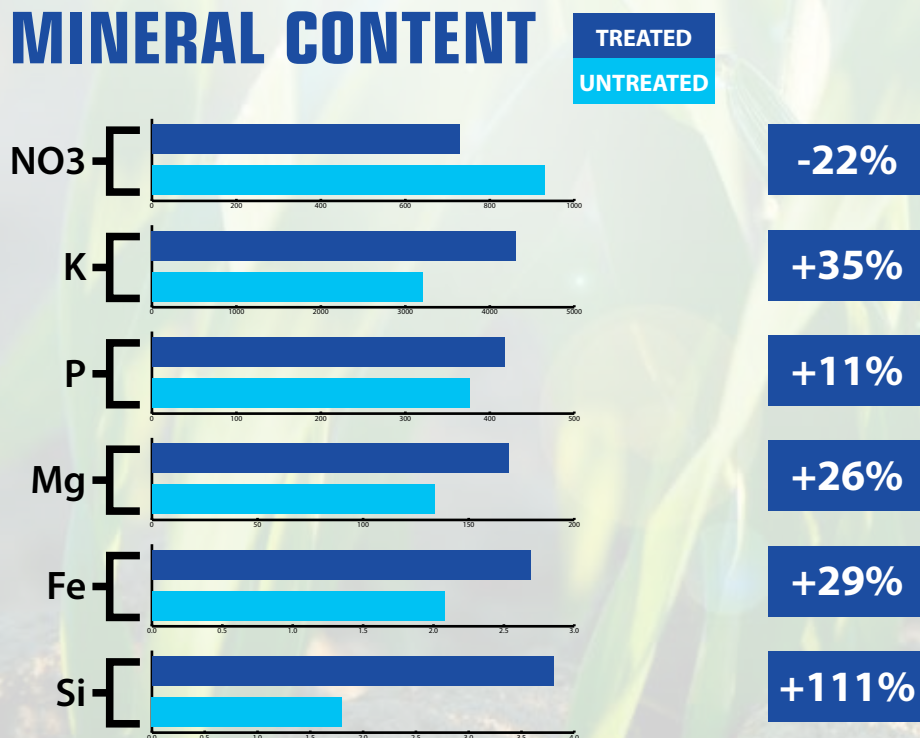
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LOCATION: Agro-Solutions testing garden, Nederweert, the Netherlands
PRODUCTS: Silamol
DOSAGE: 150 ml/Ha
PROTOCOL: 6 applications in 90 days
RESEARCH: NovaCropControl, Tilburg
SEASON: Spring 2015

MINERAL CONTENT



SILAMOL

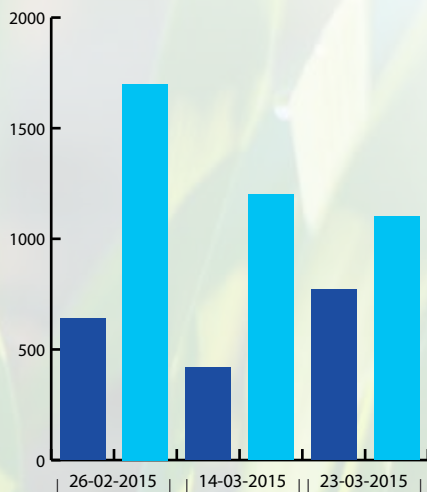
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SILAMOL EFFECT ON LETTUCE

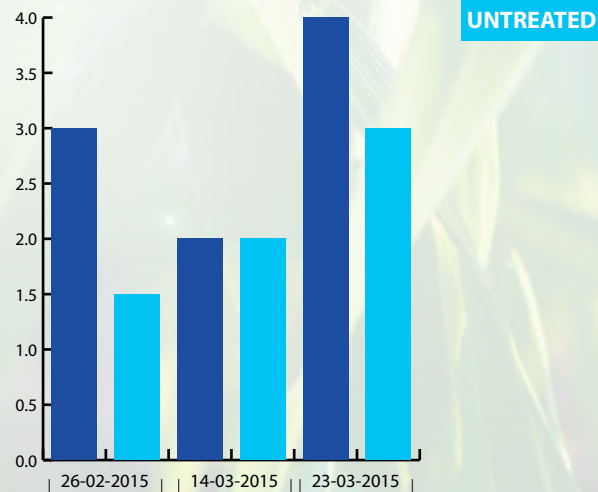
CROP: Lettuce
LOCATION: Agro-Solutions Greenery, Nuth, the Netherlands
PRODUCTS: Silamol
DOSAGE: 150 ml/Ha
PROTOCOL: 3 applications in 45 days
RESEARCH: Agro-Solutions
SEASON: Spring 2015

NO3 (NITRATE)



**AVERAGE -54%
LESS NITRATE**

BRIX



**AVERAGE
+38% BRIX**



SILAMOL

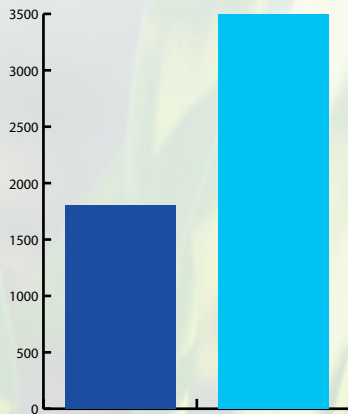
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SILAMOL EFFECT ON ROCKET SALAD

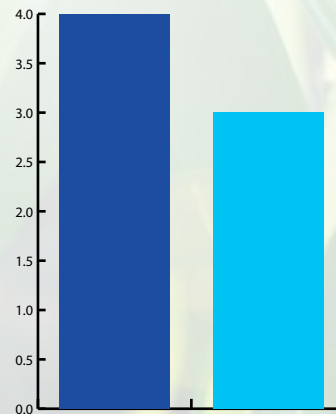
CROP: Rocket salad
LOCATION: Agro-Solutions Greenery, Nuth, the Netherlands
PRODUCTS: Silamol
DOSAGE: 150 ml/Ha
PROTOCOL: 3 applications in 45 days
RESEARCH: Agro-Solutions
SEASON: Spring 2015

NO₃ (NITRATE)



**-48% LESS
NITRATE**

BRIX



+33% BRIX

TREATED
UNTREATED



SILAMOL

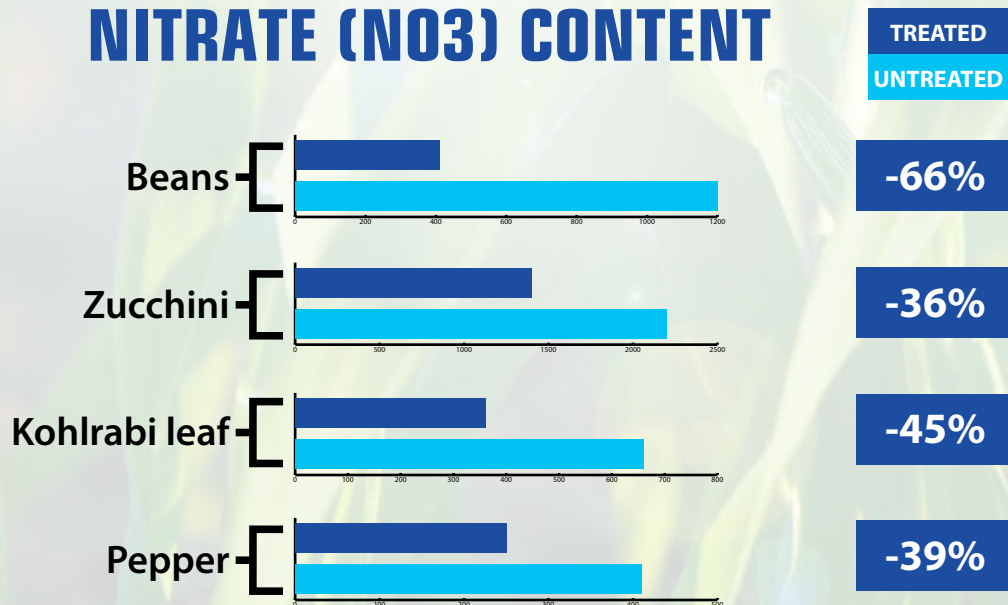
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SILAMOL EFFECT ON NITRATE IN CROPS

CROP: Beans, zucchini, kohlrabi and pepper
LOCATION: Agro-Solutions Greenery, Nuth, the Netherlands
PRODUCTS: Silamol
DOSAGE: 150 ml/Ha
PROTOCOL: 3-6 applications in 45-90 days
RESEARCH: Agro-Solutions
SEASON: Spring 2015

NITRATE (NO₃) CONTENT



**Less Nitrate =
Better shelflife - Better nutritional values - Healthier**



SILAMOL

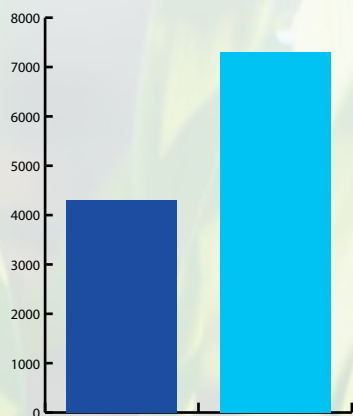
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SILAMOL EFFECT ON CORIANDER

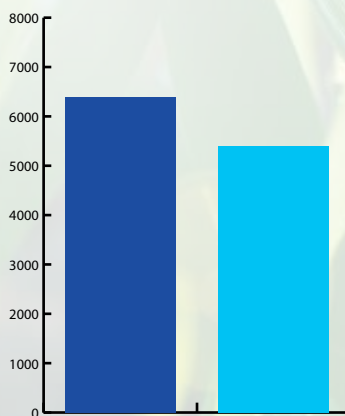
CROP: Coriander
LOCATION: Agro-Solutions Greenery, Nuth, the Netherlands
PRODUCTS: Silamol
DOSAGE: 120 ml/Ha
PROTOCOL: 4 applications in 60 days
RESEARCH: Agro-Solutions
SEASON: Spring 2015

NO₃ (NITRATE)



**-42%
LESS NITRATE**

POTASSIUM (K)



**+19%
POTASSIUM (K)**



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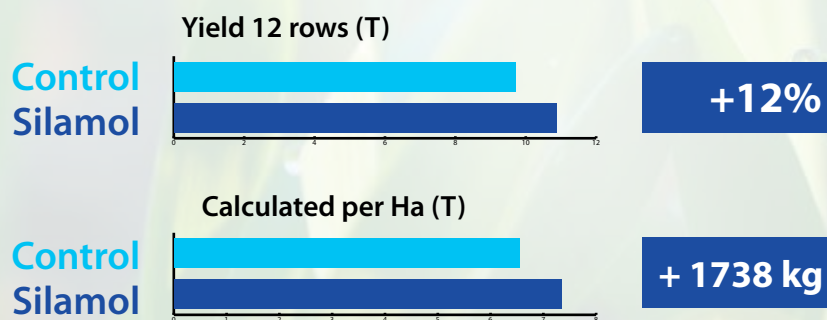


SILAMOL EFFECT ON CHARDONNAY GRAPES PERFORMANCE IN CANADA

CROP: Chardonnay grapes
LOCATION: Ontario, Canada
PRODUCTS: Silamol
DOSAGE: 330 ml/Ha
PROTOCOL: 4 applications preflower, 4 applications postflower
RESEARCH: Falk Farms Ltd
SEASON: Spring 2014

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CONTROL



YIELD INCREASE PER HA: 1738 KG **\$ 2085,00**

COSTS SILAMOL PER HA (2,7 l) **\$ 351,00**

CONCLUSION:
RETURN ON INVESTMENT PER Ha = \$1734,00



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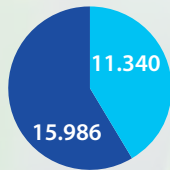


SILAMOL EFFECT ON POTATO PERFORMANCE IN ITALY

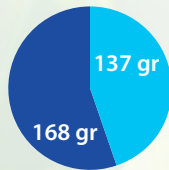
CROP: Potato, Agate
LOCATION: Italy
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 4 applications post flower
RESEARCH: Ilsa
SEASON: Spring 2008

SILAMOL

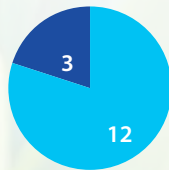
CONTROL



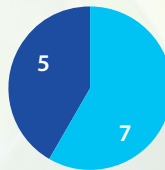
KG/Ha total yield



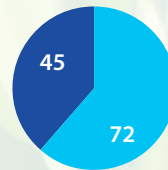
Average weight per tuber



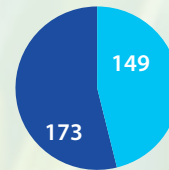
Malformations



Germinated



Size <30-50mm



Numbers of tubers per plot

Increased yield KG/Ha

+ 4646 kg

CONCLUSION:

+ 40% MORE YIELD

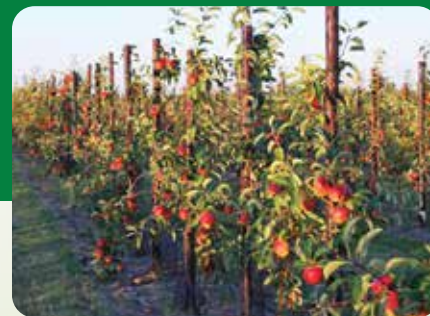
+ 22,6% HIGHER WEIGHT PER TUBER

+16,1% MORE TUBERS



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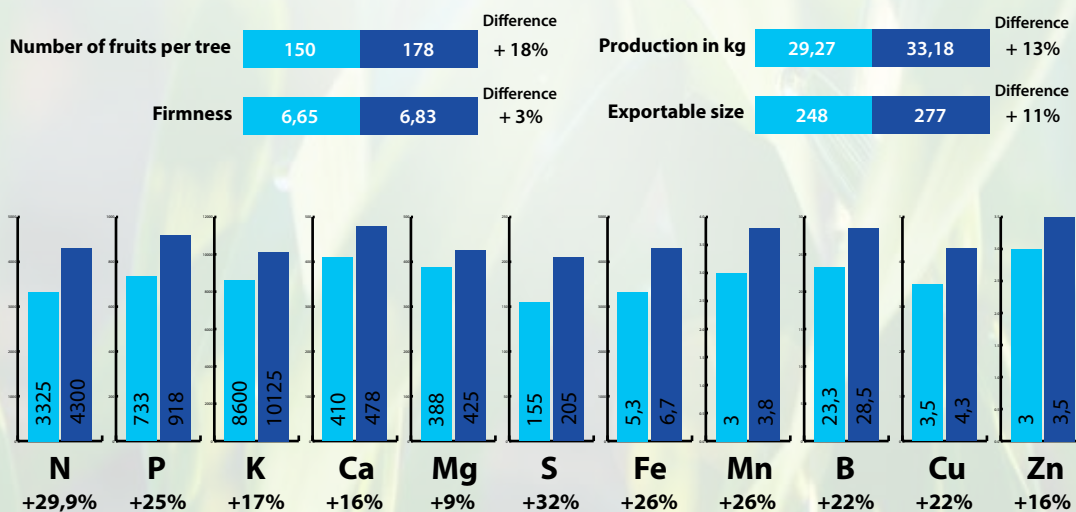


SILAMOL EFFECT ON APPLES PERFORMANCE ITALY

CROP: Gala apples
LOCATION: Italy
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 5x preflower & 5x postflower
RESEARCH: Istituto Agrario Di San Michele all' Adige
SEASON: Spring 2009

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CONTROL



CONCLUSION:
INCREASED PRODUCTION
INCREASED EXPORTABLE SIZE
IMPROVED MINERAL CONTENT

BETTER TASTE & HIGHER NUTRITIONAL VALUE

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81 Adel Drive St Catharines Ontario, Canada
L2M-3W9 1-289-668-6131 - dave@growfrontline.com



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SILAMOL EFFECT ON POWDERY MILDEW IN SOUTHERN CALIFORNIA 2014

CROP: Butternut squash
LOCATION: Orange county Southern California
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 4 applications
RESEARCH: Agro Solutions and OC Produce/Alegria Farm
SEASON: Summer 2014

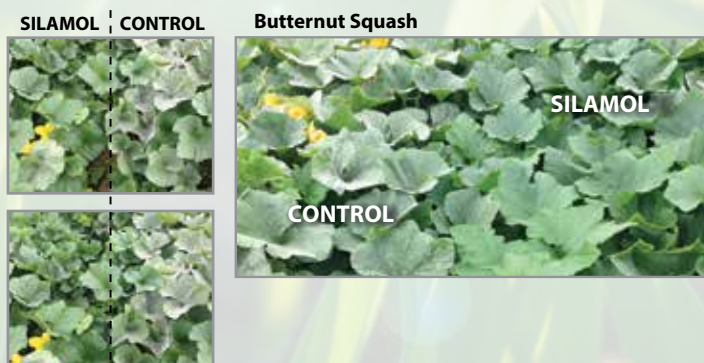
July 29 August 8 August 18 August 28 September 8
Application Application Application Application

Photos Taken

RESULTS AND COMMENTS

Measurements were taken prior to spray. Photos were taken after 4 SILAMOL applications. Fields were not treated with fungicide products.

Sample Dates	Powdery Mildew Coverage (%)	
	SILAMOL	Control
August 8	0	0
August 18	0	0
August 28	0	0
September 8	5	30
September 19	15	60



POWDERY MILDEW -45%



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SILAMOL EFFECT ON STRAWBERRIES CALIFORNIA, FALL 2012

CROP: Strawberries
LOCATION: Ventura, California
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 4 applications postflower
RESEARCH: Agro Solutions
SEASON: Fall 2012

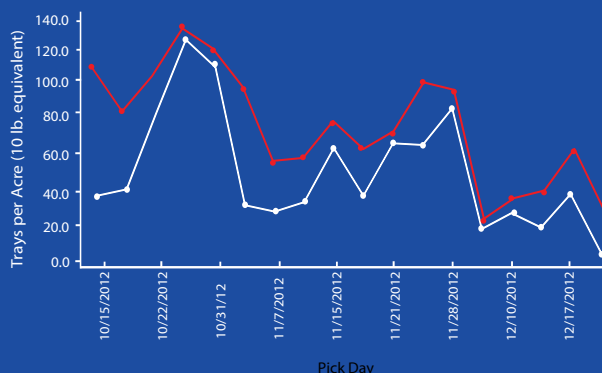
Primary benefits in strawberries are:

- Reduced powdery mildew and botrytis pressure
- Increased brix level of fruit
- Increased yield and fruit weight
- Longer shelf-life (up to 5 days)
- Early fruit maturity

SILAMOL ON STRAWBERRIES FALL 2012

Marketable production by pick day

- Agro Solutions Program
- Grower Standard



After only four weekly applications, total harvest was increased 882 flats per acre with a significant increase in the early pickings.

Grower's ROI using SILAMOL was \$7370 per Ha.

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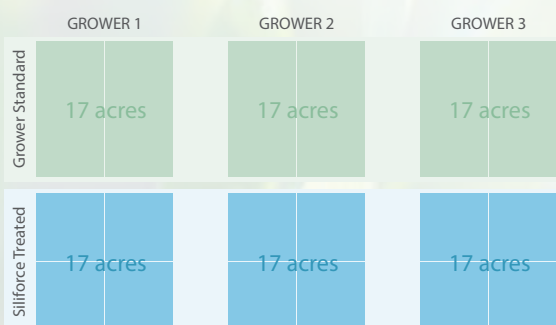
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SILAMOL EFFECT ON STRAWBERRY PERFORMANCE IN FLORIDA

CROP: Strawberries
LOCATION: Florida
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 6 applications postflower
RESEARCH: Dr. Santos
SEASON: Winter - Spring 2014



VARIETIES
 FLORIDA RADIANCE
 STRAWBERRY FESTIVAL

TRIAL DETAILS
 34 ACRES EACH, 4 REPS

RESULTS AND COMMENTS

These tables are all plot data averaged. Between growers there was no statistically significance between all grower plots.

Treatments	Plant diameter (cm)		Soluble solids (°Brix)		
	Jan 14	Feb 10	Jan 14	Feb 10	Mar 11
Control	32.2	35.7	8.2	8.3	8.1
Silamol	33.1	36.8	8.2	8.8	9.3

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

* = Statistical difference, NS = No significant difference

**BRIX INCREASE
 +15%**

**YIELD INCREASE
 +12% LBS/PLANT
 +7% BERRIES/PLANT**

**QUALITY INCREASE
 +30% CALCIUM
 +6% NITROGEN**

**NET GROWER VALUE
 +\$3630 PER HA**



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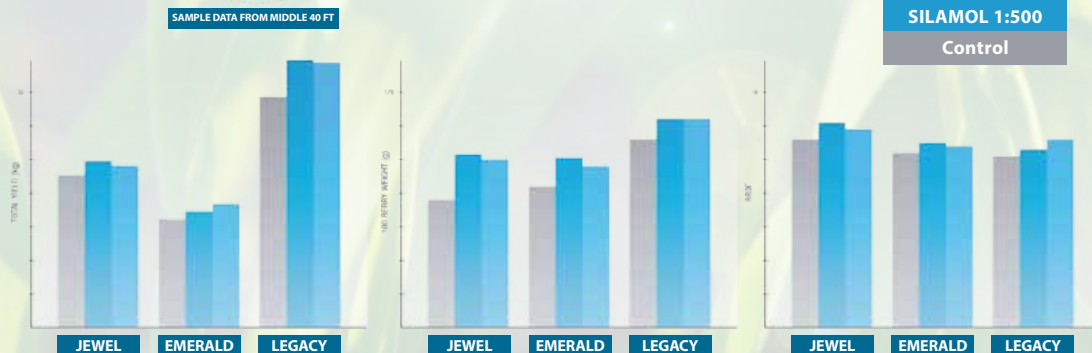
SILAMOL EFFECT ON BLUEBERRY PERFORMANCE IN CALIFORNIA 2013

CROP: Blueberry
LOCATION: Tulare county, California
PRODUCTS: Silamol
DOSAGE: 300 ml/Ha & 600 ml/Ha
PROTOCOL: 3 applications postflower
RESEARCH: Agro Solutions
SEASON: 2013

FIELD TRIAL SETUP



Nominal increase was observed in all varieties and factors, including early coloring noted on Legacy. These results were seen after only three applications post-bloom; SILAMOL effects are compounded with more applications and earlier start.



YIELD INCREASE
+7-16%

100 BERRY WEIGHT
+5-11%

BRIX INCREASE
+2-5%



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SILAMOL EFFECT ON POWDERY MILDEW IN CALIFORNIA 2014

CROP: Green beans
LOCATION: Orange county Southern California
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 4 applications
RESEARCH: Agro Solutions and OC Produce/Alegria Farm
SEASON: Summer 2014

July 29 August 8 August 18 August 28 September 8
Application Application Application Application Photos Taken

RESULTS AND COMMENTS

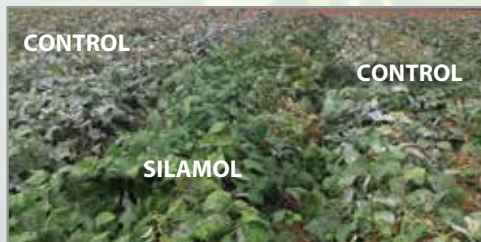
Measurements were taken prior to spray. Photos were taken after 4 SILAMOL applications of 250 ml / Ha. Fields were not treated with fungicide products.

Sample Dates	Powdery Mildew Coverage (%)	
	SILAMOL	Control
August 8	0	0
August 18	<1	5
August 28	5	25
September 8	15	80
September 19	30	90

SILAMOL | CONTROL



Green Beans



POWDERY MILDEW -60%



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SILAMOL EFFECT ON GRAPE PERFORMANCE IN CALIFORNIA 2013

CROP: Grape
LOCATION: Sonoma, California
PRODUCTS: Silamol
DOSAGE: 500 ml/Ha
PROTOCOL: 4 applications
RESEARCH: Agro Solutions
SEASON: 2013

FIELD TRIAL SETUP

Multiple growers in the Sonoma Valley applied standard programs with SILAMOL added to minimum one acre plots. Primary variety was Zinfandel with several other varieties

● Sonoma Valley

SEASON
FALL 2013

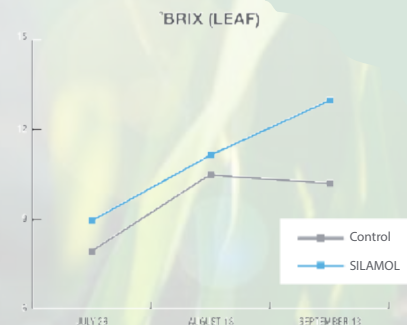
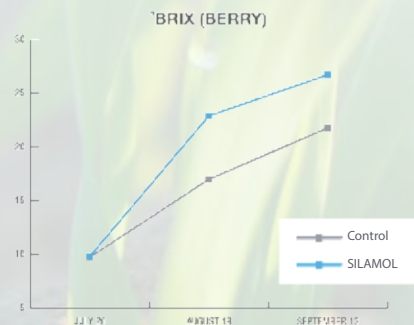
VARIETIES
ZINFANDEL (GRAPHS)
MISC OTHER VARIETIES

TRIAL DETAILS
TOTAL 30 TREATED ACRES
3-5 APPLICATIONS

RESULTS AND COMMENTS

Only Brix and pH data was officially recorded during this trial. Growers made visual observations for other factors.

BRUX INCREASE (BERRY)
+23%



↑ EARLIER RIPENING
TOTAL YIELDS

↓ MILDEW PRESSURE

↑ ↓ HIGH BRUX
HIGH ACID (LOW PH)

"We saw significant increases in brix, earlier ripening, less mildew, heavier total yields and high Brix/high acid combinations that the winemakers all love."

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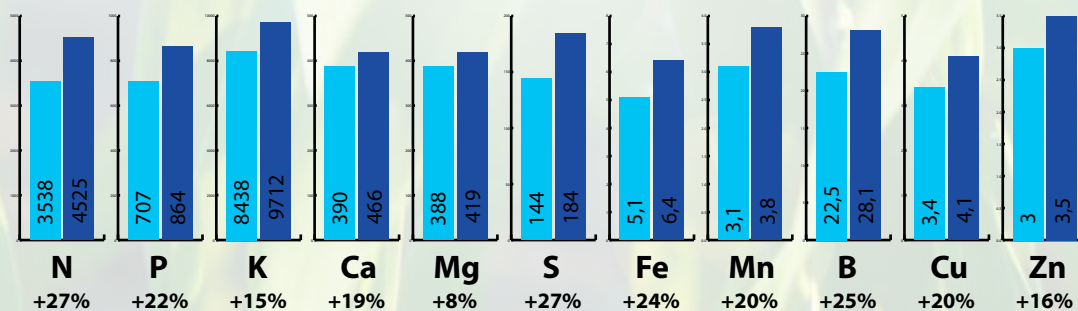
SILAMOL EFFECT ON APPLES PERFORMANCE ITALY 2009

CROP: Gala apples
LOCATION: Italy
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 5x preflower & 5x postflower
RESEARCH: Istituto Agrario Di San Michele all' Adige
SEASON: Spring 2009

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CONTROL

BETTER TASTE & HIGHER NUTRITIONAL VALUE



CONCLUSION: INCREASED PRODUCTION
INCREASED EXPORTABLE SIZE
IMPROVED MINERAL CONTENT



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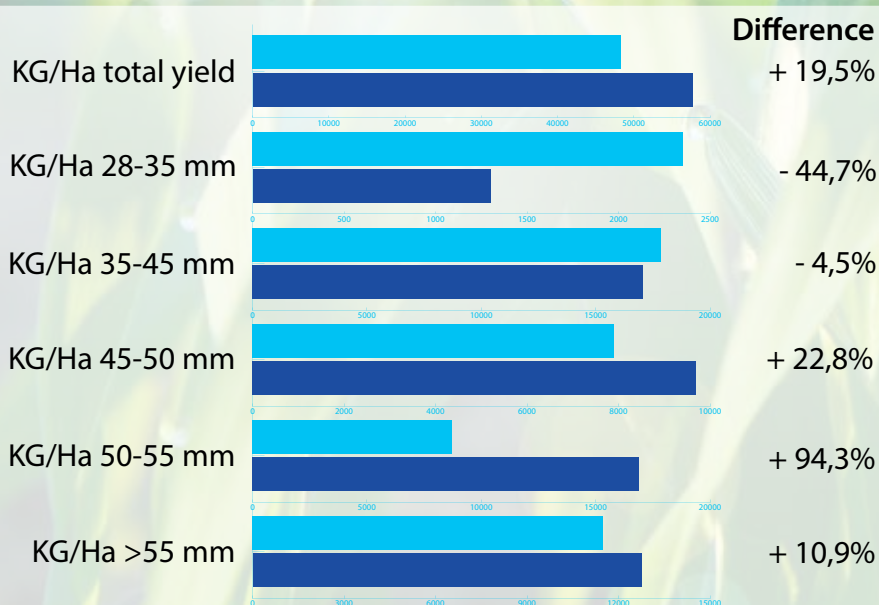


SILAMOL EFFECT ON POTATO PERFORMANCE IN FRANCE

CROP: Potato, Agate
LOCATION: France
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 8 applications postflower
RESEARCH: Jurion Company
SEASON: Spring 2010

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CONTROL



Increased yield KG/Ha + 9400 kg

CONCLUSION:
+ 19,5% more exportable yield / + 9400 kg extra production



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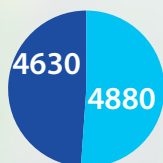


SILAMOL EFFECT ON POTATO PERFORMANCE IN FRANCE

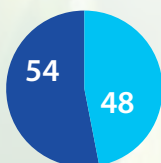
CROP: Potato, Safrane
LOCATION: France
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 8 applications
RESEARCH: Jurion Company
SEASON: Spring 2013

SILAMOL

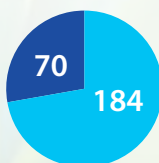
CONTROL



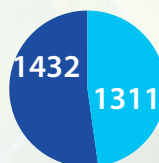
K
- 5%



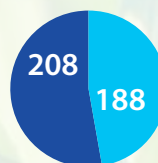
Ca
+ 13%



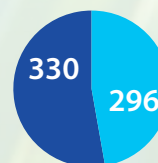
NO3
- 62%



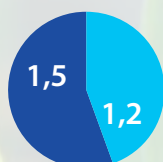
N total
+ 9%



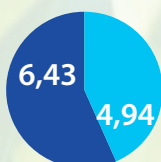
S
+ 11%



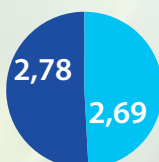
P
+ 11%



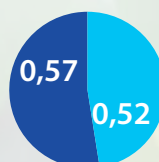
Si
+ 25%



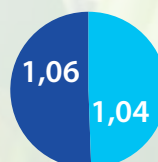
Fe
+ 30%



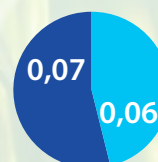
Zn
+ 3%



B
+ 10%



Cu
+ 2%



Mo
+ 17%

CONCLUSION:

- IMPROVED K/CA RATIO
 - 62% LESS NO3 CONTENT
 - INCREASED MICRO-ELEMENT UPTAKE
- RESULTS IN BETTER CONSERVATION



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SILAMOL EFFECT ON POTATO PERFORMANCE IN BELGIUM

CROP: Potato, Bintje
LOCATION: Belgium
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 8 applications postflower
RESEARCH: Redebel Institute
SEASON: Spring 2012

SILAMOL

CONTROL



CONCLUSION:

+ 11,5% more exportable yield
+ 3050 kg extra production



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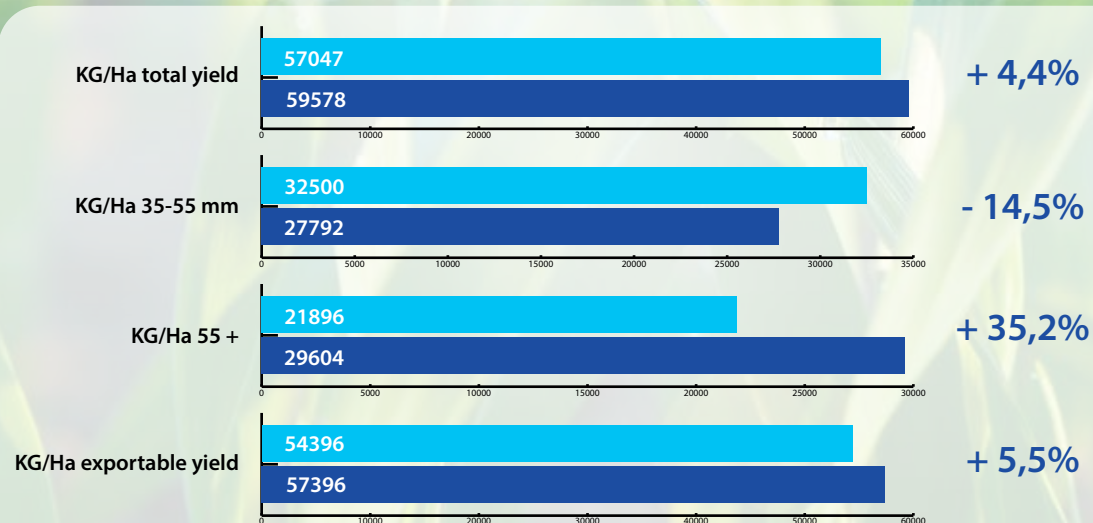


SILAMOL EFFECT ON POTATO PERFORMANCE IN BELGIUM

CROP: Potato, Bintje
LOCATION: Belgium
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 8 applications postflower
RESEARCH: Redebel Institute
SEASON: Spring 2013

SILAMOL

CONTROL



CONCLUSION:

+ 5,5% more exportable yield
+ 3000 kg extra production



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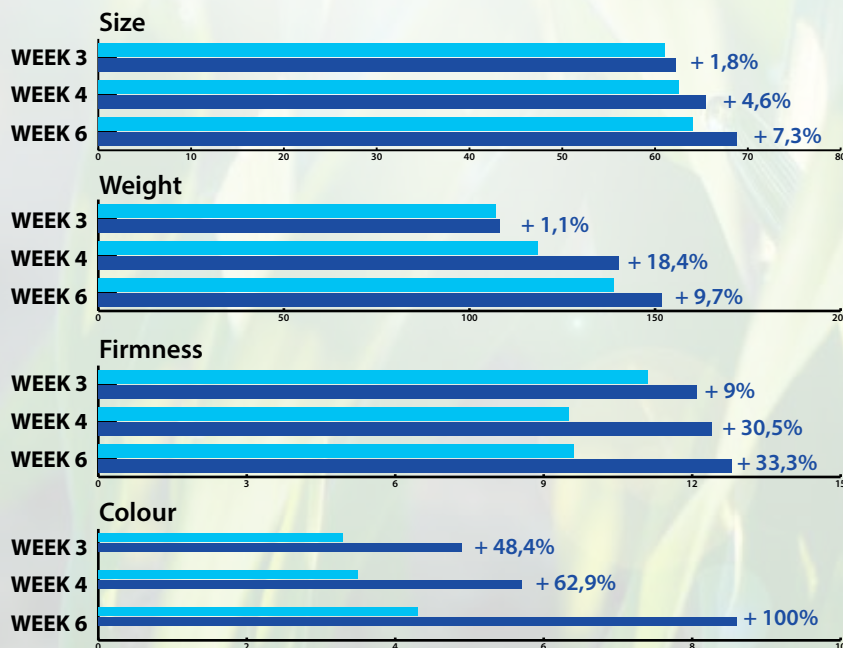


SILAMOL EFFECT ON APPLES PERFORMANCE SOUTH AFRICA 2004

CROP: Gala apples
LOCATION: South Africa
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 6x preflower & 4x postflower
RESEARCH: Bemlab
SEASON: Spring 2004

SILAMOL

CONTROL



CONCLUSION:

Improved sizing - Improved weight per fruit - Improved firmness



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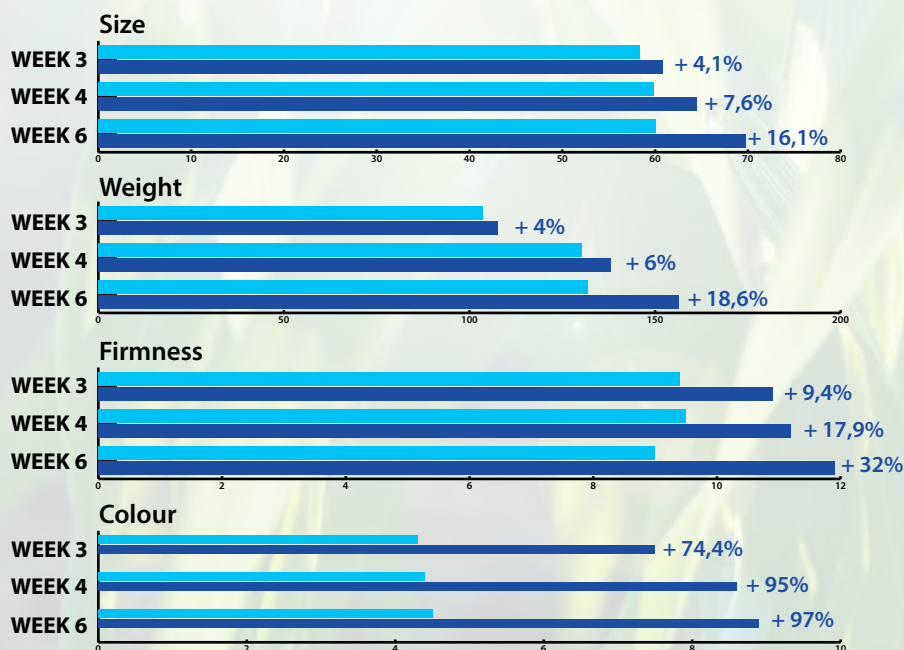


SILAMOL EFFECT ON APPLES PERFORMANCE SOUTH AFRICA 2004

CROP: Royal Gala apples
LOCATION: South Africa
PRODUCTS: Silamol
DOSAGE: 250 ml/Ha
PROTOCOL: 6x preflower & 4x postflower
RESEARCH: Bemlab
SEASON: Spring 2002

SILAMOL

CONTROL



CONCLUSION:

Improved sizing - Improved weight per fruit - Improved firmness



SILAMOL

Silicon-based Plant Supplement



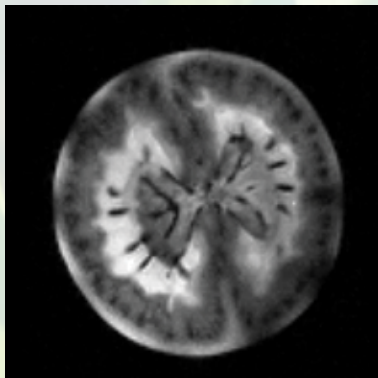
SILAMOL EFFECT ON SHELF LIFE TOMATOES 2009

CROP: Tomato
LOCATION: Italy
PRODUCTS: Silamol
RESEARCH: CRA CNR Italy 2009

MRI scan shows:

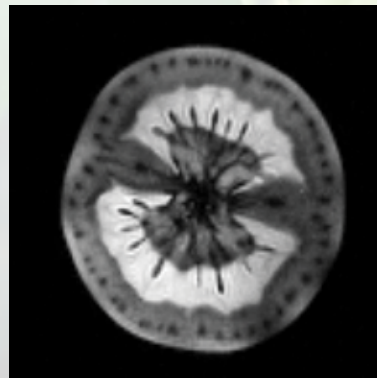
- Improved internal structure
- Improved interactions between cell walls in water

CONTROL



Decreased quality
Decreased freshness

SILAMOL

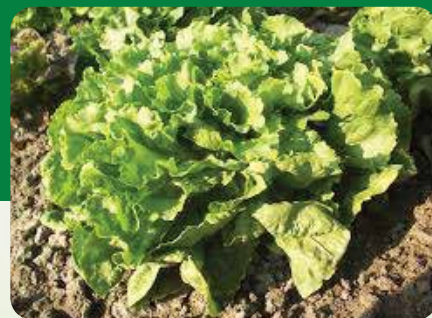


Longer shelf life
Improved freshness



SILAMOL

Silicon-based Plant Supplement

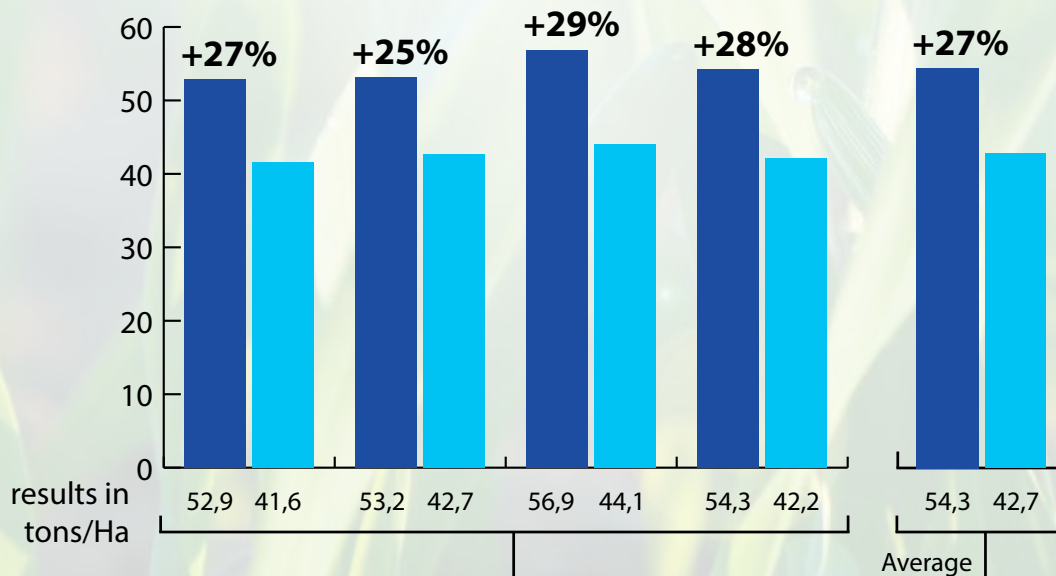


SILAMOL EFFECT ON CHICORY PERFORMANCE BELGIUM 2003

CROP: Chicory
LOCATION: Belgium
PRODUCTS: Silamol
DOSAGE: 300 ml/Ha
PROTOCOL: 2 applications
RESEARCH: ORAFIT
SEASON: July 2003

SILAMOL

CONTROL



HIGHER YIELD: +27,1%



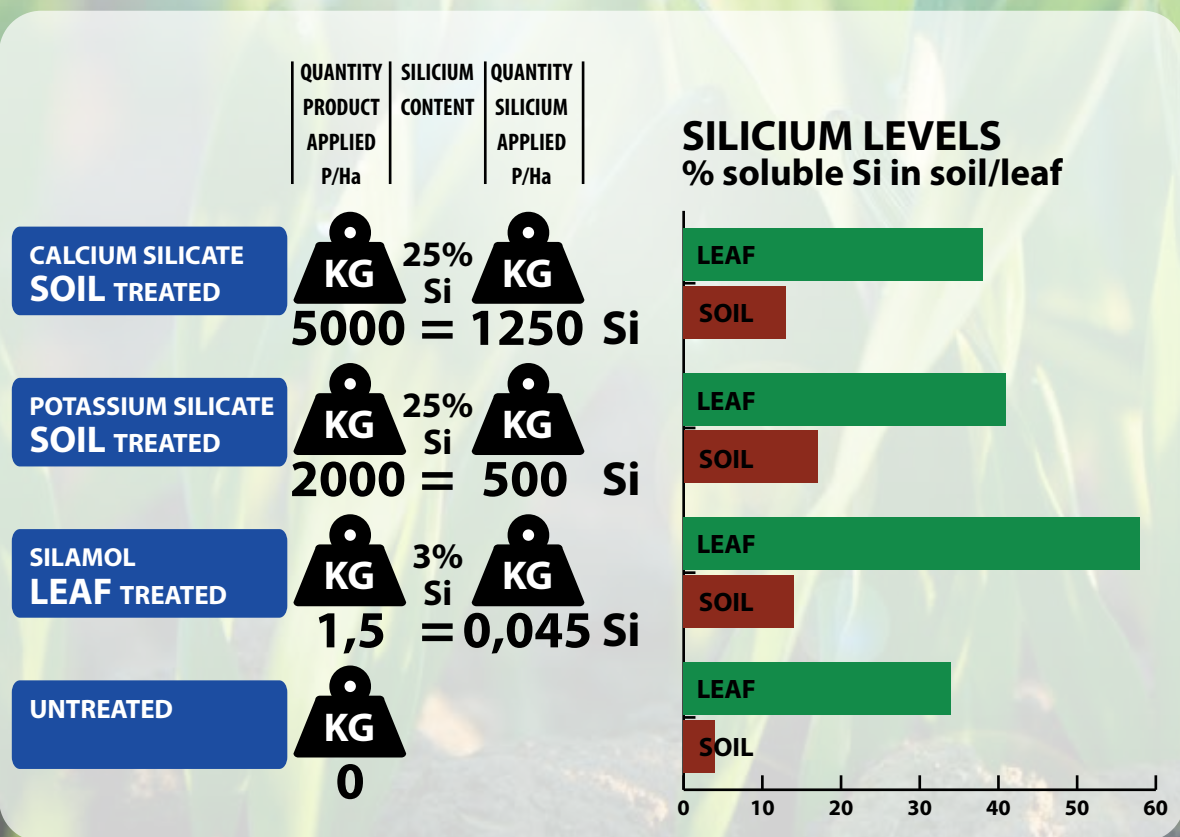
SILAMOL

Silicon-based Plant Supplement



UPTAKE AND ACCUMULATION OF SILICIUM IN TURFGRASS

CROP: Turfgrass
LOCATION: The Netherlands
PRODUCTS: Silamol, Calcium silicate, Potassium silicate
RESEARCH: DSM research 2008
SUBJECT: Bio availability of Silicon



**CONCLUSION: HIGHEST SILICIUM CONTENT IN PLANT WITH LOWEST DOSAGE.
AT LEAST 1000 TIMES LESS PRODUCT NEEDED**

