



ENTE^C Solub

Ammonium Stabilised Water Soluble Fertilizer



- Higher marketable yield
- Improved Crop Quality



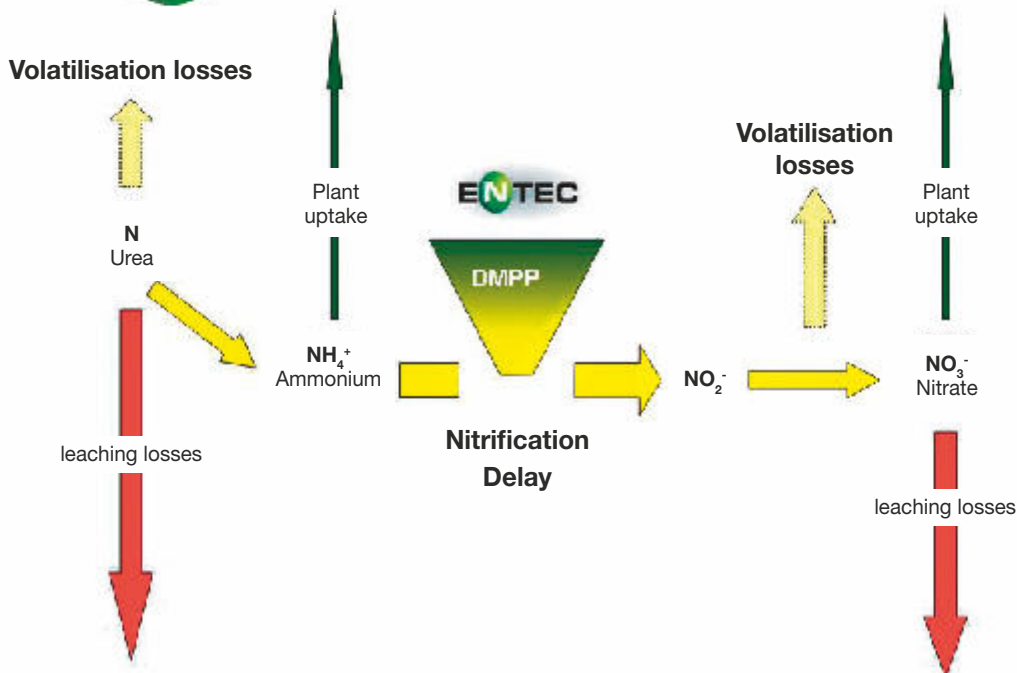
- Safe and balanced N-nutrition
- Energy efficient plant nutrition



- Increased trace element and Phosphorous availability

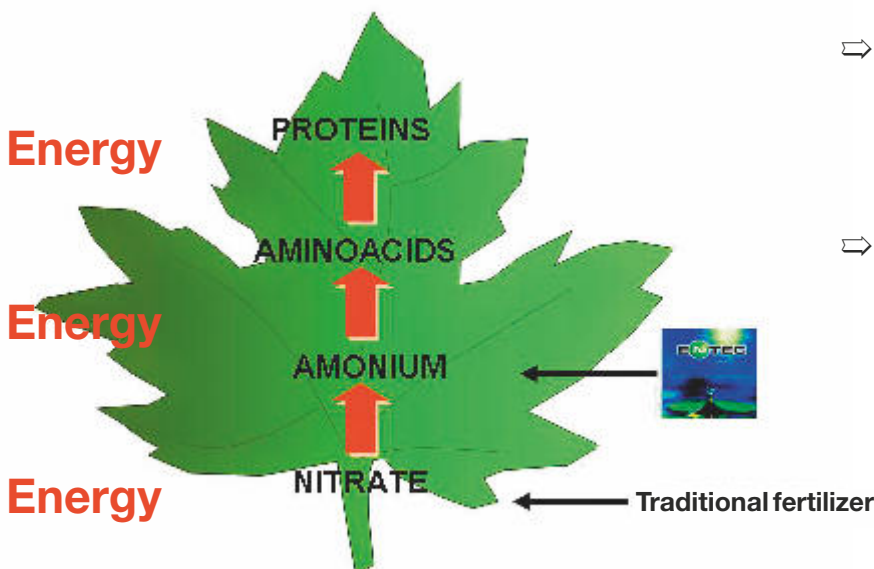


ENTEC® Solub – How does it work?



- ⇒ ENTEC® delays the conversion of Ammonium (NH_4^+) to Nitrate (NO_3^-)
- ⇒ ENTEC® leads to a more efficient NH_4^+ -based N-nutrition

ENTEC® Solub – Ammonium Nutrition



- ⇒ Energy savings by Ammonium-N-nutrition (no biological/microbial reduction required)
- ⇒ Enhanced flowering (Ammonium promotes synthesis of phyto-hormones and polyamines)



ENTEC[®] Solub – The pH-Effect

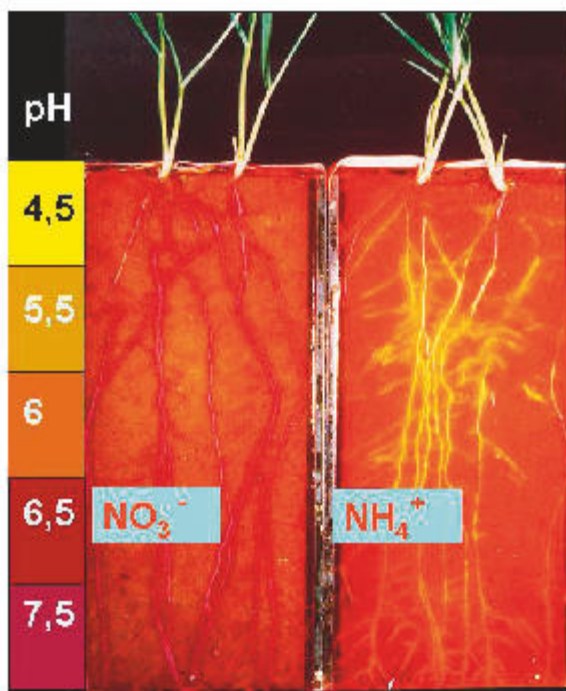
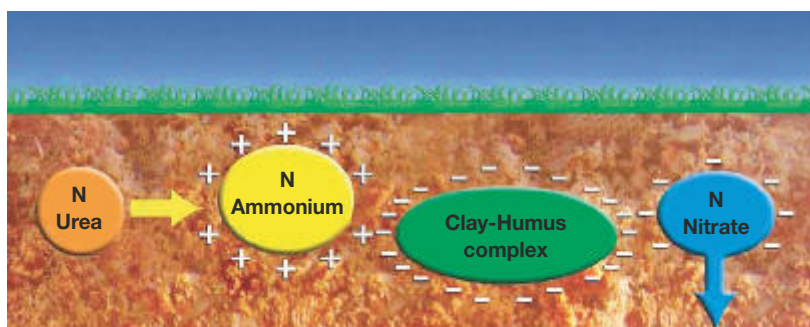


Photo: Römheld, University of Hohenheim

- ⇒ Ammonium nutrition leads to acidification of rhizosphere
- ⇒ Absorption of micro elements and Phosphate is increased

ENTEC[®] Less N-leaching

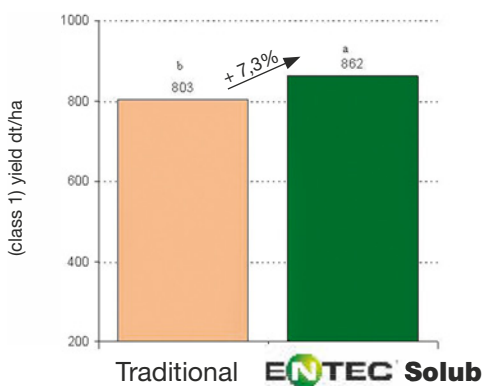
- ⇒ ENTEC[®] strongly reduces Nitrate leaching due to a higher Ammonium concentration in the soil
- ⇒ ENTEC[®] leads to significant ground water protection





ENTE[®] Solub – Trial Results

ENTE[®] Solub in Cucumbers (Limburgerhof, Germany, 2002)

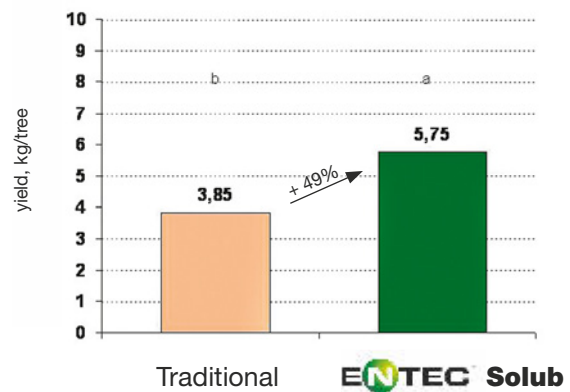


- ⇒ Same NPK quantities
- ⇒ ENTE[®] Solub:
59 dt/ha more yield (+7,3%)

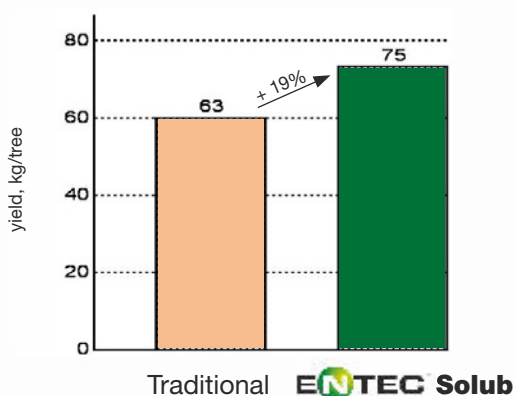


ENTE[®] Solub in Melons (Murcia, Spain, 2001)

- ⇒ Same NPK quantities
- ⇒ ENTE[®] Solub:
1,9 kg/m² more yield (+49%)



ENTE[®] Solub in Clementines (Spain, 1999-2001)



- ⇒ 400 kg N/ha
- ⇒ ENTE[®] Solub:
12 kg/tree more yield (+19%)





ENTEC[®] Solub – Nutrient Facts

Guaranteed content

	ENTEC [®] Solub 21	ENTEC [®] Solub 24	ENTEC [®] Solub 14-48	ENTEC [®] Solub 20-5-10	ENTEC [®] Solub 14-8-30	ENTEC [®] Solub 16-10-17
Nutrients						
Total nitrogen (N)	21 %	24 %	14 %	20 %	14 %	16 %
Nitrate (NO ₃)	-	2,8 %	-	5.8 %	8 %	5 %
Ammonium (NH ₄) [*]	21 %	20,2 %	14 %	14.2 %	6 %	11 %
Phosphate (P₂O₅)^{**}	-	-	48 %	5 %	8 %	10 %
Phosphorus (P) ^{**}	-	-	21 %	2.2 %	3.5 %	4.4 %
Potassium (K₂O)^{**}	-	-	-	10 %	30 %	17 %
Potash (K) ^{**}	-	-	-	8.3 %	24.9 %	14.1 %
Magnesium oxide (MgO)^{**}	-	-	-	1.3 %	-	-
Magnesium (Mg) ^{**}	-	-	-	0.8 %	-	-

^{*} DMPP-content: 0,8% of total ammonium-N ^{**} water soluble

Conductivity in solution

		ENTEC [®] Solub 21	ENTEC [®] Solub 24	ENTEC [®] Solub 14-48	ENTEC [®] Solub 20-5-10	ENTEC [®] Solub 14-8-30	ENTEC [®] Solub 16-10-17
Conductivity in mS/cm at 25°C							
Concentration in g/1000 ml	0.5	1.17	1.67	0.65	0.99	0.84	0.94
	1.0	2.21	2.41	1.24	1.88	1.62	1.79
	1.5	3.21	3.15	1.81	2.76	2.37	2.61
	2.0	4.12	3.95	2.36	3.55	3.09	3.39
	2.5	5.06	4.70	2.89	4.39	3.81	4.17
	3.0	5.95	5.44	3.41	5.18	4.50	4.92
	3.5	6.81	6.15	3.92	5.93	5.18	5.65
	4.0	7.61	6.94	4.43	6.63	5.85	6.35
4.5	8.48	7.63	4.92	7.36	6.51	7.08	






pH

		ENTEC [®] Solub 21	ENTEC [®] Solub 24	ENTEC [®] Solub 14-48	ENTEC [®] Solub 20-5-10	ENTEC [®] Solub 14-8-30	ENTEC [®] Solub 16-10-17
pH							
Concentration in g/100 ml	0.2	4.40	5.00	4.50	4.30	4.70	4.40
	10	3.70	3.80	4.00	3.70	4.20	3.80
	17.5	3.60	3.70	3.90	3.60	4.10	3.70



ENTE[®] Solub

Water Soluble Ammonium Stabilized Fertilizer

Product	Composition	Characteristics	Packaging	Use
ENTE [®] Solub	20+5+10 (+1,3MgO+13S) 	Soluble NPK Fertilizer - Ammonium stabilized - High N content - for Fertigation - 14,2% Ammonium - 5,8% Nitrate	25 kg bag Container capacity: 48 x 25 kg x 20 (24 mt)	Fertigation: 1,0 - 3,0 ‰
ENTE [®] Solub	16+10+17 (+11S) 	Soluble NPK Fertilizer - Ammonium stabilized - Balanced NPK ratio - for Fertigation - 11% Ammonium - 5% Nitrate	25 kg bag Container capacity: 48 x 25 kg x 20 (24 mt)	Fertigation: 1,0 - 3,0 ‰
ENTE [®] Solub	14+8+30 (+6S) 	Soluble NPK Fertilizer - Ammonium stabilized - High K content - for Fertigation - 6% Ammonium - 8% Nitrate	25 kg bag Container capacity: 48 x 25 kg x 20 (24 mt)	Fertigation: 1,0 - 3,0 ‰
ENTE [®] Solub	14+48 (+6S) 	Soluble NPK Fertilizer - Ammonium stabilized - High P content - for Fertigation - 14% Ammonium	25 kg bag Container capacity: 48 x 25 kg x 20 (24 mt)	Fertigation: 1,0 - 3,0 ‰
ENTE [®] Solub	24 (+18S) 	Soluble High N Fertilizer - Ammonium stabilized - for Fertigation - 20,2% Ammonium - 3,8% Nitrate	25 kg bag Container capacity: 48 x 25 kg x 20 (24 mt)	Fertigation: 1,0 - 3,0 ‰
ENTE [®] Solub	21 (+24S) 	Soluble N Fertilizer - Ammonium stabilized - for Fertigation - 21% Ammonium	25 kg bag Container capacity: 48 x 25 kg x 20 (24 mt)	Fertigation: 1,0 - 3,0 ‰