






cracintech  
**NITROCRACIN**

## Microbiological biostimulant for foliar application

-  Stages of cultivation with high demand for nitrogen
-  Reduction of the use of chemical fertilizers
-  Increased resistance to stressors such as drought and salinity



**4**

PGPB species



**SL**

Translucent liquid



**Shelf life**

1 year



**5L**

Container



**Registered**

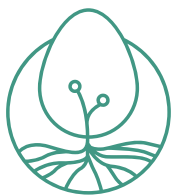
as a fertilizer for  
microorganisms  
**Mutual recognition.**



**Organic**

Certified  
by CERES  
**90305-AK**





# cracintech NITROCRACIN

**Nitrocracin** is the ideal alternative for farmers looking to **maximize their production by reducing dependence on chemical fertilizers**. Its ability to **fix atmospheric nitrogen and strengthen crop resistance** makes it a key ally for sustainable agriculture.

## Composition

***Azospirillum lipoferum*:**

**3 x 10<sup>11</sup> UFC**

***Pseudomonas putida*:**

**3 x 10<sup>11</sup> UFC**

***Herbaspirillum seropedicae*:**

**3 x 10<sup>11</sup> UFC**

***Paenibacillus durus*:**

**3 x 10<sup>11</sup> UFC**



## GENERAL BENEFITS



### Increased yield

Increased yield in harvest in extensive crops, maintaining fertilization levels.



### Reduction of the use of chemical fertilizers

with maintenance of productivity. Reduction of up to 50% the applied chemical nitrogen without compromising performance.



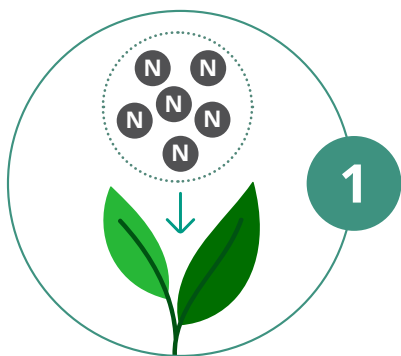
### Better resistance to environmental stress

Strengthens resistance to drought and salinity, ensuring stable development against various stresses.



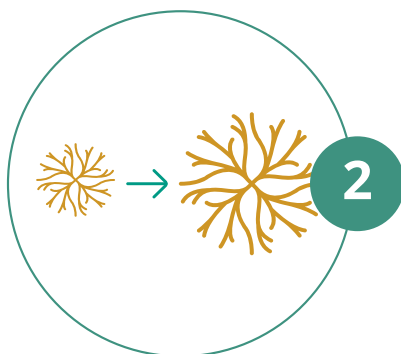
## INNOVATIVE TECHNOLOGY

**Nitrocracin** is a biostimulant based on **endophytic nitrogen-fixing bacteria**, which penetrate the leaves and work directly inside the plant, providing nitrogen continuously and efficiently. This advanced technology is based on three key principles:



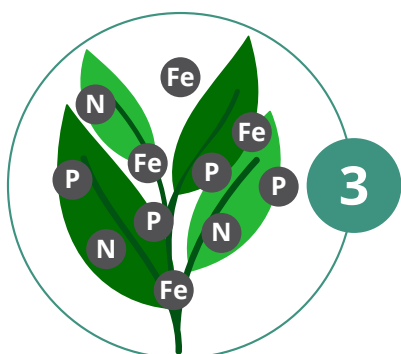
### Biological Nitrogen Fixation

- > **Nitrocracin bacteria** capture nitrogen from the air and transform it into a form that can be assimilated by the plant.
- > Unlike traditional fertilizers, **Nitrocracin** acts **directly on the leaves**, and prevents the contribution of nitrates to the environment.



### Production of Phytohormones for Growth

- > The beneficial bacteria in **Nitrocracin** stimulate the natural production of **auxins and cytokinins**, hormones responsible for cell development and the elongation of roots and shoots.
- > This results in **increased root growth**, which allows the plant to absorb more water and nutrients, increasing its resistance to drought and other stressors.



### Improved Nutrient Mobilization

- > In addition to nitrogen, **Nitrocracin** facilitates the mobilization of other key nutrients, such as iron and phosphorus, thanks to its action on solubilizing enzymes.
- > This **increases the efficiency of the use of applied fertilizers**, allowing to reduce dependence on chemical inputs without affecting yield.



**R + D + i**

We are looking for the best solutions for your needs

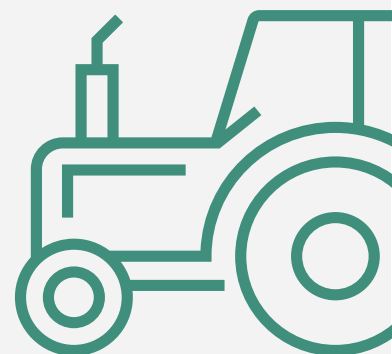


## APPLICATION AND HANDLING

1 - 2 foliar applications per season, during the early stages of cultivation or when vegetative growth stimulation is required:

- Low dose as a stimulant, no reduction in fertilization.
- High dose for 30-50% reductions in nitrogen chemical fertilization.

# DOSAGE PER CULTURE



## Winter or spring cereals (wheat, barley, oats, rye, hops)

2 and 5 L/ha and campaign. (BBCH 20–33, from tillering to early stem elongation)



## Corn

3 - 5 L/ha and season (BBCH 20–33, from tillering to early stem elongation)



## Rice

2 - 5 L/ha and season (BBCH 20–33, from tillering to early stem elongation)



## Potato

2 - 5 L/ha and season (BBCH 20-39 from the beginning of lateral shoots, until total closure of rows, always before flowering – BBCH 61)



## Cotton

3 – 5 L/ha (BBCH 20-39 from the beginning of lateral shoots, until the total closure of the rows, always before the appearance of the Floral Org. – BBCH 51)



## Energy crops, alfalfa, fodder, aromatic herbs

2 - 4 L/ha and campaign. (First half of the cycle, when there is sufficient leaf area, until before flowering)



## Horticultural crops

2 – 5 L/Ha and season. (First half of the cycle, with sufficient leaf area. In fruit crops, before flowering)



## Fruit and citrus crops

Up to 3 – 5 L/Ha and campaign. (BBCH 31-61 apply during shoot and bud development, with sufficient leaf area, before flowering)



# FIELD TRIALS

## Durum wheat trial

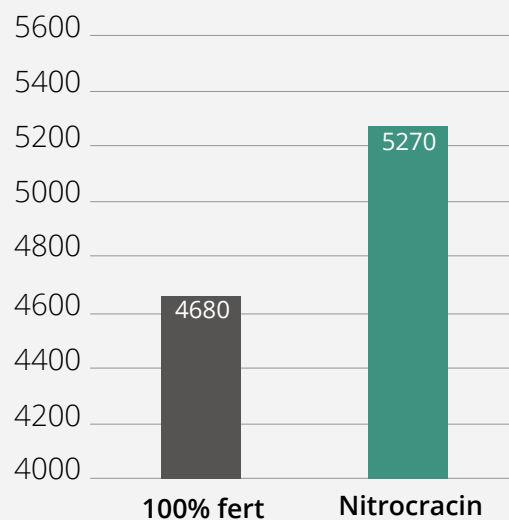
Phtiotis, Greece

In front of a standard control (100% chemical fertilization) a **thesis of 1 application of 5L/ha of Nitrocracin** + 50% chemical fertilization is tested.

### Result

**Nitrocracin-treated crops achieve a 13% increase in yield** (+590 kg/ha) with a reduction of 400 kg/ha of nitrogen fertilizers.

### Yield Kg/ha



## Corn Trial

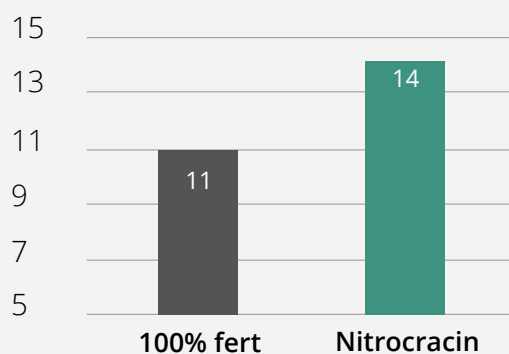
Phtiotis, Greece

Tesis con **1 aplicación de 3 L/ha Nitrocracin, manteniendo el 100% de fertilización química**, frente a un testigo con la misma fertilización química.

### Result

**27% increase in production, 14 tonnes/ha**, compared to 11 tonnes/ha in the control.

### Ton/ha yield



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