Fytocell

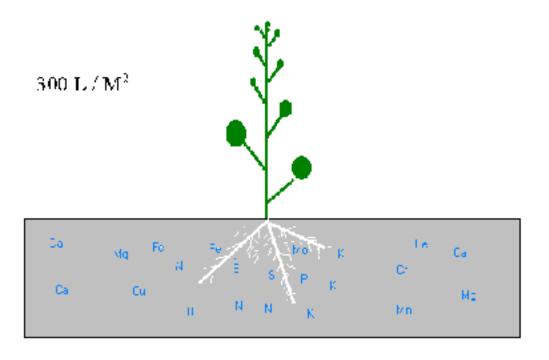
Substrate growing medium



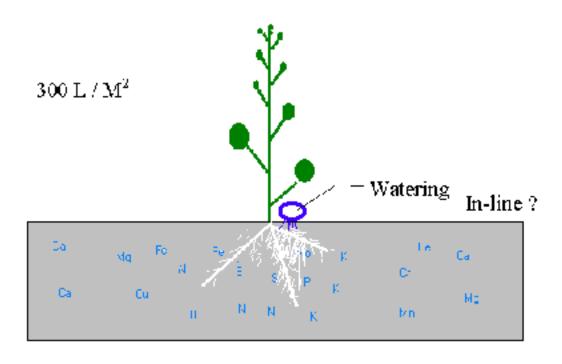
Principle of growing in substrate



Plant in soil

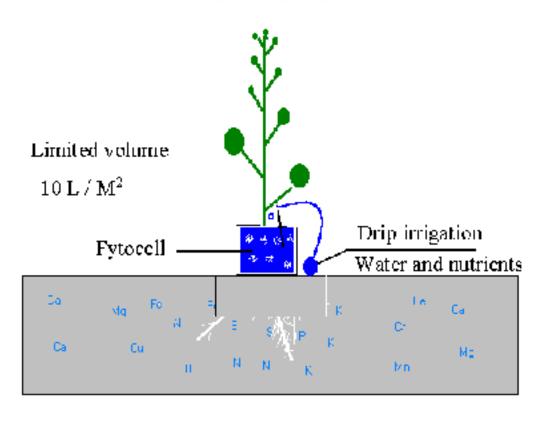


Plant in soil

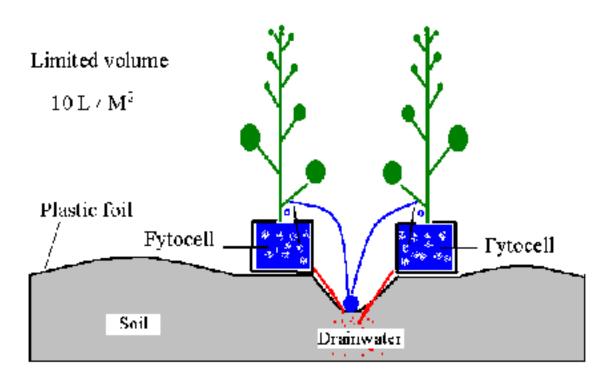


Plant in substrate Limited volume In-line not possible Plastic foil Dα Fe viq. Cal C: Ca Cu Ma Mn.

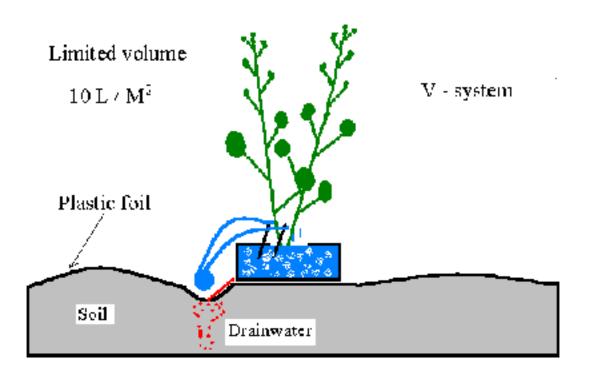
Plant in substrate

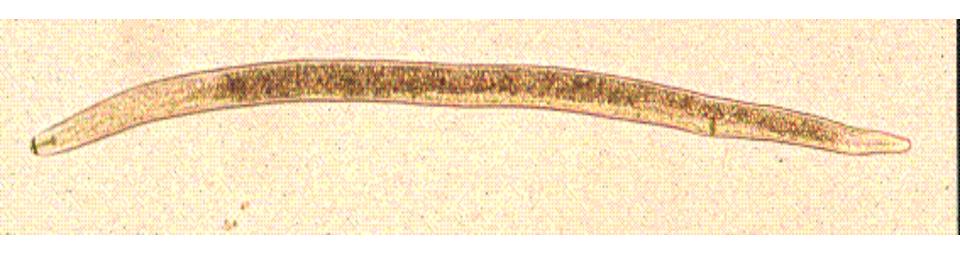


Plant in substrate



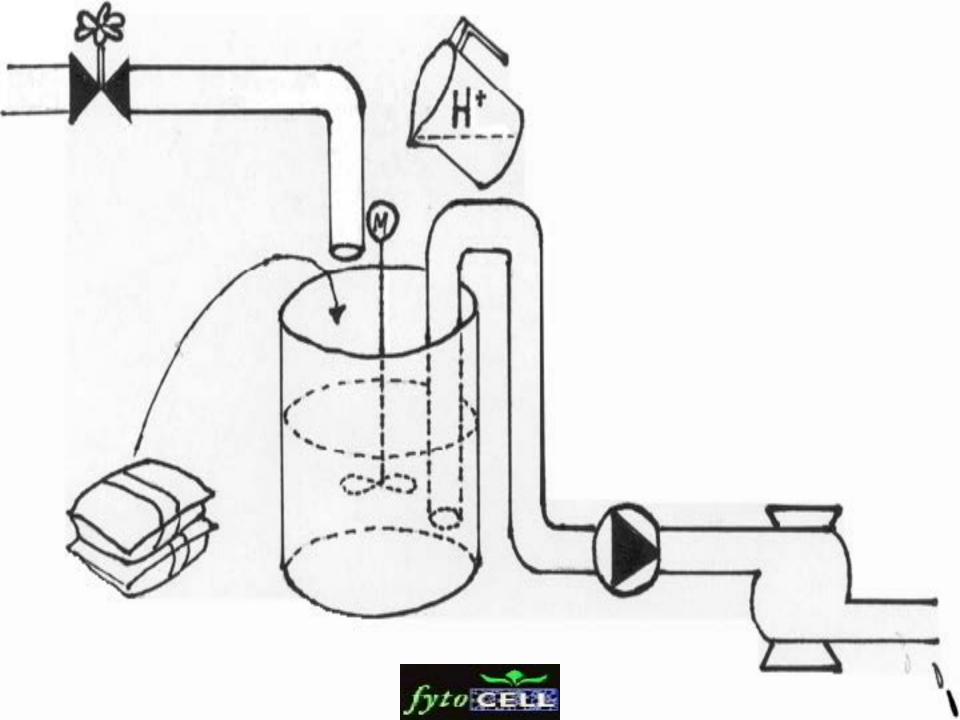
Plant in substrate

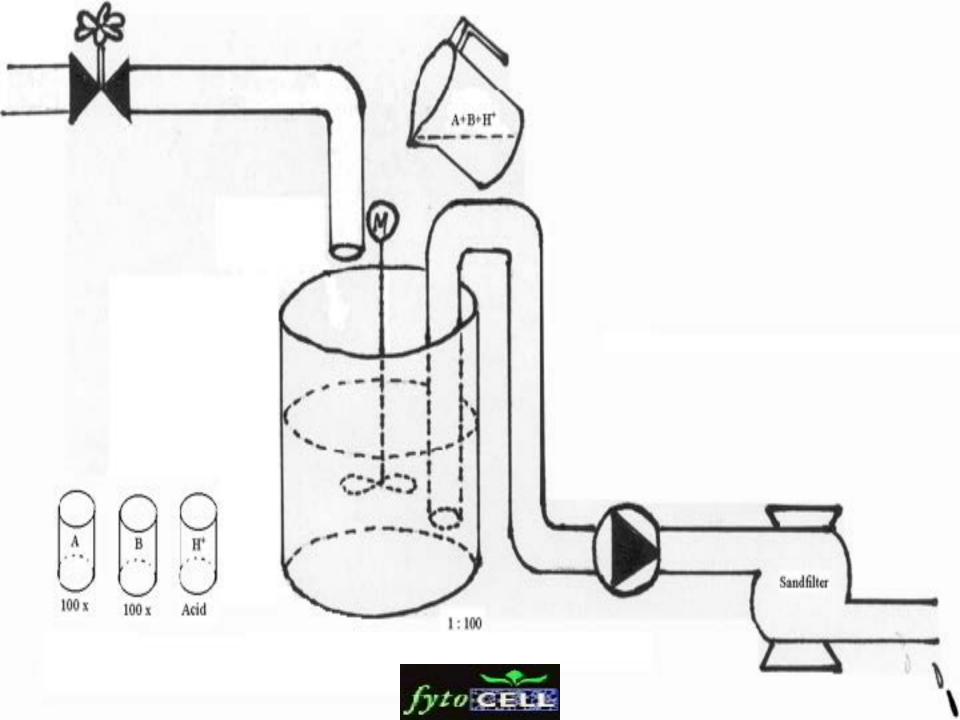


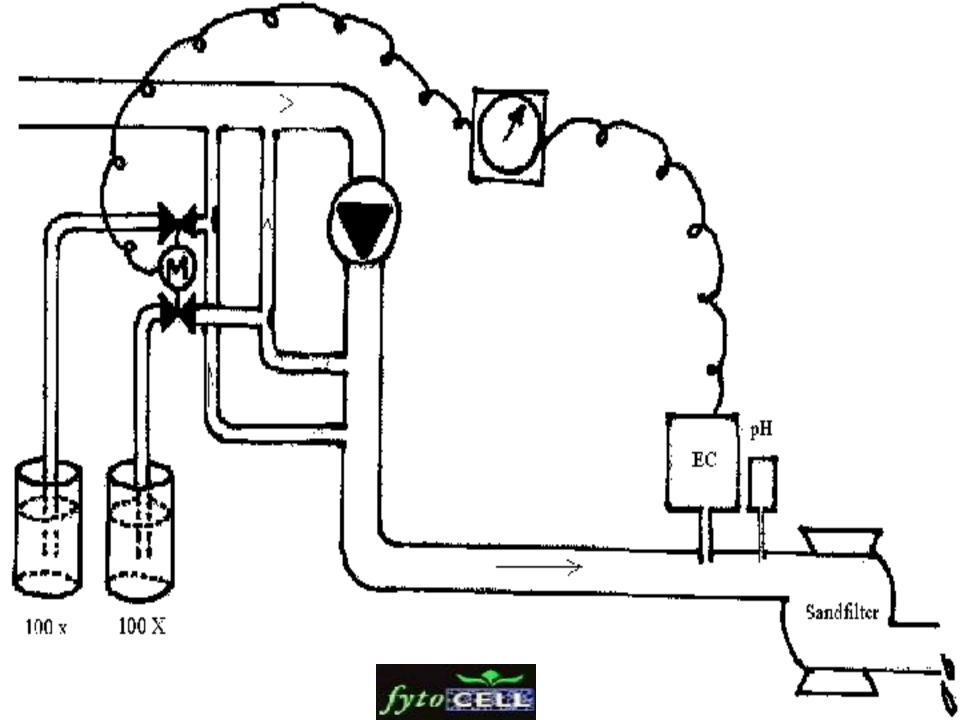


Nutrition systems









What is Fytocell?

Fytocell: Identification

Chemical Name

Aminoplast

Synonyms

UF resin

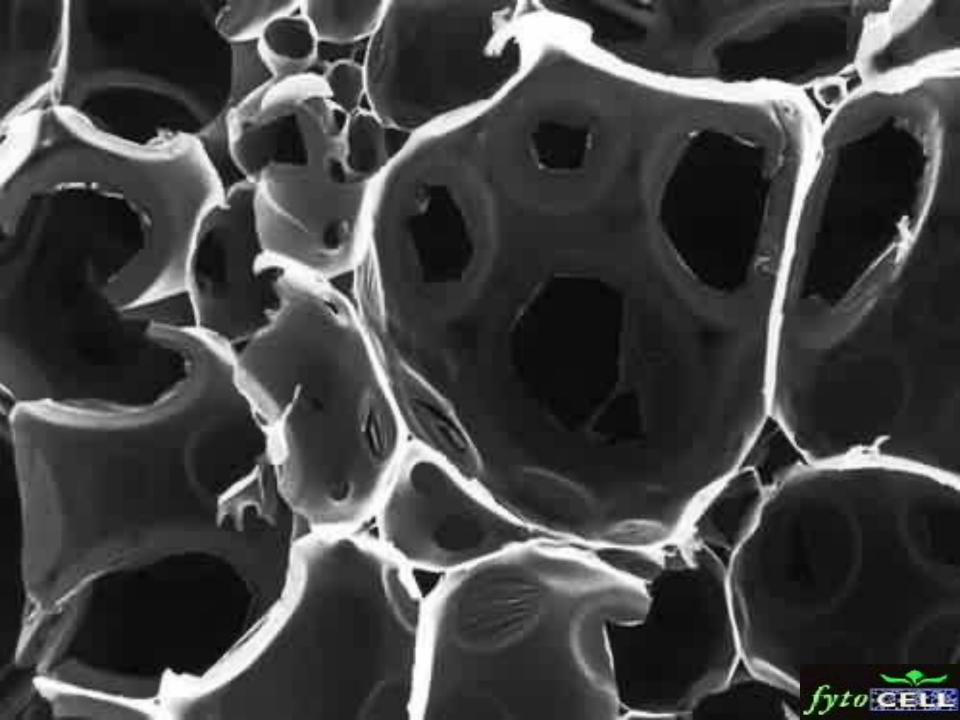
Formula

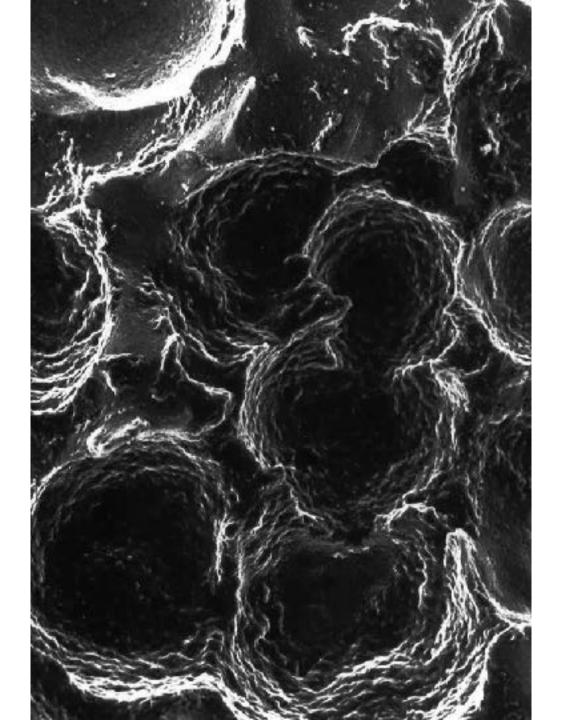
H2O-CO-NH-CH2CH2N-CO-NH-CH2-H2O

Chemical Family

Aminoplast-Duroplast







In practice





































AGRO - applications

Turf industry

 FYTOFOAM or Fytogreen Schaum

Nursery Stock



Potting Soil Industry



Soil less Culture

























Fytocell – successful applications

Horticulture / Glasshouse

TomatoesCucumber

Sweet Pepper Aubergine

CourgetteStrawberries

Roses Gerbera

– Cymbidium Anthurium



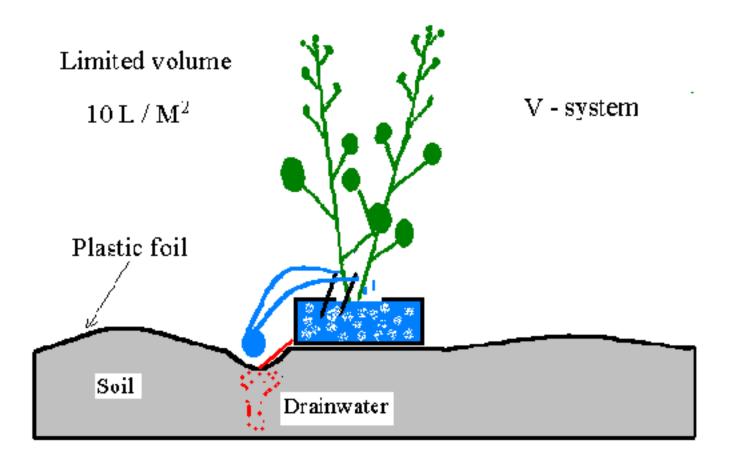
Fytocell: Miscellaneous

Less transport, volume is produced locally

One 20 ft container (35 m3) filled with 19.500 litre of resin will result in 557 m3



Plant in substrate





fytoELL

Standard nutrient solution

Crop: Tomato

dd:

pH= 5,5

NH'	4 K⁺	Ca ²⁺	Mg ²⁺	NO'3	SO'4	H₂PO⁻₄
1,2	9,5	5.4	2,4	16	4,4	1,5

µmol/	Fe 1	Mn	Zn	B	Cu	Мо	
	15.	10	5,0	30,0	0,75	0,50	

In the substrate

EC = 3,7 mS/cm 25 °C

mmol	NH ⁺ ₄	K⁺	Ca ²⁺	Mg ²⁺	NO'3	SO ² '4	Р	Na ⁺	CI	рН	EC
Low	0.0	6.5	8,0	2,7	17,0	4,0	0,7	0,0	4,0	5,0	2,5
High	0,5	10,0	12,0	6,5	28,0	9,0	2,0	12,0	12,0	6,5	5,0

μшο⊮	Fe	Mn	Zn	В	Cu	Мо
µmol/ Low	18,0	3,0	5,0	35,0	0,5	0,0
High	35,0	10,0	10,0	65,0	1,5	0,0

Remarks:

Water:

Nutrients	A container Kg	B container Kg
H ₃ PO ₄ (liquid) 59 % (1,42)		
KH ₂ PO ₄		
NH ₄ H ₂ PO ₄		
HNO ₂ (liquid) 38 % (1,24)		
Ca(NO ₃) ₂ /0,2 NH ₄ NO ₅	117,0	
KNO ₃		
NII4NO2		
K2SO4		35,0
MgSO ₄ .7 H ₂ O		47,0
Mg (NO ₃) ₂ . 6 H ₂ O		-
CaCl ₂ . 2 H ₂ O		
ка		
Amnitra (liquid) (1,24)		
Ca(NO ₃) ₂ (liquid) (1,50)		
Magnitra (liquid) (1,35)		
кисоз		
Ca(OH)2		
Peters 6 + 18 + 38 + 3 MgO		65,0

EC = 2,7

mS/cm 25 °C

pH = 5.8

- Content of container A and B each 1 000 L.
- Dilution 100 times. (total 100 000 L nutrient solution)

Trace elements

Nutrients	A Contained Grams	B container Grams
Iron chelate		
3% Fe		
5%Fc		
5% Fe		-
7%		
11%		
13 %		
Manganese sulphate		
32 % Mn		
Zine sulphate		
23 % Zn		,
24,5 % Zn		
36 % Zn		-
Borax		
11%B		,
Cupper sulphate		
25 % Cu		
Sodium molybdate		
40 % Mo		

Remarks overall:

- * Content of container A and B each 1 000 L
- * Dilution 100 times. (total 100 000 L nutrient solution)
- * pH in A container between 1,5 and 6 by use of Fe-DTPA and between 3,0 and 6,0 by use of Fe-EDDHA
- * pH in B container below 5,3

Wateranalyse	HCO.3	NH ⁺ .	K K	Ca	2+ N	lg ²⁺	NO ₃	SO2+4	H ₂ PO 4	Na ⁺	Cl	1 mol	A	В	EC
H ₃ PO ₄ vlb. 59 % (1,42)		05000	0 0 0 0 0	W 100-300	220 11/20	6235230	10123310	DUSQ-3003.		10000000	N SEEDLE DAY	100 x	CONTRACTOR OF THE PARTY OF THE		0.25
KH ₂ PO ₄	10000000000	5090000 002000	60 (S20) (S	800 MODES	000 00000 000 00000	KOO G ES	- B 100	CONTRACTOR OF		2227700		11,76	9276		0,37
NH ₄ H ₂ PO4	District Co.	0000000	50000	900 (80 (87)	400 600 60 400 900 60	55650 S	0000000	360.00		RESERVE		13,61		-	0,68
HNO ₃ vlb 38 % (1,24)	0239528029	10000000	Sta (50-17)		201 200 E	20200 22	SECTION.	STORE STORE	201 Delay 0/000	200000000 2000000000000000000000000000	S CARROLL STATE	11,50	22883		0,86
Ca(NO ₃) ₂ / 0,2 NH ₄ NO ₃	Partition of	SCHOOL STATE	\$1,000	60 (COO)	050 00000	86365 66566		60354333 Green		SCHOOL S		13,47		20000000	1,12
KNO ₃	SECTION OF	0,21	S CONTRACT	50000	9.8 (303)	2,2		S COLUMN	2000 2000 E	SINGS S	S SPENSES	21,61		905600	1,24
NH ₄ NO ₃		200000	10000	0.000	500	83900		1-100000 0160000	\$655555555 \$65555555	92300 FG	1 (2000) 1 (2000)	10,11			1,35
K2SO4	A OF THE	3000	9	10000	0.000	5200 S	210000	DERECTOR OF		RESERVED.		17,43	GREEN		0,50 1.54
MgSO ₄ .7 H ₂ O	980 P	2000	5 2000	20000 20000	200	50			RANGE ALTERNATION	5300000	d Houseans Contains	24,64			0,94
Mg (NO ₃) 2 . 6 H ₂ O	40.00	5289		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	99	300	2000000	SHEHISE	ESTERO, 200500	Services.		25,63			The second second
CaCl ₂ , 2 H ₂ O	2000	12333		2	0,000	SEC. 22	OF THE PARTY OF	1000000			9550000	14,71	920000	GENERAL STATE	0,8
KCI	Design	13360	8	0000	2 5 5	5350	61/23/36 61/23/36	100.00	PARAGONA.	Modera		7,46		12221290	
KHCO ₃	SALVANIA SALVA	100 E	8	9000	000		Same C	2000000	10000000	S 48 V	0000000	10,00	SECTION S	2000	1,10
Ca(OH) ₂		6550	23384		200	3000	100	Dates	St. St. Control	190.00	200 200	7,40	2017112	5250100	1,10
Ca(NO ₃) ₂ vlb. (1,50)	SE 1175 X	(COS)	9 5523		- 1000	866	-	Figure 15	ELECTION OF SERVICE		1 100 mm	21,33		2028282	0,60
Amnitra vlb. (1,24)	SVS 93		10051		i con	8866			0.000	NO CONTRACTOR	100000	12,50		100000000	0,86
Magnitra vlb. (1,35)	100 to 10	2000	0.00	61 (Sa)		80000		0.2893	COMMUNICATION OF			29,60			0,54
	-							SAVERGED.	LO ROT DISCOURSE	Described	O POSTANCIO CO	25,00			0,04
												EC			
Berekend															1
Gewenst EC (c)					-										
Mat analyse															
EC(c)/EC(v)						(6)									
Minimum															
Maximum															
SPOORELEMENTEN µn	nol/I	Fe ³⁺	Mn ²⁺	Zn ²⁺	B3+	Cu ²⁺	Mo	dec	1999						
Matanalyse									3000						
Streefwaarde															
Advics															

	HCO3	NH [*] 4	K	Ca2+	Mg ²⁺	NO:	SO24	H ₂ PO' ₄	Na ⁺	CI	1 mol	A	В	EC	
Wateranalyse	7,0			2,5	1,0	-	-	-	3,5	3.7.	100 x	100	100		
H ₃ PO ₄ vlb. 59 % (1,42)	715	12.34	d street,	1882.2	Constant		762	1,5	31532333	S TOTAL STATE	11,76	DESCRIPTION OF THE PERSON OF T		0,37	
KH ₂ PO ₄		0.00		TOTAL	E (1981)	600000	43200	30	MERCIE	TO BE	13,61	Table 9		0,68	
NH ₄ H ₂ PO4	RELATION OF		6723	E HE	682 KR	NGC STREET	1800		913203	SWINIS.	11,50	Service.		0,86	
HNO ₃ vlb 38 % (1,24)	7-5	F-bate	ale sai	31500	and the same	5.0	36360	SECTION AND	B10 (7)	100000	13,47	ETOONSON		1,12	
Ca(NO ₃) ₂ / 0,2 NH ₄ NO ₃	11 2 3	0,00,6	1230	2,9		5.0	84 Z	V 10 00 10	also de	2000	21,61		SONELLER	1,24	-
KNO ₃	28,733	780	4	Sec. 25	8-13-15E	4		- A	233934	1006	10,11		SESSION FOR	1,35	
NH ₄ NO ₃	100	0,6	1000	Constant	Section 1	0.6	1000	*****	N2 80 8	1	8,00			0,50	
K ₂ SO ₄	88186	9	5,5	100000	K-ANG	5880 19	2.75	1000 to 1000 t	NA SER	22446	17,43	ARTES.		1.54	-
MgSO ₄ .7 H ₂ O	65 July 1	Zilox i	100000	- C. C. C.	1,4	100 M	1.4	600 SU-300S	BASS- S	Sazze	24,64	3833.22		0.94	-
Mg (NO ₃) 2 . 6 H ₂ O	4	AND S	100000	65 12	77		TO BUSES	I STEEL	SPECIAL		25,63	2536		0.8	-
CaCl ₂ . 2 H ₂ O	5200		1 P. S. S. S.		担急的		S. Tarakini	ASSESSED BY	PERMIT		14,71	September	5.555353	4,0	-
KCI	2803000			1930 A	M1000000	988.00	98 M S	1 State of the last	100		7,46		200000000		
KHCO ₃		All (S	8	448828	000000	38(2)(33)	F (800 %)	115 PH 115	23.8	SHOW	10,00	S15155S23	W 500 500	1,10	
Ca(OH) ₂		1950	103832		85886450	STATE OF STREET	2000	Sessions.	NEWS	100 PM	7,40	STORY OF THE PARTY	8 100 000	1,10	-
Ca(NO ₃) ₂ vlb. (1,50)	No State	e Cham	a Paparaga		B0889861	200000000000000000000000000000000000000	2 5 to 5	CENTRAL	10 1000	Sec. 1966	21,33		S. Contract	0,60	
Amnitra vlb. (1,24)	10.32		108 100	200	Signal Control		9/0.093	TOTAL STREET	W 25 1	18 H.	12,50	-	Barrier St.	0,86	-
Magnitra vlb. (1,35)		1000			The state of the s		Yası	200		deres.	29,60			0,54	
		1									E.C.		. 17		
Berekend	0,5	1.20	9,5	5,4	2,4	15,98	0 15	15		-	EC 7				
Gewenst EC (c)	0,5	190	9,50	511	971	16,0	4.4		90	0 4	Annual Management of the Control of	water			
Mat analyse	90	Buch	4500	0,77	2,4	10,0	494	1,5	3,5	2,7	Lugo	->3,0	,		
EC(c)/EC(v)											-				
Minimum															
Maximum															
SPOORELEMENTEN µm	nol/I	Fe ³⁺	Mn ²⁺ 2	Zn ²⁺ B	D ⁺ Cu	2+ Mo	den	1999							_
Matanalyse	1017.1	10		All L	Cu	Mio	dec	1999							
Streefwaarde							-								

SPOORELEMENTEN µmol/1	Fe ³⁺	Mn ²⁺	Zn2+	B ^{J+}	Cu2+	Mo
Matanalyse					10,1	1.10
Streefwaarde						
Advies	15	10	5	30	0,70	0,50

	HCO3	NH ⁺	K	Ca2+	Mg ²⁺	NO ₃	SO2F4	H ₂ PO 4	Na ⁺	CT	1 mol	A	В	EC
Wateranalyse	7,0			2,5	1,0	-	-	-	3,5	3.7.	100 x	1		
H ₃ PO ₄ vlb. 59 % (1,42)	755	45 .30	863123	1200	N. Carlot	1000	Name of	1,5	3000	15020	11,76	No.	17,64	0,37
KH ₂ PO ₄		No.		Table 1	B. Carrie	SECOND !	Sale.	70		10000	13,61	2000	1 4,04	0,68
NH ₄ H ₂ PO4			162.33	1000	28.20 Miles	304 (80	20000		45 (13)	190250	11,50	, No.		0,86
HNO ₃ vlb 38 % (1,24)	7-5	TSIS!			30.3036.3	5,0	100000	SALESSES.	All III	100.000	13,47	province:	181.5	
Ca(NO ₃) ₂ / 0,2 NH ₄ NO ₃	100 No. 100	120,6	36200	2,9	groundless.	2:6:38	THE STATE	Statistic	A STATE OF	Taesac	THE REAL PROPERTY AND ADDRESS OF	62.7	S1552 (500)	1,24
KNO ₃		150	4	100000	S-40-263		\$3000 P	September	2004	111000	10,11	40,11	STOCKER	1,35
NH ₄ NO ₃	right six	0,6	2700		S	0,6	1881 V	3100000	200	15.86.8	8,00	1 - 2		0,50
K ₂ SO ₄	A 18 18 18 18 18 18 18 18 18 18 18 18 18	表示 為	5,5	0.00	Service.	200 SE	2,75	Catalana (S	MISH.		17,43	And the second	50,0	The second second
MgSO ₄ .7 H ₂ O	8000	1000	1 (2000)	253 4	1,4	445	1,4	210,000	0.000		24,64	STATE OF THE PARTY OF	34,5	
Mg (NO ₃) 2 . 6 H ₂ O	2000	ALC:	10000	40,000	-		S-8000	K. C. LEWIS CO.	100.0		25,63	025002200000	3910	0,8
CaCl ₂ . 2 H ₂ O							THE		1		14,71	10000000	\$500.00	1,0
KCI	200000	4333	ě	Sec. 2	\$10 × 81	93723	100	1007203			7,46		0801190	
KHCO ₃	De la Company	州 集6	Š.	4000	2000	(1988)	DEN S	(2)	933	0.000	10,00	900000	8.80.00	1,10
Ca(OH) ₂		(Fig. 6)	1000		XXX0520	1000 PM	1388	a section of	10.00	40.070	7,40	0.00000000	24000	1,10
Ca(NO ₃) ₂ vlb. (1,50)	No. of	3000	No.		影響技術		S CONTRACT	SURAD DIE	10,100	Service .	21,33		Supplier of	0,60
Amnitra vlb. (1,24)	WHO.		100	Carrier,	82330		100	25/26/20	NI CONTRACT	No. of	12,50		200000000	0,86
Magnitra vlb. (1,35)		1000	10000	12000.5			8000	STEELS	-	the little	29,60			0,54
	-							-	ALC: NAME	-				
											EC			
Berekend	0,5	1,20	9,5	54	2,4	15,98	2.15	1,5		777	And in column 2 is not a second	wake		
Gewenst EC (c)	0,5	1,20	9,50	5,4	2.4	16,0	4,4	1,5	3,5	2,7	2,6			
Mat analyse									025	1	1630			
EC(c)/EC(v)	ERRAIN				(6)							Y .		
Minimum		1		9								8		
Maximum														
SPOORELEMENTEN µn	nol/1	Fe ³⁺	Mn ²⁺ 2	Zn ²⁺ I	3 ³⁺ Cu	2+ Mo	dec	1999						
Matanalyse						1.10	1							
Streefwaarde														
Advies		15	10	5	30 0,	70 0,50	9							

Wateranalyse	A	В	
H ₃ PO ₄ vlb. 59 % (1,42)	2 2 1 6 5 7	17 60	Flan
KH ₂ PO ₄		17,09	
NH ₄ H ₂ PO4			
HNO ₃ vlb 38 % (1,24)	20.004043424255	101,5	# 1-7-L
Ca(NO ₃) ₂ / 0,2 NH ₄ NO ₃	697	1000	
KNO ₃	40.11		
NH ₄ NO ₃	4.8		
K ₂ SO ₄		50.0	
MgSO ₄ .7 H ₂ O	574.62	34.5	
Mg (NO ₃) 2.6 H ₂ O	3.5.00	7/10	
CaCl ₂ . 2 H ₂ O	Cristal Isoa Robins		
KCl		BREADSOCIAL	
KHCO ₃	No. of the last	10.53	
Ca(OH) ₂			
Ca(NO ₃) ₂ vlb. (1,50)		0.00	
Amnitra vlb. (1,24)		SCHOOLSE SEE	WWW.





