

What can regenerative agriculture deliver for farmers?

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Organic vegetable farmer



ILVO





Healthy soil, healthy plants



Same soil type

3rd year
agroforestry

2nd year
agroforestry

First year
agroforestry



compost



ZWARTE SPECHT
gangmaker van de rhizosfeer



BASISGANGMAKER COMPOST

BESTE BASIS VOOR BODEMVERBETERING

- ✓ Optimaal ontwikkelde compost
- ✓ Stimuleert het bodemleven
- ✓ 100% biologisch, ook voor gangbaar
- ✓ Goede resultaten in akkerbouw en fruitteelt

GECOMPOSTEERDE KIPPENMESTKORRELS

**VOOR EEN OPTIMAAL WERKENDE
EN GEZONDE BODEM**

- ✓ 100% biologisch
- ✓ A-meststof
- ✓ Werkt al na 2 weken
- ✓ Hoge stikstofefficiëntie



Fertilization = nutrition soil life

- Fertilization autumn:
 - compost of wood chips and poplar bark
 - Miscanthus compost
- Fertilization spring:
 - Dried organic chicken manure in pellets



Broccoli



Broccoli



Broccoli old system: too much NA



Mineraal		Huidig niveau		
Suikers	%	6,2	1	
	%	5,1	2	
pH		6,3	1	
		6,0	2	
EC	mS/cm	9,9	1	
	mS/cm	12,5	2	
K - Kalium	ppm	2101	1	
	ppm	1808	2	
Ca - Calcium	ppm	2677	1	
	ppm	4827	2	
K / Ca		0,78	1	
		0,37	2	
Mg - Magnesium	ppm	152	1	
	ppm	233	2	
Na - Natrium	ppm	251	1	
	ppm	543	2	
NH4 - Ammonium	ppm	66	1	
	ppm	40	2	
NO3 - Nitraat	ppm	<20	1	
	ppm	<20	2	
N uit Nitraat	ppm	<5	1	
	ppm	<5	2	
N - Stikstof totaal	ppm	1039	1	
	ppm	631	2	
Cl - Chloride	ppm	683	1	
	ppm	1649	2	

S - Zwavel	ppm	2220	1	
	ppm	2595	2	
P - Fosfaat	ppm	190	1	
	ppm	139	2	
Si - Silicium	ppm	10,3	1	
	ppm	9,1	2	
Fe - IJzer	ppm	1,74	1	
	ppm	1,27	2	
Mn - Mangaan	ppm	1,38	1	
	ppm	1,32	2	
Zn - Zink	ppm	3,11	1	
	ppm	1,61	2	
B - Borium	ppm	2,72	1	
	ppm	4,13	2	
Cu - Koper	ppm	0,26	1	
	ppm	0,16	2	
Mo - Molybdeen	ppm	0,39	1	
	ppm	0,38	2	
Al - Aluminium	ppm	<0,50	1	
	ppm	0,54	2	

Plant juice analysis broccoli - Zwarte Specht concept

Mineraal		Huidig niveau	Optimum			
Suikers	%	2,7	0,6 - 1,9	1	[Bar chart showing current level 2.7% vs optimum 0.6-1.9%]	
	%	3,0		2	[Bar chart showing current level 3.0% vs optimum 0.6-1.9%]	
pH		5,9	6,2 - 6,6	1	[Bar chart showing current level 5.9 vs optimum 6.2-6.6]	
		6,1		2	[Bar chart showing current level 6.1 vs optimum 6.2-6.6]	
EC	mS/cm	7,1	11,9 - 16,1	1	[Bar chart showing current level 7.1 vs optimum 11.9-16.1]	
	mS/cm	12,6		2	[Bar chart showing current level 12.6 vs optimum 11.9-16.1]	
K - Kalium	ppm	1867	3625 - 5775	1	[Bar chart showing current level 1867 ppm vs optimum 3625-5775]	
	ppm	4200		2	[Bar chart showing current level 4200 ppm vs optimum 3625-5775]	
Ca - Calcium	ppm	1655	1225 - 4300	1	[Bar chart showing current level 1655 ppm vs optimum 1225-4300]	
	ppm	3342		2	[Bar chart showing current level 3342 ppm vs optimum 1225-4300]	
K / Ca		1,13		1	[Bar chart showing current level 1.13 vs optimum 1225-4300]	
		1,26		2	[Bar chart showing current level 1.26 vs optimum 1225-4300]	
Mg - Magnesium	ppm	83	280 - 510	1	[Bar chart showing current level 83 ppm vs optimum 280-510]	
	ppm	143		2	[Bar chart showing current level 143 ppm vs optimum 280-510]	
Na - Natrium	ppm	27	66 - 161	1	[Bar chart showing current level 27 ppm vs optimum 66-161]	
	ppm	42		2	[Bar chart showing current level 42 ppm vs optimum 66-161]	
NH4 - Ammonium	ppm	62	140 - 470	1	[Bar chart showing current level 62 ppm vs optimum 140-470]	
	ppm	81		2	[Bar chart showing current level 81 ppm vs optimum 140-470]	
NO3 - Nitraat	ppm	<20	70 - 910	1	[Bar chart showing current level <20 ppm vs optimum 70-910]	
	ppm	<20		2	[Bar chart showing current level <20 ppm vs optimum 70-910]	
N uit Nitraat	ppm	<5	16 - 205	1	[Bar chart showing current level <5 ppm vs optimum 16-205]	
	ppm	<5		2	[Bar chart showing current level <5 ppm vs optimum 16-205]	
N - Stikstof totaal	ppm	735	1630 - 3110	1	[Bar chart showing current level 735 ppm vs optimum 1630-3110]	
	ppm	1202		2	[Bar chart showing current level 1202 ppm vs optimum 1630-3110]	
Cl - Chloride	ppm	276	740 - 1780	1	[Bar chart showing current level 276 ppm vs optimum 740-1780]	
	ppm	951		2	[Bar chart showing current level 951 ppm vs optimum 740-1780]	
S - Zwavel	ppm	1155	1130 - 1730	1	[Bar chart showing current level 1155 ppm vs optimum 1130-1730]	
	ppm	2305		2	[Bar chart showing current level 2305 ppm vs optimum 1130-1730]	

P - Fosfaat	ppm	208	230 - 610	1	[Bar chart showing current level 208 ppm vs optimum 230-610]	
	ppm	313		2	[Bar chart showing current level 313 ppm vs optimum 230-610]	
Si - Silicium	ppm	4,8	2,6 - 7,5	1	[Bar chart showing current level 4.8 ppm vs optimum 2.6-7.5]	
	ppm	6,4		2	[Bar chart showing current level 6.4 ppm vs optimum 2.6-7.5]	
Fe - IJzer	ppm	0,77	1,50 - 2,45	1	[Bar chart showing current level 0.77 ppm vs optimum 1.50-2.45]	
	ppm	2,73		2	[Bar chart showing current level 2.73 ppm vs optimum 1.50-2.45]	
Mn - Mangaan	ppm	1,14	2,20 - 6,20	1	[Bar chart showing current level 1.14 ppm vs optimum 2.20-6.20]	
	ppm	1,30		2	[Bar chart showing current level 1.30 ppm vs optimum 2.20-6.20]	
Zn - Zink	ppm	0,82	2,30 - 5,35	1	[Bar chart showing current level 0.82 ppm vs optimum 2.30-5.35]	
	ppm	1,81		2	[Bar chart showing current level 1.81 ppm vs optimum 2.30-5.35]	
B - Borium	ppm	0,70	2,60 - 5,20	1	[Bar chart showing current level 0.70 ppm vs optimum 2.60-5.20]	
	ppm	1,69		2	[Bar chart showing current level 1.69 ppm vs optimum 2.60-5.20]	
Cu - Koper	ppm	0,15	0,25 - 0,50	1	[Bar chart showing current level 0.15 ppm vs optimum 0.25-0.50]	
	ppm	0,31		2	[Bar chart showing current level 0.31 ppm vs optimum 0.25-0.50]	
Mo - Molybdeen	ppm	0,51	0,20 - 0,60	1	[Bar chart showing current level 0.51 ppm vs optimum 0.20-0.60]	
	ppm	1,92		2	[Bar chart showing current level 1.92 ppm vs optimum 0.20-0.60]	
Al - Aluminium	ppm	<0,50	<0,50 - <0,50	1	[Bar chart showing current level <0.50 ppm vs optimum <0.50-0.50]	
	ppm	0,51		2	[Bar chart showing current level 0.51 ppm vs optimum <0.50-0.50]	

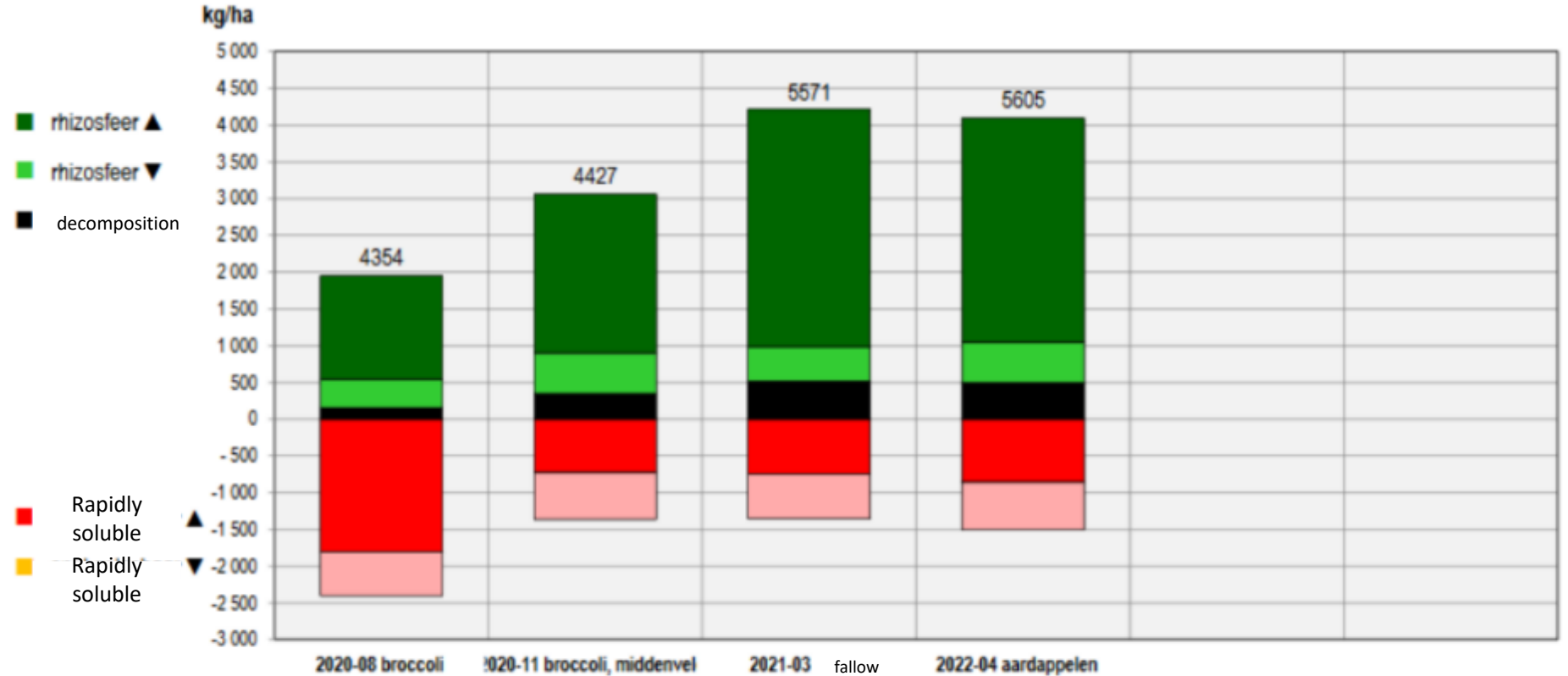


Measurement report Peter Vanhoof then and now



Samenvatting van de activiteit van het bodemleven

Beschikbare of beschikbaar gemaakte nutriënten uit verschillende bronnen (kg/ha)





Potatoes



Knolselder Cellery





TREATED WITH ZWARTE SPECHT CONCEPT

NOT TREATED



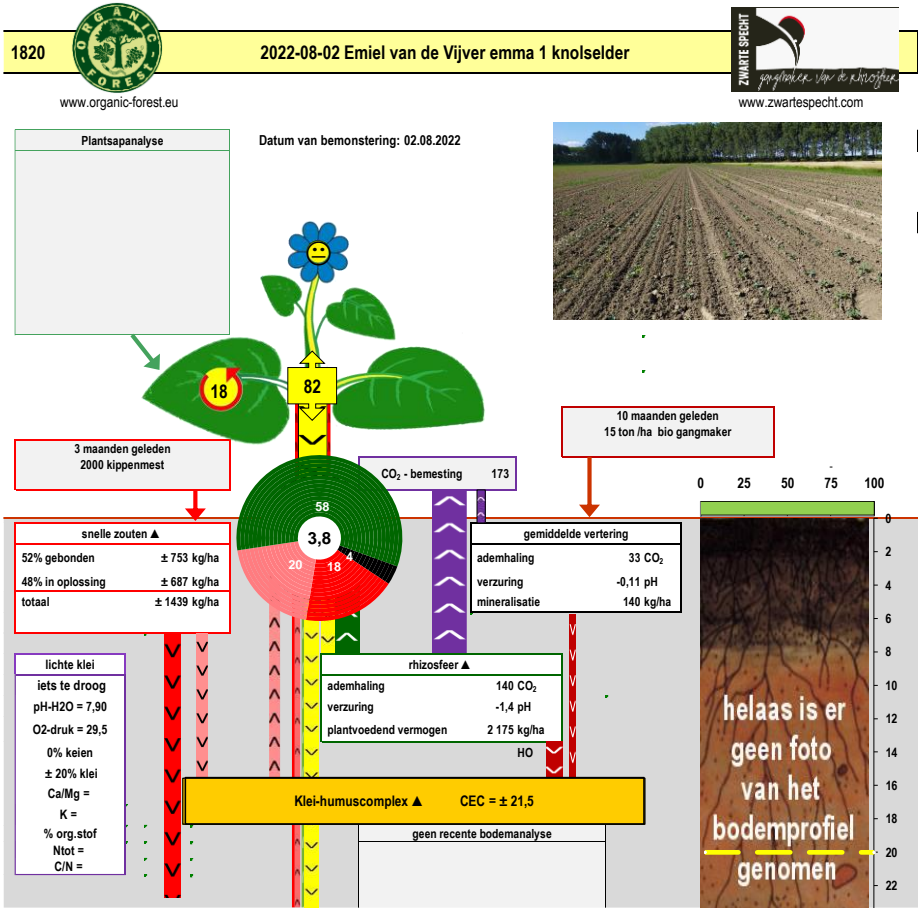
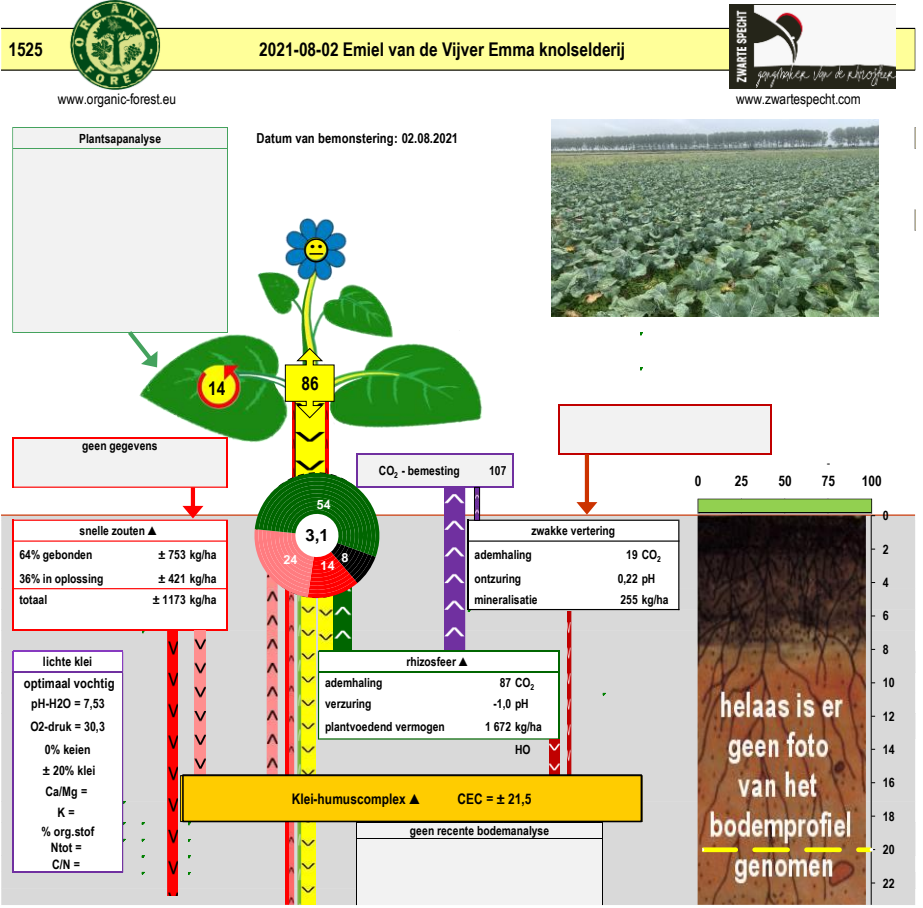
Plant juice analysis



Mineraal		Huidig niveau	Optimum		
Suikers	%	0,5	0,6 - 1,2	1	
	%	0,4		2	
pH		5,6	5,7 - 6,0	1	
		5,8		2	
EC	mS/cm	20,9	15,7 - 29,7	1	
	mS/cm	20,2		2	
K - Kalium	ppm	2908	3675 - 5925	1	
	ppm	5436		2	
Ca - Calcium	ppm	3466	1175 - 8075	1	
	ppm	3541		2	
K / Ca		2,25		1	
		0,98		2	
Mg - Magnesium	ppm	610	360 - 570	1	
	ppm	651		2	
Na - Natrium	ppm	801	611 - 1237	1	
	ppm	1012		2	
NH4 - Ammonium	ppm	38	60 - 120	1	
	ppm	41		2	
NO3 - Nitraat	ppm	1204	280 - 1420	1	
	ppm	2576		2	
N uit Nitraat	ppm	272	63 - 321	1	
	ppm	537		2	
N - Stikstof totaal	ppm	1305	930 - 1640	1	
	ppm	1404		2	
Cl - Chloride	ppm	1073	1750 - 1750	1	
	ppm	3950		2	
S - Zwavel	ppm	2291	630 - 2470	1	
	ppm	2044		2	

P - Fosfaat	ppm	555	110 - 340	1	
	ppm	126		2	
Si - Silicium	ppm	10,8	2,3 - 4,7	1	
	ppm	14,5		2	
Fe - IJzer	ppm	3,34	2,25 - 5,15	1	
	ppm	7,31		2	
Mn - Mangaan	ppm	3,49	3,80 - 11,00	1	
	ppm	6,64		2	
Zn - Zink	ppm	6,81	4,45 - 6,80	1	
	ppm	8,57		2	
B - Borium	ppm	2,32	0,40 - 1,50	1	
	ppm	1,14		2	
Cu - Koper	ppm	1,12	0,55 - 0,90	1	
	ppm	0,62		2	
Mo - Molybdeen	ppm	0,16	0,10 - 0,35	1	
	ppm	0,70		2	
Al - Aluminium	ppm	2,58	<0,50 - 1,33	1	
	ppm	3,57		2	

Measurement report then and now





Met het Zwarte Specht concept naar een duurzame landbouw

Hoge kwaliteit

Sterke weerbare planten



ZWARTE SPECHT
gangmaker van de rhizosfeer

De bodem als basis

Hoge opbrengst

Vruchtbare bodem

HOE HET WERKT

Hoogwaardige
compost

Natuurlijke bacteriën
en schimmels

Kwantum
landbouw

RESULTATEN

✓
Hogere
biodiversiteit

✓
Herstellen communicatie
tussen plant en bodem

✓
Opbouw
humus

✓
Efficiëntere
wateropname

✓
Vastlegging
CO₂

Thank you for your attention

Questions?

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Questions?