



SICOGREEN®-L SILICIUM NPK 10.4.9 + 0.9% Silicium

Combined action of NPK, Silicium and basic pH

02/2015

1/ PRODUCT SPECIFICATIONS & ANALYSIS

Total Nitrogen (**N**) 10 % (122 g/l)

of which 10 % Ureic N (N-NH₂)

Phosphorus Pentoxide (P_2O_5) 4 % soluble in water (49 g/l)

Potassium Oxide (**K₂O**) 9 % total soluble in water, poor in chlorine (110 g/l)

Silicium (**Si**) 0.9 % soluble in water (11 g/l)

2/ ADVANTAGES: The combined action of NPK, Silicium and basic pH gives SICOGREEN®-L SILICIUM the following special characteristics :

* NUTRITIONAL input (NPK):

The efficiency of a foliar NPK is well established!

Elements as nitrogen, phosphorus, potassium are absorbed through the leaves and directly assimilated by the plant. The NPK input of SICOGREEN[®]-L SILICIUM, combined with the effects of Silicium and pH, **ensures a good regulation of the mineral balance of the plant.**

* QUALITATIVE action (Silicium):

Even if silicium is not seen as an esssential element for most of plants, it is generally considered as beneficial (Epstein, 1994). Sprayed on leaves, it has a positive impact on the epiderm. Its presence on the sides of cells improves the behavior of the plant in case of stress:

- => less wilting in situation of water deficit
- => better conservation of fruits
- => skin quality: bruising reduction, better protection etc.

* LOCALIZED distribution (pH):

- SICOGREEN®-L SILICIUM has a pH of 12 in line with the pH of the phloem. The sprayed product is thus transported in the plant through the phloem sap. This substance supplies organic molecules to cells which are in need, meaning the young organs in development as well as storing organs (fruits and tubers).
- $SICOGREEN^{\otimes}$ -L SILICIUM allows a more efficient redistribution of nutritive elements (brought and absorbed) to the active cells and stimulates the photosynthesis.

SICOGREEN®-L SILICIUM = NUTRITIONAL input + QUALITATIVE action + LOCALIZED distribution.

3/ RECOMMENDED APPLICATIONS & DOSING INSTRUCTIONS

· Flax : 2 x 4 l/ha, at stages 5 and 10 cm

· Nuts : 3 x 4 l/ha, at stage of dried stigma's (repeat every 15 days)

Orchards
: 3 x 4 l/ha, at petals fall (repeat every 15 days)
Potato
: 3 x 4 l/ha, at stage "nuts" (repeat every 15 days)
· Vine
: 3 x 4 l/ha, at fruit setting (repeat every 15 days)







4/ EXAMPLE OF COMPARATIVE TRIAL: Foliar NPK 10.4.8 + TE against SICOGREEN-L SILICIUM

Trial on early cherry tree (La Tapy, France, 2012)

5 applications on stages :

- 1) leaves
- 2) end flowering
- 3) beginning of growth
- 4) growth
- 5) fruits at 15mm.

YIELDS	Gross production (kg/ha)	Marketable fruits (%)	Marketable net production (kg/ha)	Gross income* (EUR/ha)	Net income** (EUR/ha)
Control group	4895	79.5	3875	11625	9214
10.4.8 + TE	5053 (+ 3.2%)	79	4099 (+ 5.7%)	12297	9808 (+ 6.5%)
SICOGREEN®-L SILICIUM	5095 (+ 4.1%)	87 (+ 9%)	4519 (+ 16.6%)	13557	11047 (+ 20%)

considering selling price at 3 Eur/kg

Trials on SICOGREEN®-L SILICIUM are covering several crops (apple, nut, vine, flax and potato) during 6 years:

- => 80% of trials are showing an agronomical result which is higher than the control group
- => most of them are giving a significative economical benefit for the producer.

5/ PACKINGS

- 10 lt cans, 500 lt per pallet, 20 pallets = 10,000 lt/20' container.
- 200 lt drums x 4 per pallet, 10 pallets = 8,000 lt/20' container.
- 1000 lt IBC, 10,000 lt/20' container.



^{**} considering treatments and additional costs of collection