

NitroStim

Microbial Growth Biostimulant

The alternative way for the fertilization of cotton



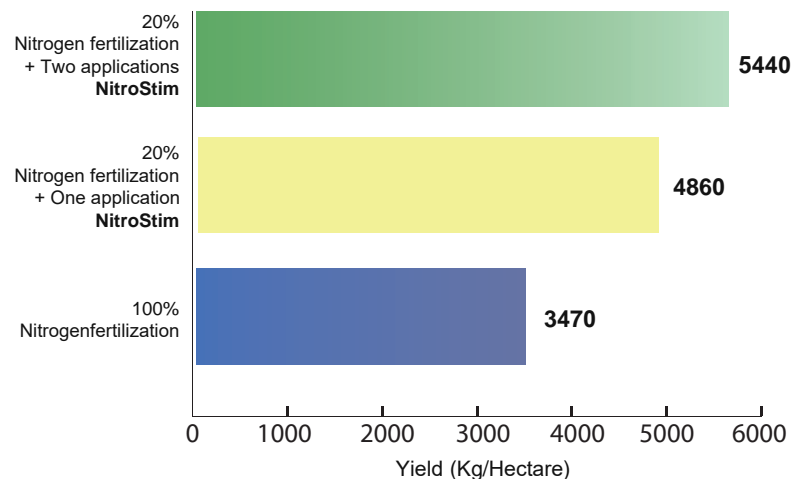
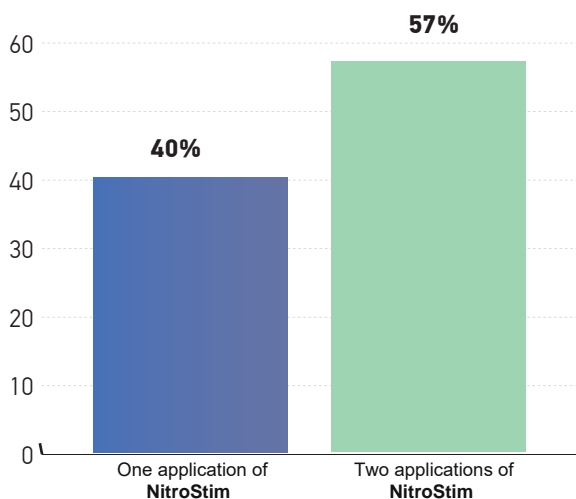
After a systematic scientific research by **HUMOFERT** in cooperation with the Agricultural University of Athens, we can now suggest an alternative fertilization way for cotton by **HUMOFERT**, based on the innovative biotechnology product **NitroStim**.

With **just one** foliar application of **NitroStim** at the stage of 15-20 cm the following benefits have been observed :

- Reduction of Nitrogen fertilization **by 80%**
- Yield increase **by 40%**
- Impressive weed reduction
- Minimization of the environmental footprint of the cultivation

With a **second** foliar application of **NitroStim** fifteen days after the first one, even better results were observed:

- Yield increase **by 57%**



The application of **NitroStim** along with just 20% of the total Nitrogen fertilization greatly increased the yield, in comparison with the cotton where there was 100% Nitrogen fertilization without **NitroStim**

The following results were observed after field trials on cotton cultivation (*Gossypium hirsutum*) done under the supervision of professors at the Agricultural University of Athens.

LOCATION

Neo Monastiri, Phthiotis

SPECIES

Cotton (*Gossypium hirsutum*)

YEAR

2021-2022

TREATMENTS

Control: application of the typical dosage of Nitrogen fertilizers (100% N) along with chemical herbicides

Applications:

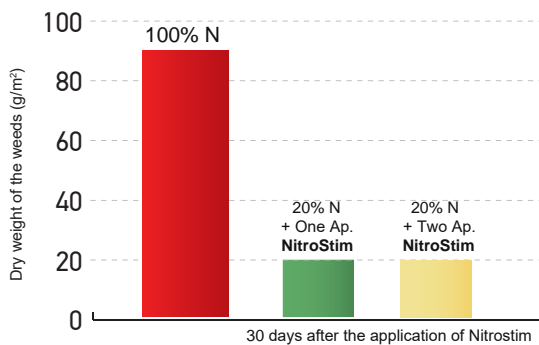
One application of the biostimulant NitroStim at a rate of 5L per Hectare, along with only 20% of the usual Nitrogen fertilization (20%N + Nitrostim) and chemical herbicides, when the plants had a height of approximately 15-20 cm.

Two applications of the biostimulant NitroStim along with 20% of the usual total dosage of Nitrogen (20%N + Nitrostim) along with chemical herbicide. The first application was done with a dosage of 5L per Hectare, when plants were approximately 15-20 cm high. The second application was done at a rate of 5L per Hectare, fifteen days after the first one.

Weed reduction

A great achievement was the weed control, which was a result of:

- The continuous and stable growth of the crop, due to **NitroStim**
- Reduced Nitrogen fertilization, which limits the growth of the weeds



The measurements took place 30 days after the application of **NitroStim**. The reduction of weeds reached the impressive percentage of 79%, when **Nitrostim** was applied.

APPLICATION METHOD

First Application: Growth stage at 15-20 cm.

Foliar spraying of **Nitrostim** at a rate of 5L per Hectare

Second Application: Foliar spraying of **Nitrostim** at a rate of 5L per Hectare 15 days after the first application



The impressive increase of the yield is a result of the activity of the beneficial endophytic Nitrogen fixing bacteria contained in **NitroStim** which:

- Bind atmospheric Nitrogen in the leaves and transform it to an assimilable form
- Produce plant hormones
- Increase the nutrient uptake from the leaves

NitroStim:

- Brings high yield with low cost
- Limits the use of Nitrogen fertilizers
- Reduces weeds
- Contributes to the reduction of Nitrate pollution of the environment caused by the extensive application of Nitrogen fertilizers

Produced by

HUMOFERT



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