SOIL MICROBIOTA



SILICONMICROBES

EFFICACY EVALUATION

RESULTS OF USING **SILICON** SOLUBILIZING BIOSTIMULANT.

SiliconMicrobes, property of Microendo Inc., is a unique and patented biofertilizer in the market, based on the activity of the fungus *Aspergillus terreus*. These microorganisms naturally live in the soil near plant roots, where they establish a mutually beneficial relationship (symbiosis) with the roots. The fungal cells in **SiliconMicrobes** have the ability to convert insoluble nutrients into soluble and assimilable forms for the plant. **SiliconMicrobes** helps to access the silicon present in the soil that is not available in a biodisponible form for the plant, thereby reducing the need for silicon fertilization.



LAND INFORMATION

Location HILLSIDE FARM Suesca, vereda Guita Colombia

Size

1 complete crop bed

Analysis design

- The trial was conducted on the standard export-type Rosa variety Brighton, which has been treated with a solid silicon source for quite some time due to its susceptibility to downy mildew attacks. This treatment significantly reduces the incidence level almost entirely.
- A dosage of 20 ml was applied over a period of 20 days.
- Foliar samples were analyzed before applying the **SiliconMicrobes** product, and these were compared with a foliar sample taken one week after the third application.

EFFICACY EVALUATION

Three applications of the product were made using a drench method without an adjuvant, directed at the base of the plants. A Maruyama machine was used for foliar spraying, with the nozzles removed. The first two applications were made at intervals of 8 days between each, followed by a 15-day interval for the third application, in a standard export-type Rosa variety Brighton crop.

RESULTS

Table 1 presents the comparison of the silicon percentage in leaves before starting the treatment with SiliconMicrobes and the silicon percentage in leaves 8 days after the last application of SiliconMicrobes. As we can see, there is a 24.4% increase in silicon uptake after using the product.



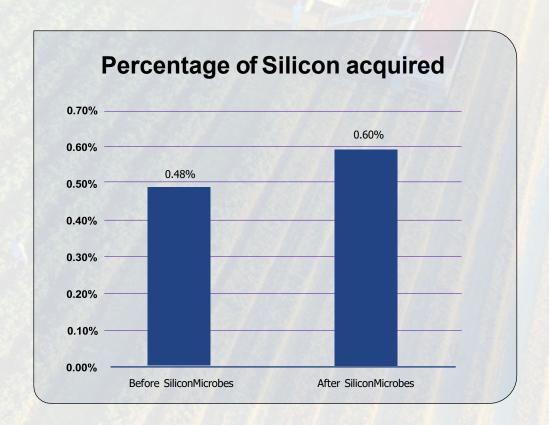
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Treatment	% of silicon
Before using SiliconMicrobes	0.479%
After using SiliconMicrobes	0.596%

Table 1. Comparative table of Silicon percentage acquired before and after using SiliconMicrobes.



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