SweeterSoils

Bactivate BioBoost+

WHAT IS BACTIVATE BIOBOOST+?

Bactivate BioBoost+ is an organic bio stimulant derived from a blend of molasses that has undergone an extensive processing regime to improve its efficacy then enriched with calcium. It can:

1. replenish much needed nutrients in the soil;
2. feed plant root development stimulating plant growth;
3. bind the soil, reduce soil erosion; and
4. Is hydrophilic, allowing readily absorbing moisture.

A recognised bio-stimulant of plant growth is the salts in levulinic acid, which is a key ingredient in Bactivate BioBoost+. Research shows that humic substances are also effective bio-stimulants. They maintain soil stability and increase the water holding capacity of soil; they also act as a cation exchange system, improving soil content and fertility.
Bactivate BioBoost+ primarily contains salts of carbonic acids such as saccharinic, aldonic and formic acids, which function as fertilisers and stimulate root development.
The hydroscopic properties of the carbonic acid salts in Bactivate BioBoost+ increase water absorption and retention as well as encourage the biological life of the soil and the production of beneficial bacteria. In turn this allows bacteria to produce substantial amounts of carbon dioxide (CO_2), which expands within the soil, breaking down clods and improving soil structure.
By stimulating the microbial processes in the soil, it aids in the decomposition of organic materials, which allow nutrients to be released back into the soil. This process allows the soil to be better aerated and receptive to supporting plant growth, sub sequentially improving water percolation, drainage and vitality within the soil.
The salts of saccharinic acids also prove to have binding properties. When Bactivate BioBoost+ is sprayed on top of the soil, a soil layer is formed by binding soil particles together, protecting it against wind erosion.

The benefits of Bactivate BioBoost+ extend beyond the soil. As an organic bio-stimulant it is very effective when used on the foliage of growing plants. When applied at certain stages of plant development, the micronutrients are found to significantly improve growth and health by increasing photosynthesis and the plants ability to metabolise carbohydrates, proteins and other growth compounds contained in the leaves and transfers them back to the root system.

Head Office: 120 Mourilyan Road, Innisfail, QLD 4860 PO Box 51, Innisfail, QLD, 4860
P: 07 4061 6655 **F:** 07 4061 6699
E: admin@sweetersoils.com **W:** www.sweetersoils.com.au Director **M:** 0408 184 672 (Paul)

From here these compounds move out into the rhizosphere (the area surrounding the root filaments), feeding bacteria, algae, fungi and protozoa, which in turn can produce beneficial enzymes, organics acids, antibiotics, growth hormones and other nutrients. These growth stimulants are then re-absorbed by the roots and transported back through the plants' circulatory systems, producing healthier plants.

ANALYSIS AND TRACE ELEMENT CONTENT

Total Nitrogen	**N**	**%**	**0.34**
Total Phosphorus	**P**	**%**	**0.21**
Total Potassium	**K**	**%**	**1.95**
Total Sulphur	**S**	**%**	**0.22**
Total Calcium	**Ca**	**%**	**4.95**
Total Magnesium	**Mg**	**%**	**0.24**
Total Sodium	**Na**	**%**	**0.14**
Total Iron	**Fe**	**ppm**	**54**
Total Manganese	**Mn**	**ppm**	**14**
Total Zinc	**Zn**	**ppm**	**3.9**
Total Copper	**Cu**	**ppm**	**1.7**
Total Cobalt	**Co**	**ppm**	**0.76**
Total Boron	**B**	**ppm**	**2.62**
Total Molybdenum	**Mo**	**ppm**	**0.41**
pH		**8.9**	
Electrical Conductivity		**µS/cm**	**17550**
Total Organic Carbon OC		**%**	**17.93**
Carbon / Nitrogen Ratio		**C/N**	**52.73**

APPLICATION RATE

Bactivate BioBoost+ is not a generic plant food or agricultural chemical.
The application method and rate will depend on the crop and soil, which need to be inspected prior to a recommendation being made. A protocol for the application of Bactivate BioBoost+ will often involve other aspects, such as biosecurity measures and the use of other products in the Bactivate family in conjunction with Bactivate BioBoost+ itself.
Contact your Bactivate distributor for a protocol for your specific needs.

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