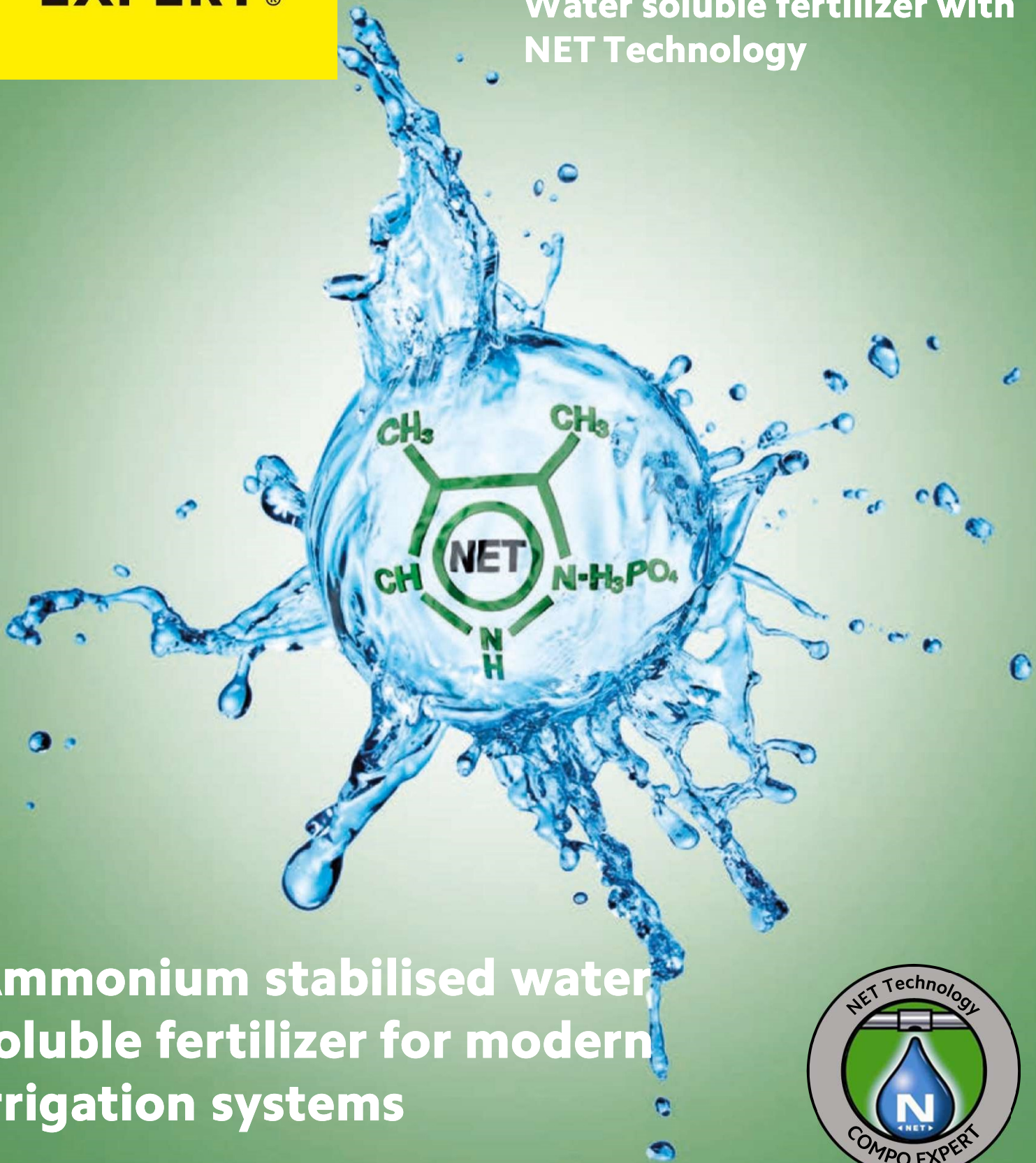


EXPERTS FOR GROWTH

**COMPO
EXPERT®**

NovaTec® Solub

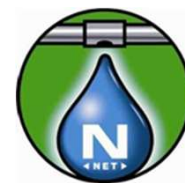
Water soluble fertilizer with
NET Technology



**Ammonium stabilised water
soluble fertilizer for modern
irrigation systems**



NovaTec® Solub range with NET (Nitrogen Efficient Technology)



Advantages of NET technology

1) Better use of the nitrogen provided:

With fewer nutrient losses through leaching.

2) Optimal crop yield:

NET technology allows you to ensure availability of nitrogen in the 2 forms absorbable by the plant (nitrate and ammonium):

3) Energy savings:

The plant, by directly absorbing ammonium nitrogen, avoids a step in the natural process of the transformation of nitrogen into proteins, ultimately increasing production.

4) Improved flowering:

The absorption of ammonium promotes the synthesis of phytohormones (gibberellins and cytokinins) and polyamines, responsible for flowering.



Features of the NovaTec® Solub range

Quality raw materials

Nitrogen (in nitric and ammonium form only), phosphorus and potassium (free of chlorine and sodium), of maximum quality and highly dissolvable.

A comprehensive, environmentally-friendly range.

For all types of crops and fertiliser programmes, contributing to more environmentally-friendly agriculture.

Safety and ease of use

Crystalline fertilisers are homogeneous, free of carbonates and free of impurities. Its high acidifying power prevents obstructions in irrigation emitters and improves the absorption of soil microelements.

Official certifications

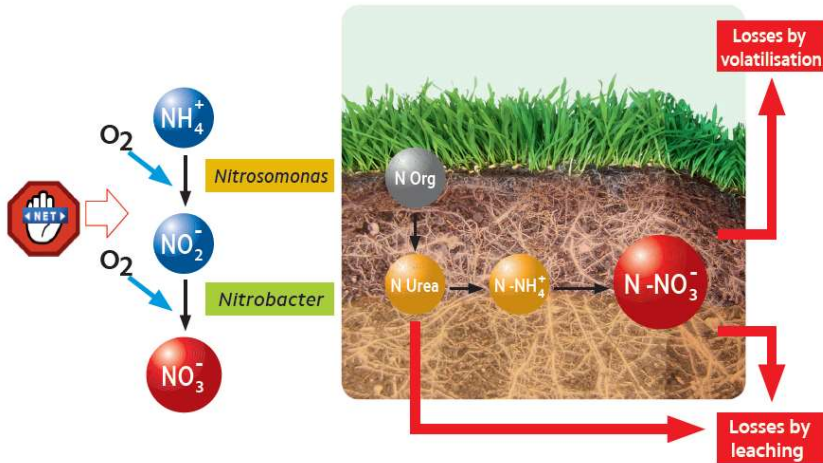
The NovaTec® Solub range has all the certifications required by EuroGAP and GlobalGAP:

- Technical data sheets
- Safety data sheets
- Certifications of heavy metals





Novatec® Solub - How Does It Work?

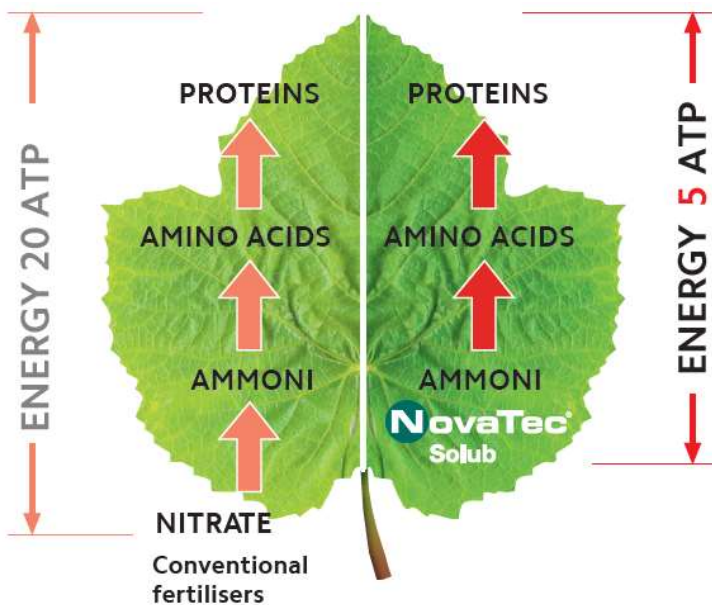


NovaTec® Solub contains the nitrification inhibitor 3,4-dimethylpyrazole phosphate (DMPP). This molecule **inhibits** the nitrosomonas bacteria present in the soil, which are responsible for the transformation of ammonium into nitrite, eventually to nitrate.

- Ammoniacal nitrogen is retained in the soil by the clay-humic complex, while nitrogen in nitrate form is highly soluble and easily washable, thus achieving greater nitrogen availability for cultivation.
- In this way, only the formation of nitrates is avoided, ensuring the nitrogen in the soil in the ammonia form for a time, reducing the risk of nitrate leaching.



Novatec® Solub - Benefits of Ammonia Nutrition



ATP = Adenosine Triphosphate.
ATP is one of the most important energy transmitters in plants

The above delay in the nitrification of Ammonium (NH_4^+) to Nitrate (NO_3^-) leads to more efficient NH_4^+ nutrition.

- Energy savings by Ammonium N-nutrition (no biological reduction required)
- Enhanced flowering (ammonia promotes synthesis of phytohormones and polyamines)
- Ammonium nutrition favours root growth





Novatec® Solub - The pH Effect

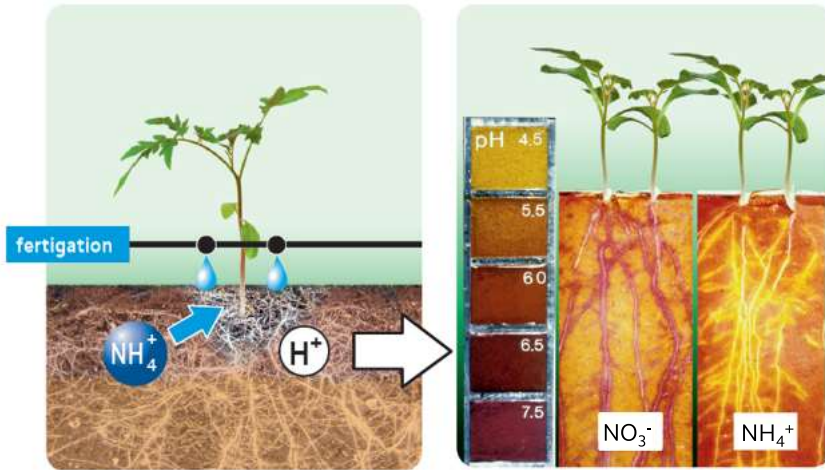


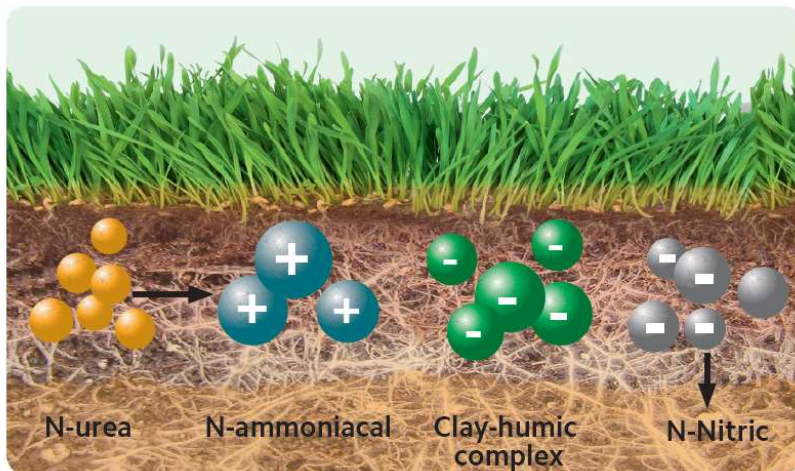
Photo: Römheld, University of Hohenheim

Ammonium nutrition leads to temporary acidification of the rhizosphere

- ❑ Absorption of micro elements and Phosphate is increased by this effect
- ❑ This effect is temporary and localised around the roots, ensuring no negative pH effects on the soil



Novatec® Solub - Less Nitrogen Loss



Novatec® Solub strongly reduces N-leaching due to a higher ammonium concentration in the soil

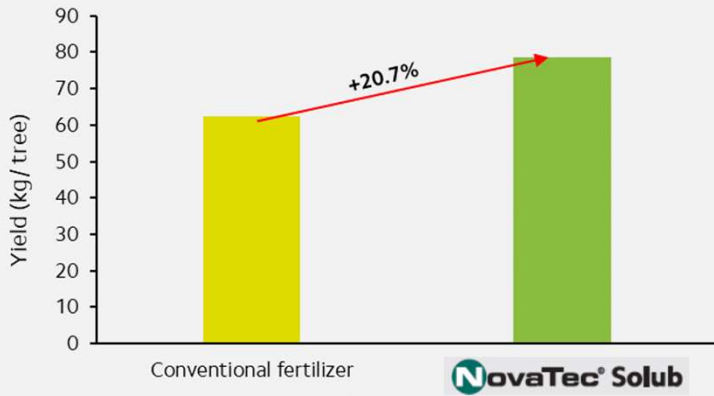
- ❑ Ammoniacal nitrogen is retained in the soil by the clay-humic complex, while nitrogen in nitrate form is highly soluble and easily washable, thus achieving greater nitrogen availability for cultivation
- ❑ In this way, only the formation of nitrates is avoided, ensuring the nitrogen in the soil in the ammonia form for a time, reducing the risk of nitrate leaching.
- ❑ Novatec® Solub leads to significant ground water protection



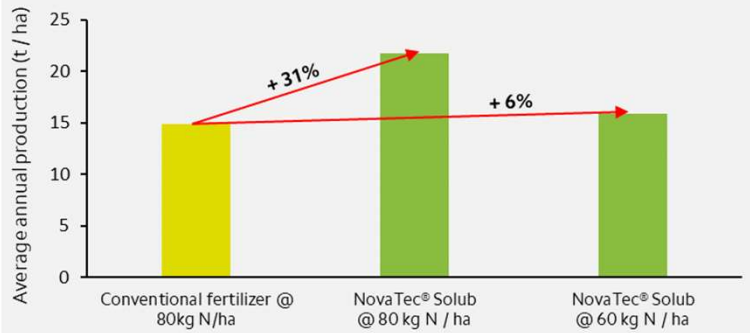


NovaTec® Solub – Fertigation Trials

Influence of NovaTec® Solub on Citrus yield



Influence of NovaTec® Solub on performance in pear trees



Greater size and fruit homogeneity



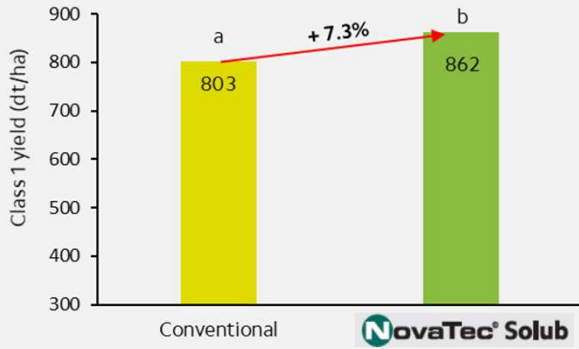
NovaTec® Solub



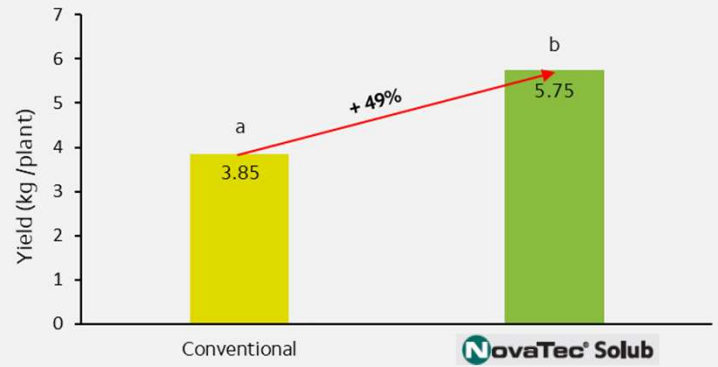


NovaTec® Solub – Fertigation Trials

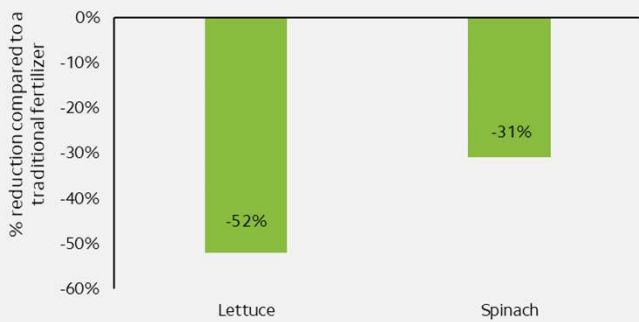
Novatec® Solub in Cucumbers



Novatec® Solub in Melons



Nitrate content reduction in leaves with NovaTec® Solub



Novatec® Solub Range

Binaries for tank mixes



Free from carbonates (avoids the formation of precipitates)

Free from impurities

Complete, rapid solubility of the elements contributed



Novatec® Solub:	21	9-0-43	NK Ca	16-30
Nutrients:				
Total N	21%	9%	22%	16%
Nitrate (NO ₃)	-	3%	11%	-
Ammonium (NH ₄)*	21%	-	-	16%
Urea (NH ₂)*	-	6%	11%	-
Phosphate (P ₂ O ₅)	-	-	-	30%
Potassium (K ₂ O)	-	32%	10%	-
Magnesium (MgO)	-	2	-	-
Sulphur (S)	25%	13.5%	-	-
Calcium (CaO)	-	-	15%	-

N-P-K's for convenience



Novatec® Solub:	19-5-5	13-33-13	14-8-30	10-5-30	18-18-18
Nutrients:					
Total N	19%	13%	14%	10%	18%
Nitrate (NO ₃)	3%	5%	8.5%	4%	9.8%
Ammonium (NH ₄)*	16%	8%	5.5%	6%	8.2%
Phosphate (P ₂ O ₅)	5%	33%	8%	5%	18%
Potassium (K ₂ O)	5%	13%	30%	30%	18%
Magnesium (MgO)	2%	2.5%	0.5%	2%	1%
Sulphur (S)	17%	2%	4.5%	12%	0.8%
Zinc (Zn)	200 mg/kg	200 mg/kg		200 mg/kg	200 mg/kg
Manganese (Mn)	500 mg/kg	500 mg/kg		500 mg/kg	500 mg/kg
Copper (Cu)	200 mg/kg	200 mg/kg		200 mg/kg	200 mg/kg
Iron (Fe)	500 mg/kg	500 mg/kg		500 mg/kg	500 mg/kg
Boron (B)	100 mg/kg	100 mg/kg		100 mg/kg	100 mg/kg
Molybdenum (Mo)	10 mg/kg	10 mg/kg		10 mg/kg	10 mg/kg



WE ARE YOUR
EXPERT FOR GROWTH



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