



**PRODUCT INFO
& DATASHEET**

SICOBIO® RANGE

Product code: S-NT21
HS Code: 3101 00 00

SICOBIO® NITRO (2023)

Feeds both plant and soil life with this highly concentrated liquid nitrogen fertiliser
Fully made from plant residues.

A great, sustainable alternative to chemical nitrogen fertilisers

- Made in E.U. -

01/2023

DIRECTLY AVAILABLE NITROGEN IN ORGANIC FORM & SUITABLE FOR IRRIGATION AND FOLIAR APPLICATION

FEEDS SOIL LIFE & REDUCES SOIL STRESS & IMPROVES SOIL STRUCTURE

1. PRODUCT DESCRIPTION & PROPERTIES

SICOBIO NITRO is a nitrogen fertiliser in organic form that feeds both plant and soil life.

The nitrogen in SICOBIO NITRO consists mainly of peptides and amino acids, substances that are essential for the growth of the plant. The amino acids in SICOBIO NITRO are made from plant residue, which means they can be readily used by plants. Despite the high organic matter content, the solution is clear and therefore suitable for use in irrigation systems and drip lines. In addition, SICOBIO NITRO is suitable for foliar fertilisation, for example when the plant experiences nitrogen deficiency.

Plants can absorb several forms of nitrogen, of which the plant uses the least amount of energy in the uptake of amino acids: the plant doesn't have to produce these amino acids itself from nitrate or ammonium. This can also help the plant in stress conditions, because the production of amino acids slows down in high stress situations. Plants need carbon to grow, which can be supplied by the amino acids, instead of taking it from the organic matter in the soil. The amino acids also feed the bacteria in the soil, which is important for good soil quality. Bacteria convert the amino acids into ammonium and nitrate, so that all the necessary nitrogen forms are present for the plant. An important advantage of fertilizing with SICOBIO NITRO is that amino acids do not wash out easily: they remain present in the soil to be absorbed when necessary.

2. PRODUCT SPECIFICATIONS & CERTIFICATE OF ANALYSIS

Chemical Analysis

	% w/w*
Total Nitrogen (N)**	10 % - 0.6/+1
Organic Nitrogen from vegetal origin	10 %
Organic Matter	51 % +/- 3.5
Dry Matter	55 % +/- 2
C _{org} / N _{org}	2.9

Physical Properties

Appearance	Liquid
Colour	Brown
pH	5 – 6.5
Density (kg/l)	1.2 – 1.4

* Nutrients are guaranteed to be within the specifications, but do not account for measurement inaccuracies and lab method tolerances.

** Organic Nitrogen (N_{org}) from vegetal origin

Content by Mass

Total Amino Acids	31.6 %
Free Amino Acids	28.1 %
Fulvic Acids	7.9 %
Humic Acids	5.2 %

Contaminants

Coliforms	< 10 cfu/g
Salmonella	0

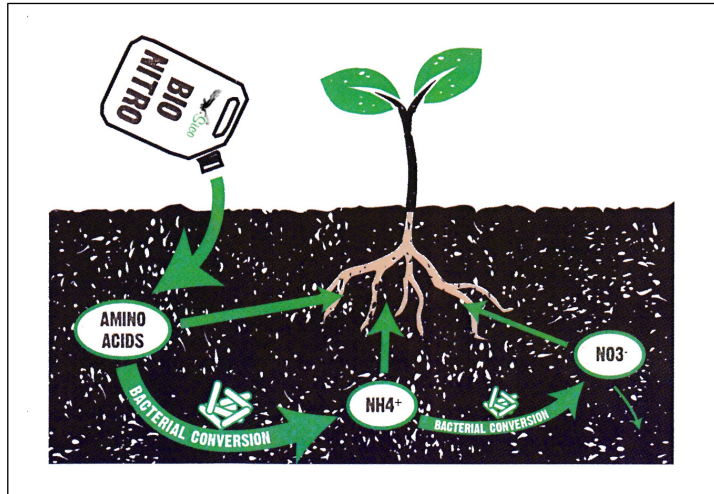
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Aminogram

Aspartic acid	11.4 %
Glutamic acid	18.2 %
Alanine	6.21 %
Arginine	3.19 %
Cystine	< 0.01 %
Phenylalanine	2.91 %
Glycine	7.42 %
Histidine	4.85 %
Isoleucine	6.11 %
Leucine	3.58 %
Lysine	3.27 %
Methionine	< 0.01 %
Proline	2.59 %
Serine	8.11 %
Tyrosine	10.1 %
Threonine	9.02 %
Valine	2.96 %



3. ADVANTAGES & BENEFITS

- plant based
- high organic matter content
- feeds soil life
- improves soil structure and soil properties
- vinasse-free
- high content of amino acids, and humic and fulvic acids
- high solubility: suitable for irrigation systems and foliar spray

4. USAGE & RECOMMENATIONS

*** APPLICATION**

SICOBIO NITRO is suitable for use on all crops through foliar application and irrigation. When used as primary fertilizer, the application is equal to mineral fertilizers. It is advised to always have an expert make a fertilization plan and to start with a test application. The exact application depends on the soil conditions and the crop. No guarantees can be given in the event of incorrect use. Always carry out a test mixing and test application when combining with other products! Always thoroughly stir the product before use!

Give foliar feed early in the morning or late in the evening to enable the plants to make full use of the extra nutrients. Avoid spraying during midday hours, especially when temperatures are high, as there is a high risk of leaf burn and toxicity to the foliage, flowers and fruits of the plants. Use a max of 1000 ltrs of foliar spraying solution per ha.

*** General recommended guidelines**

Application		Dose	Guideline
Irrigation	Agriculture	5 – 10 ml/litre	weekly
	Horticulture	2 – 4 ml/litre (8 – 16 mmol)	each watering
Foliar feed		10 – 15 litre/ha	4 – 8 applications

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Crop specific foliar spray applications

CROP	APPLICATION
Vegetables	Start for 5 to 6 weeks during development of the first roots. Use weekly during vegetative development, fruit formation and hydric stress.
Cotton	First 5 weeks after planting. Weekly applications from just before bloom until the last bud has developed.
Corn	Start for 5 to 6 weeks during development of the first roots. 3-4 applications every 7-15 days from bloom until the last bud has developed.
Citrus and fruit trees	Start when the first leaves or buds form. Repeat every 7-15 days.
Grapevine and olive	Every 7-15 days from bloom until fruit development.
Ornamental	Start for 5-6 weeks during development of the first roots. Apply weekly, especially during bud formation.
Potato	During development of tubers, especially in sandy soils and at the end of the vegetative stage.

5. DIRECTIONS FOR USE

*** TANK FILLING**

The spray tank should be filled with half of the required amount of water. Shake or stir the container. Measure the required amount of fertiliser and add to the tank whilst maintaining constant stirring. Add remaining water to reach correct dilution. Spray.

- TANK MIXING COMPATIBILITY

SICOBIO NITRO is compatible with most, but not all, pesticides, growth regulators and and micro-nutrients with regard to physical tank mixing and biological effects on the crop. However Sap International Corporation cannot accept any liability for any loss or damage as not all pesticides have been tested and because the efficacy of any mix will depend on, among other factors, the pesticide concerned, crop conditions, growth stage, weather and volumes of water used.

*** CLEANING**

Regularly flush the system with an approved oxidising agent product to prevent biofilm formation in the system.

*** REMARKS**

As SICOBIO NITRO is an organic material, it has a lower EC (Electrical Conductivity) than conventional, inorganic fertilisers. The EC depends on the breakdown of organic material into inorganic constituents.

6. STORAGE & SHELF LIFE

- Store in original container with lid tightly closed
- Store in frost free conditions
- Store in a dark and dry environment with stable temperature between 10- 25° C.
- Shelf life: 1.5 – 2 years
- In situations of prolonged storage, there may be slight settling of the nutrient particles. This is reversible on shaking. SHAKE OR STIR BEFORE USE !

7. SAFETY PRECAUTIONS

- for professional use only
- gloves and a face shield should be worn when handling a concentration of fertiliser

8. WARRANTY AND LIABILITY

The recommendations and data provided are based on thorough studies and experiments. We guarantee the quality of the product we provide. We cannot accept any further liability, for example for reduced efficacy or damage due to use, as control is impossible. You are responsible for following the instructions on the safet datasheet in order to prevent harm to humans, plants and animals.

9. PACKING

can: 5 ltr, 10 ltr, 20 ltr - drum: 220 ltr - IBC 1000 ltr

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