

# SILAMOL

Silicon-based Plant Supplement

## 100% Bio Available Silicon for Turf

Grasses are silicon accumulators and in a healthy condition contain 2 to 3 %  $\text{SiO}_2$ . On most greens the amount of bioavailable silicon is insufficient. Supply of silicon is therefore essential. Most forms of silicon (such as calcium silicate and potassium silicate) are not bioavailable for the plant.

### The Advantages of using Silamol

- 100 % Bioavailable silicon
- Improves the resistance against drought and heat stress
- Increases the plants resistance to Biotic Stress
- Increases the tolerance against salt and heavy metals
- Creates a stronger physical barrier against Biting Insects
- Improves the photosynthesis also in darker circumstances
- Facilitates the take up of calcium, potassium and other nutrients
- Creates harder turf for a better mowing result
- Gives a better ball- and green speed
- Increases the oxygen delivery to the roots

### Physical properties

Clear blue-green liquid	
Specific density	1,13 g/l
pH (0,1% solution in water )	5 - 6,5
EC (0,1% solution in water)	0,47 mS
Specific gravity	1,13 g/cm <sup>3</sup>

### Application

- As foliar fertilizer to increase the natural resistance of turf against biotic and a-biotic stress.
- Preventive: 250-500 ml/ha - in min. 250 l. water. In the growing season in intervals of 14 - 28 days.
- Fill the spraying tank, add Silamol, final solution requires a pH between 5 - 6,5.
- Store in a well ventilated area away from sunlight, keep container closed.

### Advised period of use:

Turf growing season

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



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The concept gives an ecological approach to practical management of turf grass.

Diseases are increasingly hard to tackle with chemical products only. **Silamol** was developed to Help Plants Help Themselves. Increasing the Natural resistance of Turf Grass to Biotic and A-Biotic Stress. Making them less vulnerable to different turf grass diseases.

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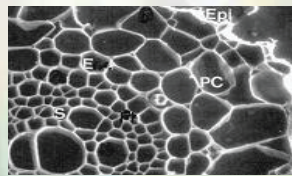
### Advantages

- + Harder turf
- + Better ball roll (trueness and stimp)
- + Higher resistance to fungal diseases
- + Better protection against insect bites
- + Higher tolerance to drought

### The differences

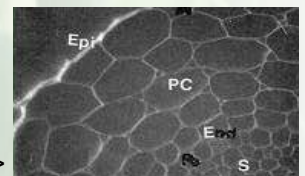
After Oxygen, Silicon is the 2nd element of the earth crust, yet it is hardly available to the plant. Potassium silicate or calcium silicate are required in huge quantities, to be effective. Silamol is already effective in very small amounts and is easily taken up by turf.

### Physical role of Silicon in plant tissue.



It strengthens cell walls both by a silicon layer as well as by additional calcium transport.

< Left: Silamol treated  
Right: Untreated >



### Silamol

On greens, turf grows on substrate, that lacks biological balance and buffer. Silicon is no longer made available though abundant biological processes. Because of that the grass cannot protect itself against adverse conditions, such as heat, drought, fungi, insects, heavy metals and salt.

### Silamol

Various trials in many different countries on 3 different continents have demonstrated the efficiency of **Silamol** on horticultural fruit, vegetable, cereal and ornamental crops. Several demonstration trials in Europe show a similar effectiveness on golf greens. Below photo's taken at one of the NGF golf courses, just after a light sand dressing. The photo's were taken on the 15th of November 2011 The untreated greens were heavily infested by *Microdochium nivale*. On the treated greens the infestation was very limited and the colour was darker.

Left standard program + Silamol



Right standard program (without fungicides)



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