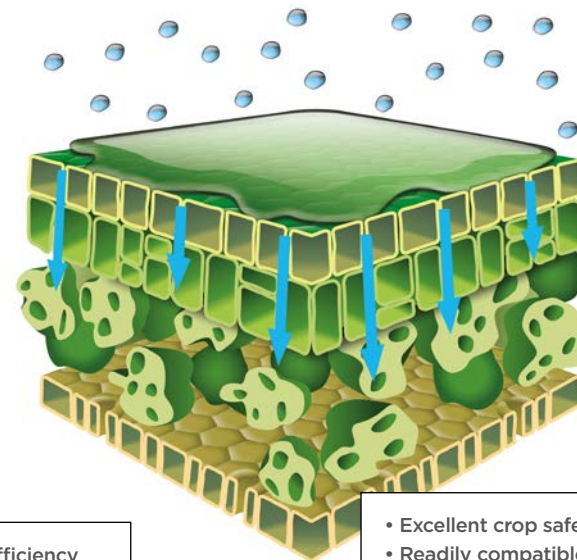


NUTRINO PRO



Nutrino Pro is a low scorch nitrogen formulation which contains magnesium and sulphur as well as the complementary biostimulants R100 and Pidolic Acid.

This high efficiency product provides a controlled-release nutrient supply with variable length chain polymers releasing their nitrogen over six to eight weeks. The biostimulants improve nutrient uptake and assimilation, stimulating growth in a wide range of crops.



- Pidolic acid and R100 biostimulants
- Increase nutrient uptake
- Stimulate nitrogen assimilation
- Improve growth and yield

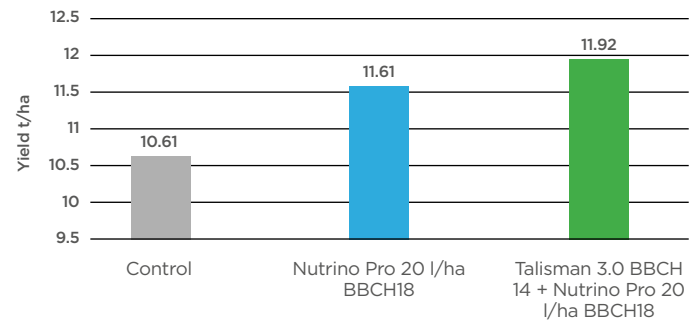
- 85-95% nitrogen use efficiency
- Controlled release over 6-8 weeks

- Excellent crop safety
- Readily compatible
- Rainfast

Analysis	% w/w
Total Nitrogen	23
Ureic N	15
Urea formaldehyde	8
Magnesium (MgO)	2.6
Sulphur (SO ₃)	5
+ Pidolic & R100 biostimulants	
Pack size:	1000L, 10L
Dose rate:	20 l/ha
Key Crops:	Wide range Maize Wheat Oilseed rape Sunflower Vegetables & fruit

Controlled release nitrogen combined with pidolic acid and R100 biostimulants.

Independent contract trial Poland 2019
 Mean of 4 replicates
 Grain Maize Variety: Poesi CS
 Talisman applied at BBCH 14 (17/5/2019),
 Nutrino Pro applied at BBCH 18 (31/5/19)
 All plots received base fertiliser (29/4/19)
 N 180kg P 150kg K 200kg



What is Pidolic acid and what does it do?

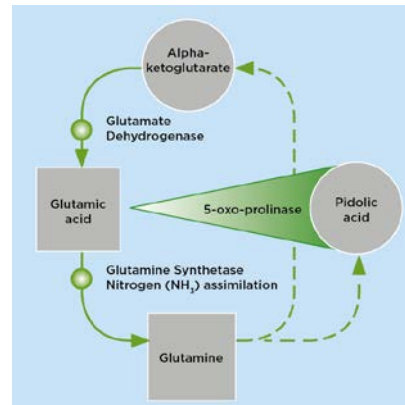
Pidolic acid is a signaling compound at the heart of the nitrogen assimilation process.

Normal conditions

During the nitrogen assimilation cycle ammonia is used to form Glutamine which is then used as a building block in many Amino acids. Amino Acids are used by the plant among other things to construct protein and nucleic acid.

When this cycle is in equilibrium growth and respiration occur unimpeded. Pidolic acid is a signalling compound right at the heart of the nitrogen assimilation cycle.

Under normal conditions an application of pidolic acid in Nutrino Pro will maximise the production of glutamic acid and glutamine by increasing the rate of nitrogen assimilation.

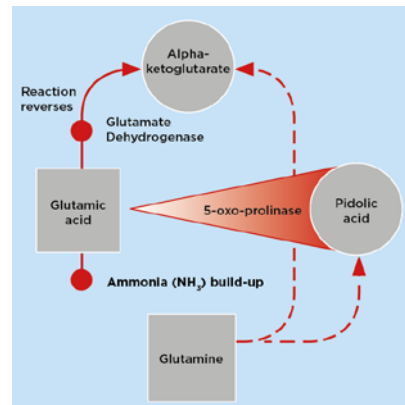


Normal conditions

Stressed conditions

Lack of Pidolic acid signals to the plant that it is under stress from temperature, water or nutrient related causes. Toxic ammonia accumulation will begin and the plant will catabolise its own reserves so that respiration can continue, which is when we see symptoms such as yellowing of leaves.

Higher concentrations of Pidolic acid will allow the plant to continue to grow during short periods of stressful weather.



Stressed conditions

What is R100 and what does it do?

R100 biostimulant contains a patented combination of two disubstituted urea compounds (DPU) and gamma polyglutamic acid.

DPU boosts cytokinin levels in tissues with resulting increased cell division and growth.

Gamma-PGA binds to foliar applied cations to improve uptake.

