N-LEAF

1. ATMOSPHERIC NITROGEN FIXATION & IMPROVING NITROGEN AVAILABILITY FOR THE PLANT

A minimum of 20 to 25 units of N supplied to crops = NUTRITION

2. GROWTH HORMONE PRODUCTION

Bacteria produce auxin and cytokinins which will promote photosynthetic activity by increasing the effective leaf surface.
This action on the foliage leads to an increase in nutrient requirements and therefore a boost to the root system = PUMP EFFECT - GROWTH PROMOTION

3. IN LINE WITH ENVIRONMENTAL CONSERVATION STRATEGIES « GREEN » Agriculture

N-LEAF BACTERIA ENSURES A NITROGEN RELEASE EQUIVALENT TO AN INPUT OF 25-20 UN/HA MINIMUM

APPLICATION ON CROP RESIDUES

FOLIAR APPLICATION
on sufficiently developed foliage

Cereals : 0,5 L/ha at 1-2 node stage BBCH 31-32
Rapeseed : 0,5 L/ha at end of winter BBCH30
Corn : 0,5 L/ha at 4-5 leaves BBCH 14-15
Sunflower : 0,5 L/ha at BBCH 14-15
Soya : 0,5 L/ha at V2 stage (BBCH 12)
Potatoes : 0,5 L/ha at 4-5 leaves BBCH 14-15
Vegetables : 0,5 L/ha at BBCH 13-31
Grapes : 0,5 L/ha at BBCH 15-71
Fruit trees : 0,5 L/ha at BBCH 31-39

COMPOSITION
3 phyllosphere bacterial strains
2 strains of Methylobacterium
1 strain of Arthrobacter

USABLE IN ORGANIC FARMING

Form : Bacterial suspension
Concentration in bacteria : $3x10^9$ CFU/mL

AGRONUTRITION - Parc Activestre - 3 avenue de l'Orchidée
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N-LEAF

ATMOSPHERIC NITROGEN FIXATION

phyllosphere bacteria

COMPOSED OF NITROGEN-FIXING BACTERIA, N-LEAF IS AN INNOVATIVE TECHNOLOGY BASED ON A CAREFUL SELECTION OF BACTERIA FROM THE PHYLLOSPHERE.

These bacteria applied to the foliage will :
- **FIX ATMOSPHERIC NITROGEN,**
- **IMPROVE THE EFFICIENCY** of its use by the plant,
- And thus **PROVIDE « NATURAL » NITROGEN TO THE PLANT** as a complement to soil inputs (organic and mineral)

BioFertiliser technologies

2 strains of Methylobacterium
1 strain of Arthrobacter

Form : liquid

usable in ORGANIC FARMING PRODUCT

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10YEARS
OF RESEARCH ON MICRO-ORGANISMS

To ISOLATE, CHARACTERISE & SELECT BACTERIA OF INTEREST

N-LEAF is composed by 3 BACTERIAL STRAINS FOR NITROGEN FIXATION.

Two strains of Methylobacterium and one strain of Arthrobacter selected for their high capacity to fix atmospheric nitrogen.

OBJECTIVES: COMPLEMENTARITY AND ADAPTATION

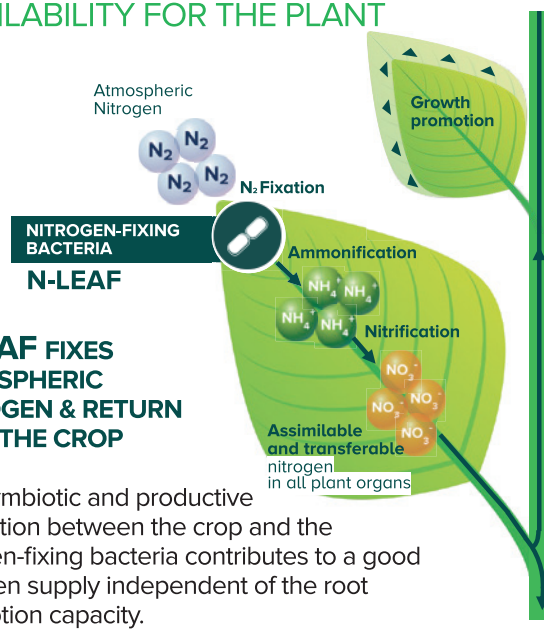
Two complementary bacterial genus, allowing a strong adaptation to all types of crops and a better efficiency.

100% MADE IN FRANCE
DESIGN - PRODUCTION

100% USABLE IN ORGANIC FARMING
IN ACCORDANCE WITH THE EC REGULATION

100% ALIVE

ATMOSPHERIC NITROGEN FIXATION
& IMPROVEMENT OF NITROGEN AVAILABILITY FOR THE PLANT

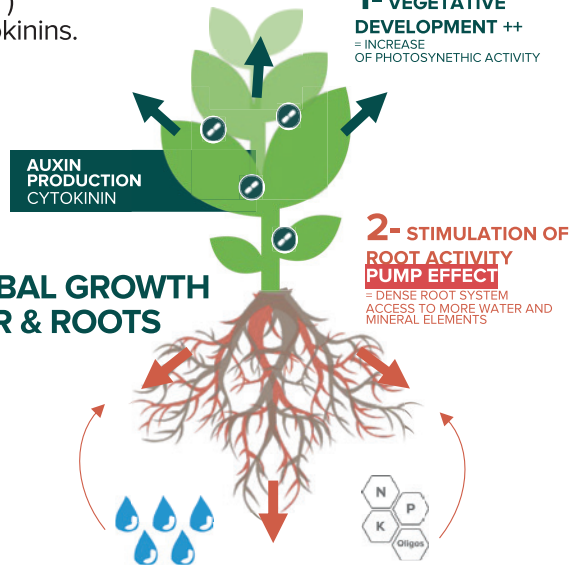


N-LEAF FIXES ATMOSPHERIC NITROGEN & RETURN IT TO THE CROP

This symbiotic and productive interaction between the crop and the nitrogen-fixing bacteria contributes to a good Nitrogen supply independent of the root absorption capacity.

GROWTH HORMONE PRODUCTION

N-LEAF bacterial strains are able to PRODUCE PHYTOHORMONES & IN PARTICULAR AIA (Indole Acetic Acid = AUXIN) and cytokinins.

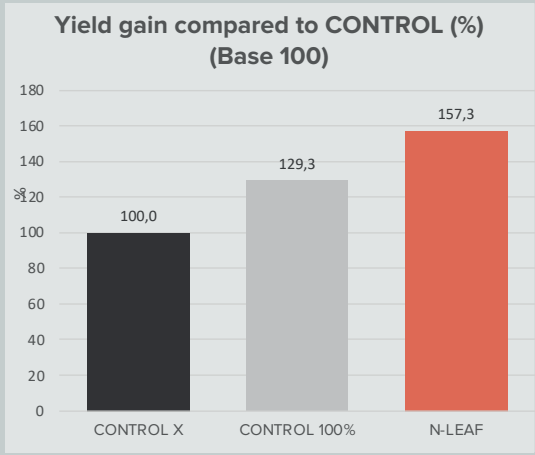


A GLOBAL GROWTH FOLIAR & ROOTS

Trial 2021
YIELD IMPROVEMENT

Foliar application
Location - FRANCE (34)
Crop: APPLE - Granny Smith Challenger
Blocks trial (4) - Service provider

Protocol :
/ CONTROL X = 45,5 UN 350 kg/ha of ammonium sulfate
/ CONTROL 100% (100% of needs) = 65 UN . 500 kg/ha of ammonium sulfate
/ N-LEAF : X+ 1L/ha of N-LEAF at post-flowering stage

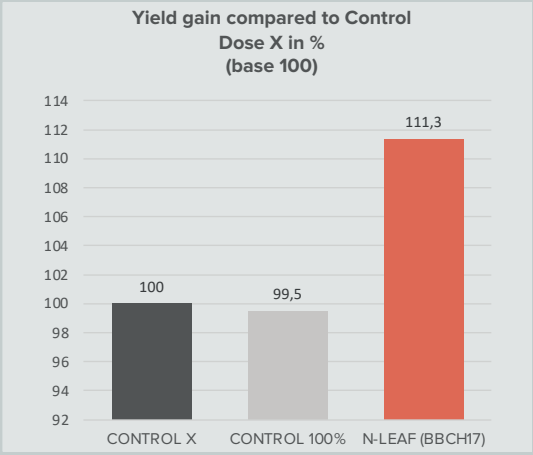


The foliar application of N-LEAF resulted in a yield improvement of 28 t/ha (i.e +57%) compared to the CONTROL X.

Trial 2021
YIELD IMPROVEMENT

Foliar application
Location - FRANCE (49)
Crop: GRAPE - Sauvignon
Blocks trial (4) - EAS France Val de Loire

Protocol :
/ CONTROL X = 45,5 UN 350 kg/ha of ammonium sulfate
/ CONTROL 100% (100% of needs) = 65 UN . 500 kg/ha of ammonium sulfate
/ N-LEAF : X+ 1L/ha of N-LEAF at post-flowering stage



The foliar application of N-LEAF at BBCH17 resulted in a yield improvement of about 11% (+2.3 t/ha).