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Version 1

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Demo onkruidbestrijding in pastinaak

Herbiciden

Project nummer: 5590

Trial nummer: 5590

Start proef: 03-05-2021

Einde proef: 22-06-2021

Land: Nederland

EU-zone: Central zone (Maritime EPPO-zone)

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Project details

Project nummer:	5590
Proef nummer:	5590
Proef titel:	Demo onkruidbestrijding in pastinaak Herbiciden
Geldverstrekker:	Stichting TOG
Contractor:	Exploras Agro Development BV
Jaar:	2021
EU-zone:	Central zone (Maritime EPPO-zone)
Land:	Nederland
Locatie:	De Moer

Samenvatting

Het doel van deze proef was het testen van verschillende strategieën met onkruidbestrijding in de teelt van pastinaak. Hiervoor is een proef opgezet met 8 objecten. In deze 8 objecten zijn de volgende middelen gecombineerd; Challenge, Stomp, Wing P en Boxer. Extra is er in object 8 gespoten met het product Toki om te screenen of dit product potentie heeft in de pastinaak teelt. Er zijn in totaal drie verschillende toepassingsmomenten geweest. Toepassing A was een toepassing vlak na het zaaien en voor opkomst van de pastinaak. Toepassing B is uitgevoerd toen de pastinaak in het 1e blad stonden en toepassing C bij het 2e blad stadium.

Gedurende de proef was het gewas in een goede staat. Op de dagen van de toepassingen was er geen extreem weer, en ook gedurende de hele proefperiode heeft het weer geen negatief effect gehad op de proef. In deze proef kwamen er vijf onkruidsoorten voor met een voldoende dichtheid en spreiding over het proefveld. De beoordeelde onkruiden zijn: *Chenopodium album* (85,25 pla/m²), *Stellaria media* (73,75 pla/m²), *Poa annua* (16,25 pla/m²), *Solanum nigrum* (35 pla/m²) en *Echinochloa crus-galli caudata* (39 pla/m²). Ook wordt de totale onkruiddruk beoordeeld onder de naam TTTTT (249,25 pla/m²).

Strategie 7 gaf gedurende de proef de hoogste werkzaamheid.

Strategieën 6 en 4 deden statistisch gezien niet onder voor strategie 7.

Strategieën 2 en 5 toonden statistisch een lagere werkzaamheid dan strategieën 4, 6 en 7.

Strategie 3 toonde statistisch een lagere werkzaamheid dan strategieën 2,4,5,6,7.

Strategie 8 toonde statistisch de laagste werkzaamheid.

Er was spuitschade waargenomen in alle strategieën.

Strategie 8 toonde statistisch de meeste spuitschade.

Gekeken naar werkzaamheid en spuitschade lijkt strategie 6 de beste strategie.

Introductie

Het doel van deze proef was het testen van verschillende strategieën met onkruidbestrijding in de teelt van pastinaak. Hiervoor is een proef opgezet met 8 objecten. In deze 8 objecten zijn de volgende middelen gecombineerd; Challenge, Stomp, Wing P en Boxer. Extra is er in object 8 gespoten met het product Toki om te screenen of dit product potentie heeft in de pastinaak teelt. Er zijn in totaal drie verschillende toepassingsmomenten geweest. Toepassing A was een toepassing vlak na het zaaien en voor opkomst van de pastinaak. Toepassing B is uitgevoerd toen de pastinaak in het 1e blad stonden en toepassing C bij het 2e blad stadium.

Materiaal en methode

A. Behandelingen

Tabel 1 spuitschema

Trt No.	Type	Treatment Name	Rate	Rate Unit	Appl Code
1	CHK	UNTREATED			
2	HERB	Stomp	2	l/ha	A
	HERB	Boxer	0,75	l/ha	B
	HERB	Wing P	1	l/ha	B
	HERB	Boxer	0,75	l/ha	C
	HERB	Wing P	1,5	l/ha	C
3	HERB	Challenge	1,5	l/ha	A
	HERB	Boxer	0,75	l/ha	B
	HERB	Wing P	1	l/ha	B
	HERB	Boxer	0,75	l/ha	C
	HERB	Wing P	1,5	l/ha	C
4	HERB	Challenge	1,5	l/ha	A
	HERB	Challenge	1	l/ha	B
	HERB	Wing P	1	l/ha	B
	HERB	Boxer	0,75	l/ha	C
	HERB	Wing P	1,5	l/ha	C
5	HERB	Challenge	1	l/ha	A
	HERB	Stomp	1	l/ha	A
	HERB	Boxer	0,5	l/ha	B
	HERB	Challenge	0,5	l/ha	B
	HERB	Wing P	0,5	l/ha	B
	HERB	Boxer	0,75	l/ha	C
	HERB	Wing P	1,5	l/ha	C
6	HERB	Challenge	1,5	l/ha	A
	HERB	Stomp	2	l/ha	A
	HERB	Boxer	0,5	l/ha	B
	HERB	Challenge	0,25	l/ha	B
	HERB	Wing P	0,5	l/ha	B
	HERB	Boxer	0,5	l/ha	C
	HERB	Challenge	0,25	l/ha	C
	HERB	Wing P	1	l/ha	C
	HERB	Challenge	1,5	l/ha	A
7	HERB	Stomp	2	l/ha	A
	HERB	Wing P	1	l/ha	A
	HERB	Wing P	1	l/ha	B
	HERB	Boxer	1	l/ha	C
	HERB	Challenge	0,5	l/ha	C
	HERB	Challenge	0,5	l/ha	C
8	HERB	Toki	0,06	kg/ha	C

B. Locatie

Trial Location			
City:	De Moer	Country:	NLD Netherlands
Latitude of LL Corner °:	51,631387		N
Longitude of LL Corner °:	4,996541		E

C. Opzet van de proef

Site and Design			
Treated Plot Width:	3 m	Site Type:	FIELD field
Treated Plot Length:	6 m	Experimental Unit:	1 PLOT plot
Treated Plot Area:	18,0 m ²	Treatments:	8
Replications:	4	Tillage Type:	CONTIL conventional-till
(RCB)		Study Design:	RACOBL Randomized Complete Block

D. Gewas beschrijving

Crop Description			
Crop 1:	C PAVSA Pastinaca sativa	parsnip	BBCH Scale: BDIC
Entry Date:	16-7-2021	Stage Scale:	BBCH
Planting Date:	26-4-2021		
Row Spacing:	50	cm	

E. Onkruid beschrijving

Pest Description			
Pest 1 Type:	W	Code: URTUR Urtica urens	Entry Date: 16-7-2021
Common Name:		Burning nettle	Stage Scale: BBCH
Pest 2 Type:	W	Code: CHEAL Chenopodium album	Entry Date: 23-7-2021
Common Name:		common lambsquarters	Stage Scale: BBCH
Pest 3 Type:	W	Code: STEME Stellaria media	Entry Date: 23-7-2021
Common Name:		Common chickweed	Stage Scale: BBCH
Pest 4 Type:	W	Code: POAAN Poa annua	Entry Date: 23-7-2021
Common Name:		Annual bluegrass	Stage Scale: BBCH
Pest 5 Type:	W	Code: SOLNI Solanum nigrum	Entry Date: 23-7-2021
Common Name:		Black nightshade	Stage Scale: BBCH
Pest 6 Type:	W	Code: TTTTT Weed plants	Entry Date: 23-7-2021
Common Name:		Weed plants	Stage Scale: BBCH
Pest 7 Type:	W	Code: ECHCC Echinochloa crus-galli caudata	Entry Date: 23-7-2021
Common Name:		Echinochloa crus-galli caudata	Stage Scale: BBCH

F. Bodem

Soil Description

Texture: S sand

G. Toepassingsinformatie

Tabel 2 Toepassingen

	A	B	C
Application Date	3-5-2021	31-5-2021	7-6-2021
Appl. Start Time	9:30	11:30	11:00
Appl. Stop Time	10:30	12:30	12:00
Interval to Prev. Appl.		28 DAYS	7 DAYS
Application Method	SPRAY	SPRAY	SPRAY
Application Timing	PREMCR	ACCRST	ACCRST
Application Placement	BROSOI	BROFOL	BROFOL
Applied By	A. Krösschell	A. Krösschell	A. Krösschell
Appl. Entry Date	16-7-2021	16-7-2021	16-7-2021
Air Temperature Start, Stop	11; 11 C	22; 22 C	20; 20 C
% Relative Humidity Start, Stop	56; 56	40; 40	45; 45
Wind Velocity+Dir. Start	4 MPS; SW	2 MPS; NE	4 MPS; NE
Wind Velocity+Dir. Stop	4 MPS; SW	2 MPS; NE	4 MPS; NE
Wind Velocity+Dir. Max	4 MPS; SW	2 MPS; NE	4 MPS; NE
Wet Leaves (Y/N)	N; no	N; no	N; no
Soil Temperature	9 C	24 C	24 C
Soil Moisture	SLIWET	DRY	DRY
% Cloud Cover	90	10	0

Tabel 3 gewasstand tijdens de toepassingen

	A	B	C
Crop 1 Code, BBCH Scale	PAVSA; BDIC	PAVSA; BDIC	PAVSA; BDIC
Stage Majority, Percent	0; 100	11; 90	12; 80
Stage Minimum, Percent	0; 100	11; 90	11; 10
Stage Maximum, Percent	0; 100	12; 10	13; 10
Diameter Average	0 cm	2 cm	4 cm
Diameter Minimum, Maximum	0; 0	2; 3	2; 5
Height Average	0 cm	3 cm	4 cm
Height Minimum, Maximum	0; 0	2; 3	3; 5
Coverage	0 %	5 %	5 %

Tabel 4 spuitapparatuur tijdens de toepassingen

	A	B	C
Appl. Equipment	EAD-SB-2	EAD-SB-2	EAD-SB-2
Equipment Type	BACCAI	BACCAI	BACCAI
Operation Pressure	2 BAR	2 BAR	2 BAR
Nozzle Model	11002	11002	11002
Nozzle Type	AIXR	AIXR	AIXR
Nozzle Spacing	50,0 cm	50,0 cm	50,0 cm
Nozzles/Row	6,0	6,0	6,0
Band Width	3,0 m	3,0 m	3,0 m
Boom ID	EAD-SB-2	EAD-SB-2	EAD-SB-2
Boom Height	50,0 cm	50,0 cm	50,0 cm
Carrier	WATER	WATER	WATER
Application Amount	300 L/ha	300 L/ha	300 L/ha

H. Waarnemingen

1 Effectiviteit

Beoordeel elk veldje, per onkruidsoort op percentage bestrijding ten opzichte van onbehandeld. Geef daarbij ook een cijfer voor bestrijding totaal.
Bij een grote onkruid dichtheid geeft een cijfer voor de bodembedekking per onkruidsoort.

2 Selectiviteit (Fyto)

Beoordeel op fyto totaal, schaal 0 (0= geen fyto) 100 (100= volledig afgestorven).
Bij verschillende symptomen maak een onderscheid (necrose, chlorose, remming, vervorming). Geef een beoordeling per symptoom. Bij fyto maak altijd (detail) foto's van de symptomen!

3 Gewasstand

Noteer de gewasstand van elk object in de schaal van 0-10.

Waarnemingsmomenten

17 dagen na A
29 dagen na A
7 dagen na B
7 dagen na C
15 dagen na C

I. Statistische analyse

De data wordt geanalyseerd met de ANOVA ($p=0,05$) gevolgd door de Student-Newman-Keuls test.
De resultaten met dezelfde letter worden als niet significant gezien.

J. Weer

April 2021: Erg zonnig en extreem koud. Gemiddelde temperatuur 6,7 graden waar 9,8 graden normaal is. Neerslag 41 mm tegen 40 normaal. 287 zonuren tegen 178 normaal.

Mei 2021: Erg koud en erg nat. Gemiddelde temperatuur 11,2 graden tegen 13,4 graden normaal. Neerslag 90 mm tegen 55 normaal en 200 zonuren tegen 225 normaal.

Juni 2021: Erg warm, nat, en zonnig. Gemiddelde temperatuur 18,2 graden tegen 16,2 graden normaal. Neerslag 94 mm tegen 66 normaal. Zonuren 247 tegen 214 normaal.

Voor gedetailleerde weer gegevens zie bijlage 4.

Resultaten en discussie

K. Algemeen

Gedurende de proef was het gewas in een goede staat. Op de dagen van de toepassingen was er geen extreem weer, en ook gedurende de hele proefperiode heeft het weer geen negatief effect gehad op de proef. In deze proef kwamen er vijf onkruidsoorten voor met een voldoende dichtheid en spreiding over het proefveld. De beoordeelde onkruiden zijn: *Chenopodium album* (85,25 pla/m²), *Stellaria media* (73,75 pla/m²), *Poa annua* (16,25 pla/m²), *Solamum nigrum* (35 pla/m²) en *Echinochloa crus-galli caudata* (39 pla/m²). Ook wordt de totale onkruidruk beoordeeld onder de naam TTTTT (249,25 pla/m²).

L. Gewasstand

Tabel 5 Gewasstand, 29DAA, 6DAB, 7DAC, 15DAC

Rating Timing		A2	A3	A4	A5		
Rating Date		1-6-2021	7-6-2021	14-6-2021	22-6-2021		
Trt-Eval Interval		29 DA-A	6 DA-B	7 DA-C	15 DA-C		
Crop Type, Code		C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA		
Crop Stage Majority/Min/Max		11; 11; 11	12; 12; 12	14; 14; 14	15; 15; 15		
Part Rated		PLANT; C	PLANT; C	PLANT; C	PLANT; C		
Rating Type		VIGOR	VIGOR	VIGOR	VIGOR		
Rating Unit/Min/Max		0-10; 0; 10	0-10; 0; 10	0-10; 0; 10	0-10; 0; 10		
Trt No.	Treatment Name	Rate	Appl Code	4*	16*	31*	47*
1	UNTREATED			10,0 a	10,0 a	10,0 a	9,3 ab
2	Stomp	2 l/ha	A	10,0 a	10,0 a	9,3 ab	8,3 abc
	Boxer	0,75 l/ha	B				
	Wing P	1 l/ha	B				
	Boxer	0,75 l/ha	C				
	Wing P	1,5 l/ha	C				
3	Challenge	1,5 l/ha	A	10,0 a	10,0 a	8,8 ab	7,8 bc
	Boxer	0,75 l/ha	B				
	Wing P	1 l/ha	B				
	Boxer	0,75 l/ha	C				
	Wing P	1,5 l/ha	C				
4	Challenge	1,5 l/ha	A	10,0 a	8,5 b	9,0 ab	8,8 abc
	Challenge	1 l/ha	B				
	Wing P	1 l/ha	B				
	Boxer	0,75 l/ha	C				
	Wing P	1,5 l/ha	C				
5	Challenge	1 l/ha	A	10,0 a	10,0 a	9,3 ab	9,3 ab
	Stomp	1 l/ha	A				
	Boxer	0,5 l/ha	B				
	Challenge	0,5 l/ha	B				
	Wing P	0,5 l/ha	B				
	Boxer	0,75 l/ha	C				
	Wing P	1,5 l/ha	C				
6	Challenge	1,5 l/ha	A	10,0 a	10,0 a	10,0 a	10,0 a
	Stomp	2 l/ha	A				
	Boxer	0,5 l/ha	B				
	Challenge	0,25 l/ha	B				
	Wing P	0,5 l/ha	B				
	Boxer	0,5 l/ha	C				
	Challenge	0,25 l/ha	C				
	Wing P	1 l/ha	C				
7	Challenge	1,5 l/ha	A	10,0 a	10,0 a	9,8 a	9,3 ab
	Stomp	2 l/ha	A				
	Wing P	1 l/ha	A				
	Wing P	1 l/ha	B				
	Boxer	1 l/ha	C				
	Challenge	0,5 l/ha	C				
8	Toki	0,06 kg/ha	C	10,0 a	10,0 a	8,3 b	7,3 c
LSD P=.05				.	0,30	0,97	1,22
Standard Deviation				0,00	0,20	0,66	0,83
CV				0,0	2,08	7,11	9,5
Grand Mean				10,00	9,81	9,28	8,72
Replicate F				0,000	1,000	0,454	1,382
Replicate Prob(F)				1,0000	0,4123	0,7173	0,2758
Treatment F				0,000	27,000	3,512	4,835
Treatment Prob(F)				1,0000	0,0001	0,0118	0,0023

De gewasstand is beoordeeld in de een schaal van 0-10 waarbij 10 is best. De gewasstand in bovenstaande tabel is vooral gebaseerd op spuutschade, en in het geval van onbehandeld op verdringing van de onkruiden. Er zijn een aantal significante verschillen te zien. Object 4 heeft 6 dagen na de 2^e toepassing significant een slechtere gewasstand dan de rest van de objecten. Bij de 3^e beoordeling is er vooral te zien dat object 8 waar Toki is toegepast significant een slechtere gewasstand heeft gekregen. Bij de laatste beoordeling, 15 dagen na de laatste toepassing, is vooral object 8 met Toki significant slechter dan de andere objecten. Gedurende de proef heeft object 6 continu de beste gewasstand gehouden.

M. Gewasveiligheid

Tabel 6 Spuitschade, Spuitschade totaal, chlorose, necrose, vervorming, 29DAA, 6DAB, 7DAC, 15DAC

Rating Timing		A2	A3	A3	A4	A4	A4		
Rating Date		1-6-2021	7-6-2021	7-6-2021	14-6-2021	14-6-2021	14-6-2021		
Trt-Eval Interval		29 DA-A	6 DA-B	6 DA-B	7 DA-C	7 DA-C	7 DA-C		
Crop Type, Code		C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA		
Crop Stage Majority/Min/Max		11; 11; 11	12; 12; 12	12; 12; 12	14; 14; 14	14; 14; 14	14; 14; 14		
Part Rated		PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; C		
Rating Type		PHYGEN	CHLOROSIS	PHYGEN	CHLOROSIS	NECROSIS	PHYGEN		
Rating Unit/Min/Max		%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100		
Trt No.	Treatment Name	Rate	Appl Code	5*	17*	18*	32*	33*	34*
1	UNTREATED			0,0 a	0,0 c	0,0 c	0,0 b	0,0 b	0,0 d
2	Stomp	2 l/ha	A	0,0 a	0,0 c	0,0 c	6,3 b	7,5 b	13,8 c
	Boxer	0,75 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
3	Challenge	1,5 l/ha	A	0,0 a	0,0 c	0,0 c	3,8 b	6,3 b	10,0 c
	Boxer	0,75 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
4	Challenge	1,5 l/ha	A	0,0 a	30,0 a	30,0 a	23,8 a	5,0 b	28,8 b
	Challenge	1 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
5	Challenge	1 l/ha	A	0,0 a	0,0 c	0,0 c	5,0 b	2,5 b	7,5 cd
	Stomp	1 l/ha	A						
	Boxer	0,5 l/ha	B						
	Challenge	0,5 l/ha	B						
	Wing P	0,5 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
6	Challenge	1,5 l/ha	A	0,0 a	7,5 b	7,5 b	5,0 b	0,0 b	5,0 cd
	Stomp	2 l/ha	A						
	Boxer	0,5 l/ha	B						
	Challenge	0,25 l/ha	B						
	Wing P	0,5 l/ha	B						
	Boxer	0,5 l/ha	C						
	Challenge	0,25 l/ha	C						
	Wing P	1 l/ha	C						
7	Challenge	1,5 l/ha	A	0,0 a	0,0 c	0,0 c	5,0 b	0,0 b	5,0 cd
	Stomp	2 l/ha	A						
	Wing P	1 l/ha	A						
	Wing P	1 l/ha	B						
	Boxer	1 l/ha	C						
	Challenge	0,5 l/ha	C						
8	Toki	0,06 kg/ha	C	0,0 a	0,0 c	0,0 c	20,0 a	18,8 a	38,8 a
	LSD P=.05			.	2,60	2,60	5,93	5,07	6,60
	Standard Deviation			0,00	1,77	1,77	4,03	3,45	4,49
	CV			0,0	37,71	37,71	46,92	69,01	33,0
	Grand Mean			0,00	4,69	4,69	8,59	5,00	13,59
	Replicate F			0,000	1,000	1,000	0,304	1,050	0,970
	Replicate Prob(F)			1,0000	0,4123	0,4123	0,8219	0,3912	0,4253
	Treatment F			0,000	142,714	142,714	17,622	13,350	35,351
	Treatment Prob(F)			1,0000	0,0001	0,0001	0,0001	0,0001	0,0001

Rating Timing				A5	A5	A5	A5
Rating Date				22-6-2021	22-6-2021	22-6-2021	22-6-2021
Trt-Eval Interval				15 DA-C	15 DA-C	15 DA-C	15 DA-C
Crop Type, Code				C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA
Crop Stage Majority/Min/Max				15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15
Part Rated				PLANT; C	PLANT; C	PLANT; C	PLANT; C
Rating Type				CHLOROSIS	NECROSIS	RESHAPING	PHYGEN
Rating Unit/Min/Max				%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100
Trt No.	Treatment Name	Rate	Appl Code	48*	49*	50*	51*
1	UNTREATED			0,0 b	0,0 b	0,0 a	0,0 d
2	Stomp	2 l/ha	A	5,0 b	3,8 b	13,8 a	20,0 abc
	Boxer	0,75 l/ha	B				
	Wing P	1 l/ha	B				
	Boxer	0,75 l/ha	C				
	Wing P	1,5 l/ha	C				
3	Challenge	1,5 l/ha	A	3,8 b	7,5 b	15,0 a	21,3 ab
	Boxer	0,75 l/ha	B				
	Wing P	1 l/ha	B				
	Boxer	0,75 l/ha	C				
	Wing P	1,5 l/ha	C				
4	Challenge	1,5 l/ha	A	6,3 b	6,3 b	2,5 a	13,8 bcd
	Challenge	1 l/ha	B				
	Wing P	1 l/ha	B				
	Boxer	0,75 l/ha	C				
	Wing P	1,5 l/ha	C				
5	Challenge	1 l/ha	A	6,3 b	3,8 b	3,8 a	11,3 bcd
	Stomp	1 l/ha	A				
	Boxer	0,5 l/ha	B				
	Challenge	0,5 l/ha	B				
	Wing P	0,5 l/ha	B				
	Boxer	0,75 l/ha	C				
	Wing P	1,5 l/ha	C				
6	Challenge	1,5 l/ha	A	2,5 b	0,0 b	0,0 a	2,5 cd
	Stomp	2 l/ha	A				
	Boxer	0,5 l/ha	B				
	Challenge	0,25 l/ha	B				
	Wing P	0,5 l/ha	B				
	Boxer	0,5 l/ha	C				
	Challenge	0,25 l/ha	C				
	Wing P	1 l/ha	C				
7	Challenge	1,5 l/ha	A	5,0 b	0,0 b	8,8 a	12,5 bcd
	Stomp	2 l/ha	A				
	Wing P	1 l/ha	A				
	Wing P	1 l/ha	B				
	Boxer	1 l/ha	C				
	Challenge	0,5 l/ha	C				
8	Toki	0,06 kg/ha	C	15,0 a	20,0 a	8,8 a	35,0 a
LSD P=.05				4,72	5,76	12,62	12,44
Standard Deviation				3,21	3,92	8,58	8,46
CV				58,7	76,02	130,78	58,24
Grand Mean				5,47	5,16	6,56	14,53
Replicate F				0,480	1,271	1,824	1,640
Replicate Prob(F)				0,6996	0,3099	0,1737	0,2104
Treatment F				7,440	11,557	1,885	6,905
Treatment Prob(F)				0,0002	0,0001	0,1233	0,0003

In deze proef is ook spuitschade waargenomen. In bovenstaande tabellen is onderscheid gemaakt in totale spuitschade, chlorose, necrose en vervorming van de bladeren.

De eerste spuitschade was waargenomen 6 dagen na toepassing B. Vooral object 4 had op dit moment veel chlorose (30%) ook in object 6 was er op dit moment enige chlorose waar te nemen (7,5%). Bij het 3^e waarnemingsmoment (7 dagen na toepassing C) was er in elk object enige spuitschade te zien. Objecten 4 (28,8%) en object 8 (38,8%) gaven significant meer spuitschade in vergelijking met de andere objecten. Op het laatste waarnemingsmoment 15 dagen na toepassing C lieten alle objecten spuitschade zien. Opvallend was het beeld van krullend blad wat vooral in objecten 2 en 3 voorkwam.

Tabel 8 effectiviteit tegen, CHEAL, ECHCC, STEME, SOLNI, totaal, 29DAA

Rating Timing					A2	A2	A2	A2	A2
Rating Date					1-6-2021	1-6-2021	1-6-2021	1-6-2021	1-6-2021
Trt-Eval Interval					29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A
Crop Type, Code					C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA
Crop Stage Majority/Min/Max					11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11
Pest Code					CHEAL	ECHCC	STEME	SOLNI	TTTTT
Pest Stage Majority/Min/Max					12; 12; 12	12; 12; 12	14; 14; 14	11; 11; 11	
Pest Density					87,5 PLA/m ²	46,25 PLA/m ²	62,25 PLA/m ²	33 PLA/m ²	229 PLA/m ²
Part Rated					PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; P
Rating Type					EFFICI	EFFICI	EFFICI	EFFICI	EFFICI
Rating Unit/Min/Max					%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	6*	7*	8*	9*	10*
1	UNTREATED				0,0 c	0,0 c	0,0 c	0,0 c	0,0 c
2	Stomp	2 l/ha	A		78,8 ab	86,3 a	70,0 b	67,5 ab	75,0 ab
	Boxer	0,75 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
3	Challenge	1,5 l/ha	A		37,5 bc	60,0 b	90,0 a	40,0 bc	47,5 b
	Boxer	0,75 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
4	Challenge	1,5 l/ha	A		61,3 ab	52,5 b	91,3 a	22,5 bc	50,0 b
	Challenge	1 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
5	Challenge	1 l/ha	A		50,0 ab	85,0 a	92,5 a	45,0 bc	57,5 b
	Stomp	1 l/ha	A						
	Boxer	0,5 l/ha	B						
	Challenge	0,5 l/ha	B						
	Wing P	0,5 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
6	Challenge	1,5 l/ha	A		81,3 ab	88,8 a	92,5 a	71,3 ab	83,8 ab
	Stomp	2 l/ha	A						
	Boxer	0,5 l/ha	B						
	Challenge	0,25 l/ha	B						
	Wing P	0,5 l/ha	B						
	Boxer	0,5 l/ha	C						
	Challenge	0,25 l/ha	C						
	Wing P	1 l/ha	C						
7	Challenge	1,5 l/ha	A		96,3 a	96,3 a	97,5 a	96,3 a	96,3 a
	Stomp	2 l/ha	A						
	Wing P	1 l/ha	A						
	Wing P	1 l/ha	B						
	Boxer	1 l/ha	C						
	Challenge	0,5 l/ha	C						
8	Toki	0,06 kg/ha	C		0,0 c	0,0 c	0,0 c	0,0 c	0,0 c
LSD P=.05					33,20	16,57	12,52	34,67	25,66
Standard Deviation					22,58	11,27	8,52	23,58	17,45
CV					44,6	19,23	12,76	55,07	34,05
Grand Mean					50,63	58,59	66,72	42,81	51,25
Replicate F					2,644	1,745	1,016	3,158	1,854
Replicate Prob(F)					0,0758	0,1885	0,4052	0,0461	0,1683
Treatment F					10,336	48,133	97,205	8,600	16,804
Treatment Prob(F)					0,0001	0,0001	0,0001	0,0001	0,0001

Tabel 9 bodembedekking, CHEAL, ECHCC, STEME, SOLNI totaal, 29DAA

Rating Timing	A2	A2	A2	A2	A2
Rating Date	1-6-2021	1-6-2021	1-6-2021	1-6-2021	1-6-2021
Trt-Eval Interval	29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA
Crop Stage Majority/Min/Max	11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11
Pest Code	CHEAL	ECHCC	STEME	SOLNI	TTTTT
Pest Stage Majority/Min/Max	12; 12; 12	12; 12; 12	14; 14; 14	11; 11; 11	207,75 PLA/m2
Pest Density	87,5 PLA/m2	46,25 PLA/m2	62,25 PLA/m2	33 PLA/m2	
Part Rated	PLANT; p	PLANT; p	PLANT; p	PLANT; p	PLANT; p
Rating Type	GROUND	GROUND	GROUND	GROUND	GROUND
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100
Trt No.	Treatment Name	Rate	Appl Unit	Code	
					11*
					12*
					13*
					14*
					15*
1	UNTREATED				10,8 a
2	Stomp	2 l/ha	A		5,3 a
	Boxer	0,75 l/ha	B		
	Wing P	1 l/ha	B		
	Boxer	0,75 l/ha	C		
	Wing P	1,5 l/ha	C		
3	Challenge	1,5 l/ha	A		12,0 a
	Boxer	0,75 l/ha	B		
	Wing P	1 l/ha	B		
	Boxer	0,75 l/ha	C		
	Wing P	1,5 l/ha	C		
4	Challenge	1,5 l/ha	A		5,0 a
	Challenge	1 l/ha	B		
	Wing P	1 l/ha	B		
	Boxer	0,75 l/ha	C		
	Wing P	1,5 l/ha	C		
5	Challenge	1 l/ha	A		5,5 a
	Stomp	1 l/ha	A		
	Boxer	0,5 l/ha	B		
	Challenge	0,5 l/ha	B		
	Wing P	0,5 l/ha	B		
	Boxer	0,75 l/ha	C		
	Wing P	1,5 l/ha	C		
6	Challenge	1,5 l/ha	A		2,0 a
	Stomp	2 l/ha	A		
	Boxer	0,5 l/ha	B		
	Challenge	0,25 l/ha	B		
	Wing P	0,5 l/ha	B		
	Boxer	0,5 l/ha	C		
	Challenge	0,25 l/ha	C		
	Wing P	1 l/ha	C		
7	Challenge	1,5 l/ha	A		0,8 a
	Stomp	2 l/ha	A		
	Wing P	1 l/ha	A		
	Wing P	1 l/ha	B		
	Boxer	1 l/ha	C		
	Challenge	0,5 l/ha	C		
8	Toki	0,06 kg/h	C		12,5 a
LSD P=.05					10,31
Standard Deviation					7,01
CV					104,4
Grand Mean					6,72
Replicate F					1,132
Replicate Prob(F)					0,3588
Treatment F					1,650
Treatment Prob(F)					0,1762
					2,04
					1,39
					58,47
					2,38
					0,778
					0,5195
					11,741
					0,0001
					3,17
					2,16
					72,64
					2,97
					0,131
					0,9403
					11,527
					0,0001
					3,10
					2,11
					70,24
					3,00
					0,637
					0,5996
					4,290
					0,0044

Tabel 10 effectiviteit tegen, CHEAL, ECHCC, STEME, SOLNI, POAAN totaal, 6DAB

Rating Timing	A3	A3	A3	A3	A3	A3			
Rating Date	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021			
Trt-Eval Interval	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B			
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA			
Crop Stage Majority/Min/Max	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12			
Pest Code	CHEAL	ECHCC	STEME	SOLNI	POAAN	TTTTT			
Pest Stage Majority/Min/Max	14; 14; 14	14; 14; 14	24; 24; 24	12; 12; 12	16; 16; 16	249,25 PLA/m2			
Pest Density	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2	16,25 PLA/m2				
Part Rated	PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; P			
Rating Type	EFFICI	EFFICI	EFFICI	EFFICI	EFFICI	EFFICI			
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100			
Trt No.	Treatment Name	Rate	Appl Unit Code	19*	20*	21*	22*	23*	24*
1	UNTREATED			0,0 c	0,0 c	0,0 c	0,0 c	0,0 b	0,0 b
2	Stomp	2 l/ha	A	67,5 ab	92,5 a	67,5 b	80,0 a	82,5 a	67,5 a
	Boxer	0,75 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
3	Challenge	1,5 l/ha	A	32,5 bc	35,0 b	80,0 ab	17,5 c	12,5 b	30,0 b
	Boxer	0,75 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
4	Challenge	1,5 l/ha	A	96,3 a	93,8 a	100,0 a	78,8 a	87,5 a	92,5 a
	Challenge	1 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
5	Challenge	1 l/ha	A	70,0 ab	70,0 a	95,0 a	50,0 b	87,5 a	78,8 a
	Stomp	1 l/ha	A						
	Boxer	0,5 l/ha	B						
	Challenge	0,5 l/ha	B						
	Wing P	0,5 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
6	Challenge	1,5 l/ha	A	81,3 a	90,0 a	98,8 a	88,8 a	100,0 a	81,3 a
	Stomp	2 l/ha	A						
	Boxer	0,5 l/ha	B						
	Challenge	0,25 l/ha	B						
	Wing P	0,5 l/ha	B						
	Boxer	0,5 l/ha	C						
	Challenge	0,25 l/ha	C						
	Wing P	1 l/ha	C						
7	Challenge	1,5 l/ha	A	95,0 a	96,3 a	97,5 a	96,3 a	97,5 a	95,0 a
	Stomp	2 l/ha	A						
	Wing P	1 l/ha	A						
	Wing P	1 l/ha	B						
	Boxer	1 l/ha	C						
	Challenge	0,5 l/ha	C						
8	Toki	0,06 kg/h	C	0,0 c	0,0 c	0,0 c	0,0 c	0,0 b	0,0 b
		a							
LSD P=.05				35,51	23,93	16,45	21,13	24,26	25,62
Standard Deviation				24,15	16,27	11,19	14,37	16,50	17,42
CV				43,66	27,26	16,61	27,95	28,23	31,32
Grand Mean				55,31	59,69	67,34	51,41	58,44	55,63
Replicate F				1,509	1,389	0,505	4,434	2,032	1,441
Replicate Prob(F)				0,2412	0,2737	0,6827	0,0145	0,1401	0,2591
Treatment F				10,707	26,622	59,147	31,577	30,362	20,871
Treatment Prob(F)				0,0001	0,0001	0,0001	0,0001	0,0001	0,0001

Tabel 11 bodembedekking, CHEAL, ECHCC, STEME, SOLNI, POAAN, totaal, 6DAB

Rating Timing	A3	A3	A3	A3	A3	A3			
Rating Date	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021			
Trt-Eval Interval	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B			
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA			
Crop Stage Majority/Min/Max	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12			
Pest Code	CHEAL	ECHCC	STEME	SOLNI	POAAN	TTTTT			
Pest Stage Majority/Min/Max	14; 14; 14	14; 14; 14	24; 24; 24	12; 12; 12	16; 16; 16	249,25 PLA/m2			
Pest Density	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2	16,25 PLA/m2				
Part Rated	PLANT; p	PLANT; p	PLANT; p	PLANT; p	PLANT; p	PLANT; p			
Rating Type	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND			
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100			
Trt No.	Treatment Name	Rate	Appl Unit Code	25*	26*	27*	28*	29*	30*
1	UNTREATED			53,8 a	8,8 a	30,0 a	7,5 ab	5,0 a	72,5 a
2	Stomp	2 l/ha	A	18,0 ab	1,5 c	4,3 b	1,0 b	2,8 ab	21,3 b
	Boxer	0,75 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
3	Challenge	1,5 l/ha	A	36,3 ab	5,3 abc	3,0 b	12,5 a	3,0 a	41,3 ab
	Boxer	0,75 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
4	Challenge	1,5 l/ha	A	1,5 b	1,0 c	0,3 b	3,3 ab	0,3 b	5,8 b
	Challenge	1 l/ha	B						
	Wing P	1 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
5	Challenge	1 l/ha	A	3,8 b	3,0 bc	0,5 b	3,0 ab	0,3 b	5,5 b
	Stomp	1 l/ha	A						
	Boxer	0,5 l/ha	B						
	Challenge	0,5 l/ha	B						
	Wing P	0,5 l/ha	B						
	Boxer	0,75 l/ha	C						
	Wing P	1,5 l/ha	C						
6	Challenge	1,5 l/ha	A	3,3 b	1,0 c	0,3 b	1,5 b	0,5 b	2,3 b
	Stomp	2 l/ha	A						
	Boxer	0,5 l/ha	B						
	Challenge	0,25 l/ha	B						
	Wing P	0,5 l/ha	B						
	Boxer	0,5 l/ha	C						
	Challenge	0,25 l/ha	C						
	Wing P	1 l/ha	C						
7	Challenge	1,5 l/ha	A	1,0 b	0,5 c	0,3 b	0,5 b	0,3 b	1,5 b
	Stomp	2 l/ha	A						
	Wing P	1 l/ha	A						
	Wing P	1 l/ha	B						
	Boxer	1 l/ha	C						
	Challenge	0,5 l/ha	C						
8	Toki	0,06 kg/h a	C	47,5 ab	6,3 ab	25,0 a	8,8 ab	5,0 a	60,0 a
LSD P=.05				29,88	3,39	13,43	6,90	1,82	27,81
Standard Deviation				20,32	2,31	9,13	4,69	1,24	18,91
CV				98,51	67,77	115,06	98,77	58,32	72,04
Grand Mean				20,63	3,41	7,94	4,75	2,13	26,25
Replicate F				0,405	2,148	0,897	1,594	1,682	1,106
Replicate Prob(F)				0,7508	0,1245	0,4593	0,2208	0,2013	0,3687
Treatment F				4,718	6,849	7,183	3,417	11,488	8,897
Treatment Prob(F)				0,0026	0,0003	0,0002	0,0135	0,0001	0,0001

Tabel 12 effectiviteit tegen, CHEAL, ECHCC, STEME, SOLNI, POAAN totaal, 7DAC

Rating Timing	A4	A4	A4	A4	A4	A4				
Rating Date	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021				
Trt-Eval Interval	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C				
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA				
Crop Stage Majority/Min/Max	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14				
Pest Code	CHEAL	ECHCC	STEME	SOLNI	POAAN	TTTTT				
Pest Stage Majority/Min/Max	26; 26; 26	22; 22; 22	61; 61; 61	18; 18; 18	26; 26; 26	249,25 PLA/m2				
Pest Density	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2	16,25 PLA/m2	249,25 PLA/m2				
Part Rated	PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; P				
Rating Type	EFFICI	EFFICI	EFFICI	EFFICI	EFFICI	EFFICI				
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100				
Trt No.	Treatment Name	Rate	Unit	Appl Code	35*	36*	37*	38*	39*	40*
1	UNTREATED				0,0 c	0,0 b	0,0 d	0,0 e	0,0 c	0,0 d
2	Stomp	2 l/ha	A		65,0 ab	77,5 a	82,5 b	90,0 ab	62,5 b	62,5 b
	Boxer	0,75 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
3	Challenge	1,5 l/ha	A		42,5 b	25,0 b	85,0 b	42,5 cd	22,5 c	28,8 c
	Boxer	0,75 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
4	Challenge	1,5 l/ha	A		95,0 a	61,3 a	100,0 a	80,0 ab	70,0 b	86,3 ab
	Challenge	1 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
5	Challenge	1 l/ha	A		76,3 a	70,0 a	98,8 a	62,5 bc	67,5 b	78,8 ab
	Stomp	1 l/ha	A							
	Boxer	0,5 l/ha	B							
	Challenge	0,5 l/ha	B							
	Wing P	0,5 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
6	Challenge	1,5 l/ha	A		95,0 a	93,8 a	100,0 a	98,8 a	97,5 a	93,8 a
	Stomp	2 l/ha	A							
	Boxer	0,5 l/ha	B							
	Challenge	0,25 l/ha	B							
	Wing P	0,5 l/ha	B							
	Boxer	0,5 l/ha	C							
	Challenge	0,25 l/ha	C							
	Wing P	1 l/ha	C							
7	Challenge	1,5 l/ha	A		93,8 a	100,0 a	100,0 a	98,8 a	100,0 a	95,0 a
	Stomp	2 l/ha	A							
	Wing P	1 l/ha	A							
	Wing P	1 l/ha	B							
	Boxer	1 l/ha	C							
	Challenge	0,5 l/ha	C							
8	Toki	0,06 kg/h	C		10,0 c	17,5 b	15,0 c	22,5 de	12,5 c	11,3 cd
	LSD P=.05				26,11	28,26	8,59	24,32	21,44	22,30
	Standard Deviation				17,76	19,22	5,84	16,54	14,58	15,16
	CV				29,75	34,55	8,04	26,73	26,97	26,59
	Grand Mean				59,69	55,63	72,66	61,88	54,06	57,03
	Replicate F				1,946	2,059	1,733	0,876	0,485	0,638
	Replicate Prob(F)				0,1532	0,1364	0,1910	0,4693	0,6963	0,5992
	Treatment F				18,636	14,891	197,257	20,044	27,273	25,580
	Treatment Prob(F)				0,0001	0,0001	0,0001	0,0001	0,0001	0,0001

Tabel 13 bodembedekking CHEAL, ECHCC, STEME, SOLNI, POAAN totaal, 7DAC

Rating Timing	A4	A4	A4	A4	A4	A4
Rating Date	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021
Trt-Eval Interval	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA
Crop Stage Majority/Min/Max	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14
Pest Code	CHEAL	ECHCC	STEME	SOLNI	POAAN	TTTTT
Pest Stage Majority/Min/Max	26; 26; 26	22; 22; 22	61; 61; 61	18; 18; 18	26; 26; 26	249,25 PLA/m2
Pest Density	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2	16,25 PLA/m2	249,25 PLA/m2
Part Rated	PLANT; p	PLANT; p	PLANT; p	PLANT; p	PLANT; p	PLANT; p
Rating Type	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100
Trt Treatment	41*	42*	43*	44*	45*	46*
No. Name						
Rate						
Unit						
Appl Code						
1 UNTREATED	67,5 a	16,3 a	37,5 a	11,3 a	6,3 a	85,0 a
2 Stomp	25,0 ab	1,8 b	4,5 b	0,8 a	2,5 bc	30,0 cd
Boxer						
Wing P						
Boxer						
Wing P						
3 Challenge	35,5 ab	11,8 ab	2,3 b	9,8 a	3,3 bc	51,3 bc
Boxer						
Wing P						
Boxer						
Wing P						
4 Challenge	1,3 b	7,0 b	0,3 b	3,8 a	1,3 c	6,0 d
Challenge						
Wing P						
Boxer						
Wing P						
5 Challenge	8,0 b	5,8 b	0,3 b	5,0 a	2,0 bc	12,5 d
Stomp						
Boxer						
Challenge						
Wing P						
Boxer						
Wing P						
6 Challenge	1,0 b	0,8 b	0,0 b	0,0 a	0,5 c	1,5 d
Stomp						
Boxer						
Challenge						
Wing P						
Boxer						
Challenge						
Wing P						
7 Challenge	1,8 b	0,3 b	0,0 b	0,3 a	0,0 c	1,8 d
Stomp						
Wing P						
Wing P						
Boxer						
Challenge						
8 Toki	60,0 a	5,5 b	22,5 ab	6,3 a	5,0 ab	68,8 ab
LSD P=.05	31,78	7,38	15,43	8,20	2,32	23,33
Standard Deviation	21,61	5,02	10,50	5,58	1,58	15,86
CV	86,45	81,96	124,86	120,55	60,76	49,43
Grand Mean	25,00	6,13	8,41	4,63	2,59	32,09
Replicate F	0,529	3,416	1,059	0,984	0,549	1,139
Replicate Prob(F)	0,6671	0,0362	0,3877	0,4193	0,6540	0,3562
Treatment F	6,252	4,943	7,120	2,376	7,562	16,885
Treatment Prob(F)	0,0005	0,0020	0,0002	0,0589	0,0001	0,0001

Tabel 14 effectiviteit tegen, CHEAL, ECHCC, STEME, SOLNI, POAAN totaal, 15DAC

Rating Timing	A5	A5	A5	A5	A5	A5				
Rating Date	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021				
Trt-Eval Interval	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C				
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA				
Crop Stage Majority/Min/Max	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15				
Pest Code	CHEAL	ECHCC	STEME	SOLNI	POAAN	TTTTT				
Pest Stage Majority/Min/Max	26; 26; 26	22; 22; 22	61; 61; 61	18; 18; 18	26; 26; 26	249,25 PLA/m2				
Pest Density	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2	16,25 PLA/m2					
Part Rated	PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; P				
Rating Type	EFFICI	EFFICI	EFFICI	EFFICI	EFFICI	EFFICI				
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100				
Trt No.	Treatment Name	Rate	Appl Unit	Code	52*	53*	54*	55*	56*	57*
1	UNTREATED				0,0 d	0,0 b	0,0 c	0,0 d	0,0 b	0,0 d
2	Stomp	2 l/ha	A		50,0 bc	52,5 ab	72,5 b	82,5 ab	70,0 a	52,5 b
	Boxer	0,75 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
3	Challenge	1,5 l/ha	A		40,0 c	25,0 ab	82,5 ab	42,5 bc	30,0 b	18,8 c
	Boxer	0,75 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
4	Challenge	1,5 l/ha	A		90,0 a	22,5 ab	100,0 a	67,5 ab	70,0 a	73,8 a
	Challenge	1 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
5	Challenge	1 l/ha	A		68,8 ab	57,5 ab	96,3 a	47,5 bc	67,5 a	57,5 b
	Stomp	1 l/ha	A							
	Boxer	0,5 l/ha	B							
	Challenge	0,5 l/ha	B							
	Wing P	0,5 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
6	Challenge	1,5 l/ha	A		92,5 a	60,0 ab	97,5 a	96,3 a	95,0 a	81,3 a
	Stomp	2 l/ha	A							
	Boxer	0,5 l/ha	B							
	Challenge	0,25 l/ha	B							
	Wing P	0,5 l/ha	B							
	Boxer	0,5 l/ha	C							
	Challenge	0,25 l/ha	C							
	Wing P	1 l/ha	C							
7	Challenge	1,5 l/ha	A		91,3 a	87,5 a	100,0 a	98,8 a	100,0 a	90,0 a
	Stomp	2 l/ha	A							
	Wing P	1 l/ha	A							
	Wing P	1 l/ha	B							
	Boxer	1 l/ha	C							
	Challenge	0,5 l/ha	C							
8	Toki	0,06 kg/h	C		7,5 d	27,5 ab	7,5 c	15,0 cd	7,5 b	6,3 cd
LSD P=.05					19,83	48,04	15,09	33,03	24,96	13,54
Standard Deviation					13,49	32,67	10,26	22,46	16,97	9,21
CV					24,52	78,61	14,75	39,93	30,86	19,39
Grand Mean					55,00	41,56	69,53	56,25	55,00	47,50
Replicate F					1,959	0,643	0,502	0,458	1,388	2,137
Replicate Prob(F)					0,1511	0,5959	0,6848	0,7142	0,2739	0,1259
Treatment F					30,373	2,884	66,306	10,595	20,107	57,558
Treatment Prob(F)					0,0001	0,0282	0,0001	0,0001	0,0001	0,0001

Tabel 15 bodembedekking, CHEAL, ECHCC, STEME, SOLNI, POAAN totaal, 15DAC

Rating Timing	A5	A5	A5	A5	A5	A5				
Rating Date	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021				
Trt-Eval Interval	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C				
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA				
Crop Stage Majority/Min/Max	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15				
Pest Code	CHEAL	ECHCC	STEME	SOLNI	POAAN	TTTTT				
Pest Stage Majority/Min/Max	26; 26; 26	22; 22; 22	61; 61; 61	18; 18; 18	26; 26; 26	249,25 PLA/m2				
Pest Density	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2	16,25 PLA/m2					
Part Rated	PLANT; p	PLANT; p	PLANT; p	PLANT; p	PLANT; p	PLANT; p				
Rating Type	GROUND	GROUND	GROUND	GROUND	GROUND	GROUND				
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100				
Trt No.	Treatment Name	Rate	Appl Unit	Code	58*	59*	60*	61*	62*	63*
1	UNTREATED				77,5 a	21,3 a	37,5 a	12,5 a	6,3 a	92,5 a
2	Stomp	2 l/ha	A		35,0 bc	7,8 a	5,3 b	2,0 a	3,3 abc	42,5 b
	Boxer	0,75 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
3	Challenge	1,5 l/ha	A		51,3 ab	20,5 a	3,3 b	10,5 a	5,0 ab	70,0 a
	Boxer	0,75 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
4	Challenge	1,5 l/ha	A		4,0 c	15,0 a	0,3 b	6,8 a	2,3 bc	20,0 bcd
	Challenge	1 l/ha	B							
	Wing P	1 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
5	Challenge	1 l/ha	A		16,5 c	9,3 a	1,8 b	8,8 a	2,3 bc	32,5 bc
	Stomp	1 l/ha	A							
	Boxer	0,5 l/ha	B							
	Challenge	0,5 l/ha	B							
	Wing P	0,5 l/ha	B							
	Boxer	0,75 l/ha	C							
	Wing P	1,5 l/ha	C							
6	Challenge	1,5 l/ha	A		2,0 c	9,0 a	0,3 b	0,3 a	0,8 c	10,0 cd
	Stomp	2 l/ha	A							
	Boxer	0,5 l/ha	B							
	Challenge	0,25 l/ha	B							
	Wing P	0,5 l/ha	B							
	Boxer	0,5 l/ha	C							
	Challenge	0,25 l/ha	C							
	Wing P	1 l/ha	C							
7	Challenge	1,5 l/ha	A		5,0 c	2,8 a	0,0 b	0,3 a	0,0 c	6,3 d
	Stomp	2 l/ha	A							
	Wing P	1 l/ha	A							
	Wing P	1 l/ha	B							
	Boxer	1 l/ha	C							
	Challenge	0,5 l/ha	C							
8	Toki	0,06 kg/h	C		75,0 a	9,3 a	22,5 ab	7,5 a	5,0 ab	83,8 a
LSD P=.05					27,04	14,94	15,51	9,82	2,33	18,81
Standard Deviation					18,39	10,16	10,55	6,68	1,58	12,79
CV					55,25	85,76	119,28	110,16	51,18	28,62
Grand Mean					33,28	11,84	8,84	6,06	3,09	44,69
Replicate F					1,336	2,037	0,998	0,414	0,145	0,975
Replicate Prob(F)					0,2893	0,1395	0,4132	0,7448	0,9315	0,4234
Treatment F					11,729	1,631	6,821	1,985	7,690	27,590
Treatment Prob(F)					0,0001	0,1815	0,0003	0,1059	0,0001	0,0001

De effectiviteit van de verschillende strategieën is waargenomen in % bestrijding van de onkruiden en in % bodembedekking van onkruiden. Op het eerste waarnemingsmoment (17 dagen na toepassing A) waren er nog geen significante verschillen te zien het object met de beste bestrijding leek op dat moment object 7. Bij het 2^e waarnemingsmoment zijn er significante verschillen tussen de objecten waargenomen. Object 7 geeft significant het beste resultaat met 96,3% totale bestrijding. De andere objecten zijn vergelijkbaar met elkaar. Gekeken naar de bodembedekking zijn objecten 6 (3,3% en 7 1,5%) significant beter dan de rest van de objecten. Bij het 3^e beoordelingsmoment (6 dagen na toepassing B) zit er een significant verschil tussen object 3 en de andere objecten. Object 3 met 30% bestrijding doet het hierbij niet goed. Bij waarnemingsmoment 4 (7 dagen na toepassing C) zijn er weer duidelijke verschillen te zien in werkzaamheid tussen de objecten. Object 7 heeft de hoogste werkzaamheid met 95% bestrijding, gevolgd door object 6 met 93,8% bestrijding. Object 3 (28,8% en object 8 11,3% geven hier significant een lagere bestrijdingsgraad.

Tijdens het laatste waarnemingsmoment 15 dagen na toepassing C, zijn er nog steeds een aantal objecten nagenoeg vrij van onkruiden. Object 7 houdt de hoogste werkzaamheid met 90% gevolgd door object 6 81,3%, object 4 73,8%, object 5 57,5%, object 2 52,5%, object 3 18,8% en object 8 6,3%.

Conclusie

- Strategie 7 geeft gedurende de proef de hoogste werkzaamheid
- Strategieën 6 en 4 deden statistisch gezien niet onder voor strategie 7
- strategieën 2 en 5 toonden statistisch een lagere werkzaamheid dan strategieën 4, 6 en 7
- Strategie 3 toonde statistisch een lagere werkzaamheid dan strategieën 2,4,5,6,7
- strategie 8 toonde statistisch de laagste werkzaamheid
- Er is spuitschade waargenomen in alle strategieën
- Strategie 8 toonde statistisch de meeste spuitschade
- Gekeken naar werkzaamheid en spuitschade lijkt strategie 6 de beste strategie

Bijlagen 1 foto's



Photo 1, Overzicht proef, 6 dagen na toepassing B



Photo 2, Behandeling 1, onbehandeld, 6 dagen na toepassing B

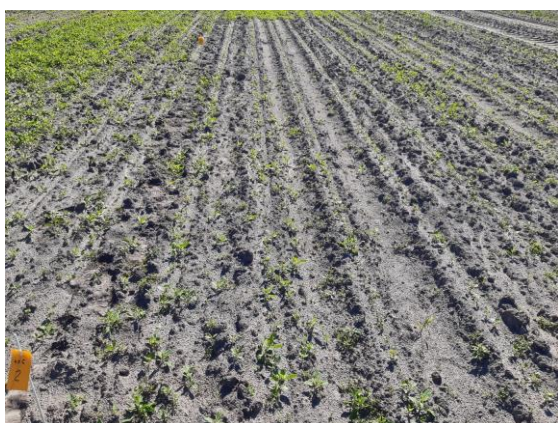


Photo 3, Behandeling 2, 6 dagen na toepassing B



Photo 4, Behandeling 3, 6 dagen na toepassing B



Photo 5, Behandeling 4, 6 dagen na toepassing B



Photo 6, Behandeling 5, 6 dagen na toepassing B



Photo 7, Behandeling 6, 6 dagen na toepassing B



Photo 8, Behandeling 7, 6 dagen na toepassing B



Photo 9, Behandeling 8, 6 dagen na toepassing B



Photo 10, spuitschade behandeling 4, Challenge 1,5 l/ha A
Challenge 1 l/ha B
Wing P 1 l/ha B



Photo 11, Overzicht proef, 7 dagen na toepassing C



Photo 12, Overzicht proef, 15 dagen na toepassing C



Photo 13, Behandeling 1, onbehandeld, 15 dagen na toepassing C



Photo 14, Behandeling 2, 15 dagen na toepassing C



Photo 15, Behandeling 3, 15 dagen na toepassing C



Photo 16, Behandeling 4, 15 dagen na toepassing C



Photo 17, Behandeling 5, 15 dagen na toepassing C



Photo 18, Behandeling 6, 15 dagen na toepassing C



Photo 19, Behandeling 7, 15 dagen na toepassing C



Photo 20, Behandeling 8, 15 dagen na toepassing C



Photo 21. Spuitschade behandeling 8, Toki 0,06 kg/ha, 15 dagen na toepassing C

Bijlagen 2 Ruwe data

Pest Type	W; Weed	W; Weed	W; Weed			W; Weed	W; Weed				
Pest Code	CHEAL		TTTTT			CHEAL	ECHCC				
Pest Scientific Name	Chenopodium alb> common lambsqua>	Unknown species	Weed plants			Chenopodium alb> common lambsqua>	Echinochloa cru>				
Pest Name			Weed plants				Echinochloa cru>				
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA				
BBCH Scale	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC				
Crop Scientific Name	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa				
Crop Name	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip				
Rating Date	20-5-2021	20-5-2021	20-5-2021	1-6-2021	1-6-2021	1-6-2021	1-6-2021				
Part Rated	PLANT; P	PLANT; P	PLANT; P	PLANT; C	PLANT; C	PLANT; P	PLANT; P				
Rating Type	EFFICI	EFFICI	EFFICI	VIGOR	PHYGEN	EFFICI	EFFICI				
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	0-10; 0; 10	%; 0; 100	%; 0; 100	%; 0; 100				
Number of Subsamples	1	1	1	1	1	1	1				
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH				
Crop Stage Majority/Min/Max	3; 3; 3	3; 3; 3	3; 3; 3	11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11				
Pest Stage Majority/Min/Max	10; 10; 10	9; 9; 9	9; 9; 9			12; 12; 12	12; 12; 12				
Pest Density	2,75 PLA/m2	21 PLA/m2	23,75 PLA/m2			87,5 PLA/m2	46,25 PLA/m2				
Data Entry Date	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021				
Rating Timing	A1	A1	A1	A2	A2	A2	A2				
Days After First/Last Applic.	17; 17	17; 17	17; 17	29; 29	29; 29	29; 29	29; 29				
Trt-Eval Interval	17 DA-A	17 DA-A	17 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A				
Trt Treatment	Rate	Appl									
No. Name	Rate	Unit	Code	Plot	1	2	3	4	5	6	7
1 UNTREATE				101	0,0	0,0	0,0	10,0	0,0	0,0	0,0
				204	0,0	0,0	0,0	10,0	0,0	0,0	0,0
				303	0,0	0,0	0,0	10,0	0,0	0,0	0,0
				407	0,0	0,0	0,0	10,0	0,0	0,0	0,0
				Mean =	0,0	0,0	0,0	10,0	0,0	0,0	0,0
2 Stomp	2 l/ha	A		102	100,0	50,0	50,0	10,0	0,0	80,0	90,0
Boxer	0,75 l/ha	B		203	0,0	50,0	50,0	10,0	0,0	80,0	70,0
Wing P	1 l/ha	B		307	0,0	0,0	0,0	10,0	0,0	60,0	90,0
Boxer	0,75 l/ha	C		405	100,0	80,0	80,0	10,0	0,0	95,0	95,0
Wing P	1,5 l/ha	C									
				Mean =	50,0	45,0	45,0	10,0	0,0	78,8	86,3
3 Challenge	1,5 l/ha	A		103	100,0	90,0	90,0	10,0	0,0	40,0	60,0
Boxer	0,75 l/ha	B		206	100,0	80,0	80,0	10,0	0,0	40,0	60,0
Wing P	1 l/ha	B		305	0,0	30,0	30,0	10,0	0,0	20,0	60,0
Boxer	0,75 l/ha	C		402	100,0	90,0	90,0	10,0	0,0	50,0	60,0
Wing P	1,5 l/ha	C									
				Mean =	75,0	72,5	72,5	10,0	0,0	37,5	60,0
4 Challenge	1,5 l/ha	A		104	100,0	90,0	90,0	10,0	0,0	10,0	20,0
Challenge	1 l/ha	B		205	100,0	50,0	50,0	10,0	0,0	60,0	60,0
Wing P	1 l/ha	B		302	100,0	80,0	80,0	10,0	0,0	95,0	90,0
Boxer	0,75 l/ha	C		408	0,0	50,0	50,0	10,0	0,0	80,0	40,0
Wing P	1,5 l/ha	C									
				Mean =	75,0	67,5	67,5	10,0	0,0	61,3	52,5
5 Challenge	1 l/ha	A		105	100,0	40,0	40,0	10,0	0,0	10,0	80,0
Stomp	1 l/ha	A		207	0,0	30,0	30,0	10,0	0,0	0,0	80,0
Boxer	0,5 l/ha	B		308	100,0	60,0	60,0	10,0	0,0	95,0	90,0
Challenge	0,5 l/ha	B		401	100,0	90,0	90,0	10,0	0,0	95,0	90,0
Wing P	0,5 l/ha	B									
Boxer	0,75 l/ha	C									
Wing P	1,5 l/ha	C									
				Mean =	75,0	55,0	55,0	10,0	0,0	50,0	85,0
6 Challenge	1,5 l/ha	A		106	100,0	60,0	60,0	10,0	0,0	50,0	80,0
Stomp	2 l/ha	A		201	100,0	80,0	80,0	10,0	0,0	90,0	90,0
Boxer	0,5 l/ha	B		304	100,0	70,0	70,0	10,0	0,0	90,0	90,0
Challenge	0,25 l/ha	B		403	100,0	90,0	90,0	10,0	0,0	95,0	95,0
Wing P	0,5 l/ha	B									
Boxer	0,5 l/ha	C									
Challenge	0,25 l/ha	C									
Wing P	1 l/ha	C									
				Mean =	100,0	75,0	75,0	10,0	0,0	81,3	88,8
7 Challenge	1,5 l/ha	A		107	100,0	90,0	90,0	10,0	0,0	90,0	90,0
Stomp	2 l/ha	A		208	100,0	60,0	60,0	10,0	0,0	95,0	95,0
Wing P	1 l/ha	A		301	100,0	90,0	90,0	10,0	0,0	100,0	100,0
Wing P	1 l/ha	B		406	100,0	90,0	90,0	10,0	0,0	100,0	100,0
Boxer	1 l/ha	C									
Challenge	0,5 l/ha	C									
				Mean =	100,0	82,5	82,5	10,0	0,0	96,3	96,3
8 Toki	0,06 kg/ha	C		108	0,0	0,0	0,0	10,0	0,0	0,0	0,0
				202	0,0	0,0	0,0	10,0	0,0	0,0	0,0
				306	0,0	0,0	0,0	10,0	0,0	0,0	0,0
				404	0,0	0,0	0,0	10,0	0,0	0,0	0,0
				Mean =	0,0	0,0	0,0	10,0	0,0	0,0	0,0

Pest Type	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed									
Pest Code	STEME	SOLNI	TTTTT	CHEAL	ECHCC	STEME	SOLNI									
Pest Scientific Name	Stellaria media	Solanum nigrum	Weed plants	Chenopodium alb>	Echinochloa cru>	Stellaria media	Solanum nigrum									
Pest Name	Common chickweed	Black nightshade	Weed plants	common lambsqua>	Echinochloa cru>	Common chickweed	Black nightshade									
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA									
BBCH Scale	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC									
Crop Scientific Name	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa									
Crop Name	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip									
Rating Date	1-6-2021	1-6-2021	1-6-2021	1-6-2021	1-6-2021	1-6-2021	1-6-2021									
Part Rated	PLANT; P	PLANT; P	PLANT; P	PLANT; p	PLANT; p	PLANT; p	PLANT; p									
Rating Type	EFFICI	EFFICI	EFFICI	GROUND	GROUND	GROUND	GROUND									
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100									
Number of Subsamples	1	1	1	1	1	1	1									
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH									
Crop Stage Majority/Min/Max	11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11	11; 11; 11									
Pest Stage Majority/Min/Max	14; 14; 14	11; 11; 11	12; 12; 12	12; 12; 12	14; 14; 14	11; 11; 11	11; 11; 11									
Pest Density	62,25 PLA/m2	33 PLA/m2	229 PLA/m2	87,5 PLA/m2	46,25 PLA/m2	62,25 PLA/m2	33 PLA/m2									
Data Entry Date	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021									
Rating Timing	A2	A2	A2	A2	A2	A2	A2									
Days After First/Last Applic.	29; 29	29; 29	29; 29	29; 29	29; 29	29; 29	29; 29									
Trt-Eval Interval	29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A	29 DA-A									
Trt Treatment	Rate	Appl	8		9		10		11		12		13		14	
No. Name	Rate	Unit	Code	Plot												
1 UNTREATE D				101	0,0	0,0	0,0	0,0	8,0	5,0	5,0	5,0	5,0	2,0		
				204	0,0	0,0	0,0	0,0	10,0	10,0	10,0	10,0	10,0	5,0		
				303	0,0	0,0	0,0	0,0	5,0	5,0	10,0	10,0	10,0	5,0		
				407	0,0	0,0	0,0	0,0	20,0	10,0	15,0	15,0	15,0	5,0		
				Mean =	0,0	0,0	0,0	0,0	10,8	7,5	10,0	10,0	10,0	4,3		
2 Stomp	2 l/ha	A		102	90,0	50,0	80,0	80,0	2,0	1,0	1,0	1,0	1,0	1,0		
Boxer	0,75 l/ha	B		203	50,0	80,0	80,0	2,0	2,0	1,0	1,0	1,0	1,0	1,0		
Wing P	1 l/ha	B		307	90,0	50,0	60,0	15,0	2,0	2,0	1,0	1,0	1,0	1,0		
Boxer	0,75 l/ha	C		405	50,0	90,0	80,0	2,0	1,0	5,0	1,0	1,0	1,0	1,0		
				Wing P	1,5 l/ha	C										
				Mean =	70,0	67,5	75,0	5,3	1,3	2,0	1,0	1,0	1,0	1,0		
3 Challenge	1,5 l/ha	A		103	90,0	0,0	50,0	5,0	2,0	1,0	1,0	1,0	1,0	5,0		
Boxer	0,75 l/ha	B		206	90,0	0,0	50,0	8,0	1,0	1,0	1,0	1,0	1,0	8,0		
Wing P	1 l/ha	B		305	90,0	90,0	20,0	30,0	1,0	1,0	1,0	1,0	1,0	2,0		
Boxer	0,75 l/ha	C		402	90,0	70,0	70,0	5,0	1,0	1,0	1,0	1,0	1,0	2,0		
				Wing P	1,5 l/ha	C										
				Mean =	90,0	40,0	47,5	12,0	1,3	1,0	1,0	1,0	1,0	4,3		
4 Challenge	1,5 l/ha	A		104	90,0	20,0	20,0	8,0	2,0	1,0	1,0	1,0	1,0	5,0		
Challenge	1 l/ha	B		205	90,0	0,0	40,0	5,0	1,0	1,0	1,0	1,0	1,0	5,0		
Wing P	1 l/ha	B		302	95,0	50,0	90,0	2,0	1,0	1,0	1,0	1,0	1,0	2,0		
Boxer	0,75 l/ha	C		408	90,0	20,0	50,0	5,0	5,0	1,0	1,0	1,0	1,0	10,0		
				Wing P	1,5 l/ha	C										
				Mean =	91,3	22,5	50,0	5,0	2,3	1,0	1,0	1,0	1,0	5,5		
5 Challenge	1 l/ha	A		105	90,0	30,0	30,0	8,0	1,0	1,0	1,0	1,0	1,0	2,0		
Stomp	1 l/ha	A		207	90,0	30,0	30,0	10,0	1,0	1,0	1,0	1,0	1,0	1,0		
Boxer	0,5 l/ha	B		308	95,0	30,0	80,0	2,0	1,0	1,0	1,0	1,0	1,0	5,0		
Challenge	0,5 l/ha	B		401	95,0	90,0	90,0	2,0	1,0	1,0	1,0	1,0	1,0	1,0		
				Wing P	0,5 l/ha	B										
				Boxer	0,75 l/ha	C										
				Wing P	1,5 l/ha	C										
				Mean =	92,5	45,0	57,5	5,5	1,0	1,0	1,0	1,0	1,0	2,3		
6 Challenge	1,5 l/ha	A		106	90,0	10,0	60,0	5,0	1,0	1,0	1,0	1,0	1,0	5,0		
Stomp	2 l/ha	A		201	90,0	90,0	90,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0		
Boxer	0,5 l/ha	B		304	95,0	90,0	90,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0		
Challenge	0,25 l/ha	B		403	95,0	95,0	95,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0		
				Wing P	0,5 l/ha	B										
				Boxer	0,5 l/ha	C										
				Challenge	0,25 l/ha	C										
				Wing P	1 l/ha	C										
				Mean =	92,5	71,3	83,8	2,0	1,0	1,0	1,0	1,0	1,0	2,0		
7 Challenge	1,5 l/ha	A		107	90,0	90,0	90,0	2,0	1,0	1,0	1,0	1,0	1,0	1,0		
Stomp	2 l/ha	A		208	100,0	95,0	95,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0		
Wing P	1 l/ha	A		301	100,0	100,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0		
Wing P	1 l/ha	B		406	100,0	100,0	100,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0		
				Boxer	1 l/ha	C										
				Challenge	0,5 l/ha	C										
				Mean =	97,5	96,3	96,3	0,8	0,5	0,3	0,3	0,3	0,3	0,5		
8 Toki	0,06 kg/ha	C		108	0,0	0,0	0,0	10,0	5,0	5,0	5,0	5,0	5,0	5,0		
				202	0,0	0,0	0,0	5,0	2,0	5,0	5,0	5,0	5,0	2,0		
				306	0,0	0,0	0,0	30,0	5,0	5,0	5,0	5,0	5,0	5,0		
				404	0,0	0,0	0,0	5,0	5,0	5,0	15,0	5,0	5,0	5,0		
				Mean =	0,0	0,0	0,0	12,5	4,3	7,5	7,5	7,5	7,5	4,3		

Pest Type	W; Weed				W; Weed	W; Weed	W; Weed	W; Weed				
Pest Code	TTTTT				CHEAL	ECHCC	STEME	SOLNI				
Pest Scientific Name	Weed plants				Chenopodium alb>	Echinochloa cru>	Stellaria media	Solanum nigrum				
Pest Name	Weed plants				common lambsqua>	Echinochloa cru>	Common chickweed	Black nightshade				
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA				
BBCH Scale	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC				
Crop Scientific Name	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa				
Crop Name	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip				
Rating Date	1-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021				
Part Rated	PLANT; p	PLANT; C	PLANT; C	PLANT; C	PLANT; P	PLANT; P	PLANT; P	PLANT; P				
Rating Type	GROUND	VIGOR	CHLOROSIS	PHYGEN	EFFICI	EFFICI	EFFICI	EFFICI				
Rating Unit/Min/Max	%; 0; 100	0-10; 0; 10	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100				
Number of Subsamples	1	1	1	1	1	1	1	1				
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH				
Crop Stage Majority/Min/Max	11; 11; 11	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12				
Pest Stage Majority/Min/Max												
Pest Density	207,75 PLA/m2											
Data Entry Date	3-11-2021	16-7-2021	16-7-2021	16-7-2021	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2				
Rating Timing	A2	A3	A3	A3	A3	A3	A3	A3				
Days After First/Last Applic.	29; 29	35; 6	35; 6	35; 6	35; 6	35; 6	35; 6	35; 6				
Trt-Eval Interval	29 DA-A	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B				
Trt Treatment	Rate	Appl										
No. Name	Rate	Unit	Code	Plot	15	16	17	18	19	20	21	22
1 UNTREATE				101	20,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
				204	25,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
				303	15,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
				407	30,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
				Mean =	22,5	10,0	0,0	0,0	0,0	0,0	0,0	0,0
2 Stomp	2 l/ha	A		102	5,0	10,0	0,0	0,0	90,0	90,0	90,0	90,0
Boxer	0,75 l/ha	B		203	5,0	10,0	0,0	0,0	80,0	80,0	50,0	80,0
Wing P	1 l/ha	B		307	15,0	10,0	0,0	0,0	10,0	100,0	80,0	60,0
Boxer	0,75 l/ha	C		405	5,0	10,0	0,0	0,0	90,0	100,0	50,0	90,0
Wing P	1,5 l/ha	C		Mean =	7,5	10,0	0,0	0,0	67,5	92,5	67,5	80,0
3 Challenge	1,5 l/ha	A		103	10,0	10,0	0,0	0,0	40,0	60,0	50,0	0,0
Boxer	0,75 l/ha	B		206	10,0	10,0	0,0	0,0	0,0	0,0	80,0	0,0
Wing P	1 l/ha	B		305	30,0	10,0	0,0	0,0	10,0	60,0	90,0	20,0
Boxer	0,75 l/ha	C		402	5,0	10,0	0,0	0,0	80,0	20,0	100,0	50,0
Wing P	1,5 l/ha	C		Mean =	13,8	10,0	0,0	0,0	32,5	35,0	80,0	17,5
4 Challenge	1,5 l/ha	A		104	15,0	8,0	30,0	30,0	95,0	95,0	100,0	60,0
Challenge	1 l/ha	B		205	10,0	8,0	30,0	30,0	95,0	95,0	100,0	90,0
Wing P	1 l/ha	B		302	2,0	9,0	30,0	30,0	95,0	90,0	100,0	70,0
Boxer	0,75 l/ha	C		408	10,0	9,0	30,0	30,0	100,0	95,0	100,0	95,0
Wing P	1,5 l/ha	C		Mean =	9,3	8,5	30,0	30,0	96,3	93,8	100,0	78,8
5 Challenge	1 l/ha	A		105	15,0	10,0	0,0	0,0	10,0	80,0	90,0	30,0
Stomp	1 l/ha	A		207	20,0	10,0	0,0	0,0	80,0	80,0	95,0	40,0
Boxer	0,5 l/ha	B		308	8,0	10,0	0,0	0,0	95,0	100,0	95,0	30,0
Challenge	0,5 l/ha	B		401	2,0	10,0	0,0	0,0	95,0	20,0	100,0	100,0
Wing P	0,5 l/ha	B		Mean =	11,3	10,0	0,0	0,0	70,0	70,0	95,0	50,0
Boxer	0,75 l/ha	C		Mean =	11,3	10,0	0,0	0,0	70,0	70,0	95,0	50,0
Wing P	1,5 l/ha	C		Mean =	11,3	10,0	0,0	0,0	70,0	70,0	95,0	50,0
6 Challenge	1,5 l/ha	A		106	10,0	10,0	10,0	10,0	50,0	90,0	100,0	70,0
Stomp	2 l/ha	A		201	1,0	10,0	0,0	0,0	95,0	90,0	95,0	90,0
Boxer	0,5 l/ha	B		304	1,0	10,0	10,0	10,0	80,0	90,0	100,0	95,0
Challenge	0,25 l/ha	B		403	1,0	10,0	10,0	10,0	100,0	90,0	100,0	100,0
Wing P	0,5 l/ha	B		Mean =	3,3	10,0	7,5	7,5	81,3	90,0	98,8	88,8
Boxer	0,5 l/ha	C		Mean =	3,3	10,0	7,5	7,5	81,3	90,0	98,8	88,8
Challenge	0,25 l/ha	C		Mean =	3,3	10,0	7,5	7,5	81,3	90,0	98,8	88,8
Wing P	1 l/ha	C		Mean =	3,3	10,0	7,5	7,5	81,3	90,0	98,8	88,8
7 Challenge	1,5 l/ha	A		107	5,0	10,0	0,0	0,0	90,0	90,0	90,0	90,0
Stomp	2 l/ha	A		208	1,0	10,0	0,0	0,0	95,0	95,0	100,0	95,0
Wing P	1 l/ha	A		301	0,0	10,0	0,0	0,0	100,0	100,0	100,0	100,0
Wing P	1 l/ha	B		406	0,0	10,0	0,0	0,0	95,0	100,0	100,0	100,0
Boxer	1 l/ha	C		Mean =	1,5	10,0	0,0	0,0	95,0	96,3	97,5	96,3
Challenge	0,5 l/ha	C		Mean =	1,5	10,0	0,0	0,0	95,0	96,3	97,5	96,3
8 Toki	0,06 kg/ha	C		108	25,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
				202	8,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
				306	35,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
				404	20,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
				Mean =	22,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0

Pest Type	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed		
Pest Code	POAAN	TTTTT	CHEAL	ECHCC	STEME	SOLNI	POAAN		
Pest Scientific Name	Poa annua	Weed plants	Chenopodium alb>	Echinochloa cru>	Stellaria media	Solanum nigrum	Poa annua		
Pest Name	Annual bluegrass	Weed plants	common lambsqua>	Echinochloa cru>	Common chickweed	Black nightshade	Annual bluegrass		
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA		
BBCH Scale	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC		
Crop Scientific Name	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa		
Crop Name	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip		
Rating Date	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021	7-6-2021		
Part Rated	PLANT; P	PLANT; P	PLANT; p	PLANT; p	PLANT; p	PLANT; p	PLANT; p		
Rating Type	EFFICI	EFFICI	GROUND	GROUND	GROUND	GROUND	GROUND		
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH		
Crop Stage Majority/Min/Max	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12	12; 12; 12		
Pest Stage Majority/Min/Max	16; 16; 16	16; 16; 16	14; 14; 14	14; 14; 14	24; 24; 24	12; 12; 12	16; 16; 16		
Pest Density	16,25 PLA/m2	249,25 PLA/m2	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2	16,25 PLA/m2		
Data Entry Date	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021		
Rating Timing	A3	A3	A3	A3	A3	A3	A3		
Days After First/Last Applic.	35; 6	35; 6	35; 6	35; 6	35; 6	35; 6	35; 6		
Trt-Eval Interval	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B	6 DA-B		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	23	24	25	26	27	28	29
1 UNTREATE D		101	0,0	0,0	60,0	10,0	10,0	5,0	5,0
		204	0,0	0,0	60,0	10,0	30,0	5,0	5,0
		303	0,0	0,0	15,0	5,0	60,0	15,0	5,0
		407	0,0	0,0	80,0	10,0	20,0	5,0	5,0
		Mean =	0,0	0,0	53,8	8,8	30,0	7,5	5,0
2 Stomp	2 l/ha	A 102	100,0	90,0	2,0	1,0	1,0	1,0	5,0
Boxer	0,75 l/ha	B 203	50,0	80,0	5,0	2,0	5,0	1,0	5,0
Wing P	1 l/ha	B 307	80,0	20,0	60,0	2,0	1,0	1,0	1,0
Boxer	0,75 l/ha	C 405	100,0	80,0	5,0	1,0	10,0	1,0	0,0
Wing P	1,5 l/ha	C							
		Mean =	82,5	67,5	18,0	1,5	4,3	1,0	2,8
3 Challenge	1,5 l/ha	A 103	0,0	30,0	20,0	5,0	5,0	10,0	5,0
Boxer	0,75 l/ha	B 206	0,0	10,0	60,0	5,0	5,0	30,0	1,0
Wing P	1 l/ha	B 305	0,0	10,0	60,0	1,0	2,0	5,0	5,0
Boxer	0,75 l/ha	C 402	50,0	70,0	5,0	10,0	0,0	5,0	1,0
Wing P	1,5 l/ha	C							
		Mean =	12,5	30,0	36,3	5,3	3,0	12,5	3,0
4 Challenge	1,5 l/ha	A 104	100,0	90,0	2,0	1,0	0,0	5,0	0,0
Challenge	1 l/ha	B 205	100,0	95,0	1,0	1,0	0,0	5,0	0,0
Wing P	1 l/ha	B 302	50,0	90,0	2,0	1,0	1,0	2,0	1,0
Boxer	0,75 l/ha	C 408	100,0	95,0	1,0	1,0	0,0	1,0	0,0
Wing P	1,5 l/ha	C							
		Mean =	87,5	92,5	1,5	1,0	0,3	3,3	0,3
5 Challenge	1 l/ha	A 105	100,0	60,0	8,0	1,0	1,0	2,0	0,0
Stomp	1 l/ha	A 207	50,0	70,0	5,0	1,0	1,0	5,0	1,0
Boxer	0,5 l/ha	B 308	100,0	90,0	1,0	0,0	0,0	5,0	0,0
Challenge	0,5 l/ha	B 401	100,0	95,0	1,0	10,0	0,0	0,0	0,0
Wing P	0,5 l/ha	B							
Boxer	0,75 l/ha	C							
Wing P	1,5 l/ha	C							
		Mean =	87,5	78,8	3,8	3,0	0,5	3,0	0,3
6 Challenge	1,5 l/ha	A 106	100,0	50,0	10,0	1,0	0,0	5,0	1,0
Stomp	2 l/ha	A 201	100,0	90,0	1,0	1,0	1,0	1,0	0,0
Boxer	0,5 l/ha	B 304	100,0	90,0	2,0	1,0	0,0	0,0	1,0
Challenge	0,25 l/ha	B 403	100,0	95,0	0,0	1,0	0,0	0,0	0,0
Wing P	0,5 l/ha	B							
Boxer	0,5 l/ha	C							
Challenge	0,25 l/ha	C							
Wing P	1 l/ha	C							
		Mean =	100,0	81,3	3,3	1,0	0,3	1,5	0,5
7 Challenge	1,5 l/ha	A 107	90,0	90,0	2,0	1,0	1,0	1,0	1,0
Stomp	2 l/ha	A 208	100,0	95,0	1,0	1,0	0,0	1,0	0,0
Wing P	1 l/ha	A 301	100,0	100,0	0,0	0,0	0,0	0,0	0,0
Wing P	1 l/ha	B 406	100,0	95,0	1,0	0,0	0,0	0,0	0,0
Boxer	1 l/ha	C							
Challenge	0,5 l/ha	C							
		Mean =	97,5	95,0	1,0	0,5	0,3	0,5	0,3
8 Toki	0,06 kg/ha	C 108	0,0	0,0	70,0	10,0	10,0	10,0	5,0
		202	0,0	0,0	20,0	5,0	30,0	10,0	5,0
		306	0,0	0,0	70,0	5,0	20,0	10,0	5,0
		404	0,0	0,0	30,0	5,0	40,0	5,0	5,0
		Mean =	0,0	0,0	47,5	6,3	25,0	8,8	5,0

Pest Type	W; Weed					W; Weed	W; Weed	W; Weed		
Pest Code	TTTTT					CHEAL	ECHCC	STEME		
Pest Scientific Name	Weed plants					Chenopodium alb>	Echinochloa cru>	Stellaria media		
Pest Name	Weed plants					common lambsqua>	Echinochloa cru>	Common chickweed		
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA		
BBCH Scale	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC		
Crop Scientific Name	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa		
Crop Name	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip		
Rating Date	7-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021		
Part Rated	PLANT; p	PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; P	PLANT; P	PLANT; P		
Rating Type	GROUND	VIGOR	CHLOROSIS	NECROSIS	PHYGEN	EFFICI	EFFICI	EFFICI		
Rating Unit/Min/Max	%; 0; 100	0-10; 0; 10	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100		
Number of Subsamples	1	1	1	1	1	1	1	1		
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH		
Crop Stage Majority/Min/Max	12; 12; 12	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14		
Pest Stage Majority/Min/Max						26; 26; 26	22; 22; 22	61; 61; 61		
Pest Density	249,25 PLA/m2					85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2		
Data Entry Date	3-11-2021	16-7-2021	16-7-2021	16-7-2021	16-7-2021	3-11-2021	3-11-2021	3-11-2021		
Rating Timing	A3	A4	A4	A4	A4	A4	A4	A4		
Days After First/Last Applic.	35; 6	42; 7	42; 7	42; 7	42; 7	42; 7	42; 7	42; 7		
Trt-Eval Interval	6 DA-B	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C		
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	30	31	32	33	34	35	36	37
1 UNTREATE D		101	70,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
		204	80,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
		303	60,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
		407	80,0	10,0	0,0	0,0	0,0	0,0	0,0	0,0
		Mean =	72,5	10,0	0,0	0,0	0,0	0,0	0,0	0,0
2 Stomp	2 l/ha	A 102	5,0	8,0	5,0	15,0	20,0	80,0	60,0	70,0
Boxer	0,75 l/ha	B 203	10,0	10,0	5,0	5,0	10,0	90,0	70,0	90,0
Wing P	1 l/ha	B 307	60,0	9,0	5,0	5,0	10,0	10,0	100,0	90,0
Boxer	0,75 l/ha	C 405	10,0	10,0	10,0	5,0	15,0	80,0	80,0	80,0
Wing P	1,5 l/ha	C								
		Mean =	21,3	9,3	6,3	7,5	13,8	65,0	77,5	82,5
3 Challenge	1,5 l/ha	A 103	10,0	9,0	5,0	10,0	15,0	40,0	40,0	70,0
Boxer	0,75 l/ha	B 206	80,0	8,0	0,0	10,0	10,0	30,0	50,0	90,0
Wing P	1 l/ha	B 305	70,0	8,0	5,0	5,0	10,0	10,0	10,0	80,0
Boxer	0,75 l/ha	C 402	5,0	10,0	5,0	0,0	5,0	90,0	0,0	100,0
Wing P	1,5 l/ha	C								
		Mean =	41,3	8,8	3,8	6,3	10,0	42,5	25,0	85,0
4 Challenge	1,5 l/ha	A 104	15,0	10,0	30,0	5,0	35,0	90,0	70,0	100,0
Challenge	1 l/ha	B 205	5,0	8,0	25,0	5,0	30,0	95,0	95,0	100,0
Wing P	1 l/ha	B 302	2,0	9,0	20,0	5,0	25,0	95,0	50,0	100,0
Boxer	0,75 l/ha	C 408	1,0	9,0	20,0	5,0	25,0	100,0	30,0	100,0
Wing P	1,5 l/ha	C								
		Mean =	5,8	9,0	23,8	5,0	28,8	95,0	61,3	100,0
5 Challenge	1 l/ha	A 105	5,0	10,0	5,0	0,0	5,0	70,0	80,0	100,0
Stomp	1 l/ha	A 207	10,0	9,0	5,0	5,0	10,0	60,0	80,0	95,0
Boxer	0,5 l/ha	B 308	2,0	9,0	5,0	0,0	5,0	80,0	100,0	100,0
Challenge	0,5 l/ha	B 401	5,0	9,0	5,0	5,0	10,0	95,0	20,0	100,0
Wing P	0,5 l/ha	B								
Boxer	0,75 l/ha	C								
Wing P	1,5 l/ha	C								
		Mean =	5,5	9,3	5,0	2,5	7,5	76,3	70,0	98,8
6 Challenge	1,5 l/ha	A 106	5,0	10,0	10,0	0,0	10,0	90,0	100,0	100,0
Stomp	2 l/ha	A 201	1,0	10,0	0,0	0,0	0,0	95,0	90,0	100,0
Boxer	0,5 l/ha	B 304	2,0	10,0	5,0	0,0	5,0	95,0	95,0	100,0
Challenge	0,25 l/ha	B 403	1,0	10,0	5,0	0,0	5,0	100,0	90,0	100,0
Wing P	0,5 l/ha	B								
Boxer	0,5 l/ha	C								
Challenge	0,25 l/ha	C								
Wing P	1 l/ha	C								
		Mean =	2,3	10,0	5,0	0,0	5,0	95,0	93,8	100,0
7 Challenge	1,5 l/ha	A 107	5,0	9,0	5,0	0,0	5,0	85,0	100,0	100,0
Stomp	2 l/ha	A 208	1,0	10,0	5,0	0,0	5,0	95,0	100,0	100,0
Wing P	1 l/ha	A 301	0,0	10,0	5,0	0,0	5,0	100,0	100,0	100,0
Wing P	1 l/ha	B 406	0,0	10,0	5,0	0,0	5,0	95,0	100,0	100,0
Boxer	1 l/ha	C								
Challenge	0,5 l/ha	C								
		Mean =	1,5	9,8	5,0	0,0	5,0	93,8	100,0	100,0
8 Toki	0,06 kg/ha	C 108	80,0	8,0	10,0	25,0	35,0	10,0	50,0	10,0
		202	40,0	9,0	20,0	10,0	30,0	10,0	0,0	10,0
		306	80,0	8,0	30,0	20,0	50,0	10,0	10,0	20,0
		404	40,0	8,0	20,0	20,0	40,0	10,0	10,0	20,0
		Mean =	60,0	8,3	20,0	18,8	38,8	10,0	17,5	15,0

Pest Type	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed				
Pest Code	SOLNI	POAAN	TTTTT	CHEAL	ECHCC	STEME	SOLNI				
Pest Scientific Name	Solanum nigrum	Poa annua	Weed plants	Chenopodium alb>	Echinochloa cru>	Stellaria media	Solanum nigrum				
Pest Name	Black nightshade	Annual bluegrass	Weed plants	common lambsqua>	Echinochloa cru>	Common chickweed	Black nightshade				
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA				
BBCH Scale	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC				
Crop Scientific Name	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa				
Crop Name	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip				
Rating Date	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021	14-6-2021				
Part Rated	PLANT; P	PLANT; P	PLANT; P	PLANT; p	PLANT; p	PLANT; p	PLANT; p				
Rating Type	EFFICI	EFFICI	EFFICI	GROUND	GROUND	GROUND	GROUND				
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100				
Number of Subsamples	1	1	1	1	1	1	1				
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH				
Crop Stage Majority/Min/Max	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14	14; 14; 14				
Pest Stage Majority/Min/Max	18; 18; 18	26; 26; 26	26; 26; 26	26; 26; 26	22; 22; 22	61; 61; 61	18; 18; 18				
Pest Density	35 PLA/m2	16,25 PLA/m2	249,25 PLA/m2	85,25 PLA/m2	39 PLA/m2	73,75 PLA/m2	35 PLA/m2				
Data Entry Date	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021	3-11-2021				
Rating Timing	A4	A4	A4	A4	A4	A4	A4				
Days After First/Last Applic.	42; 7	42; 7	42; 7	42; 7	42; 7	42; 7	42; 7				
Trt-Eval Interval	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C	7 DA-C				
Trt Treatment	Rate	Appl									
No. Name	Rate	Unit	Code	Plot							
1 UNTREATE				101	38	39	40	41	42	43	44
D				0,0	0,0	0,0	0,0	70,0	20,0	10,0	5,0
				204	0,0	0,0	0,0	80,0	15,0	40,0	10,0
				303	0,0	0,0	0,0	30,0	10,0	70,0	15,0
				407	0,0	0,0	0,0	90,0	20,0	30,0	15,0
				Mean =	0,0	0,0	0,0	67,5	16,3	37,5	11,3
2 Stomp	2 l/ha	A	102	100,0	50,0	80,0	80,0	5,0	2,0	2,0	0,0
Boxer	0,75 l/ha	B	203	90,0	50,0	80,0	5,0	5,0	2,0	5,0	1,0
Wing P	1 l/ha	B	307	80,0	80,0	20,0	80,0	1,0	1,0	1,0	1,0
Boxer	0,75 l/ha	C	405	90,0	70,0	70,0	10,0	2,0	10,0	1,0	1,0
Wing P	1,5 l/ha	C									
				Mean =	90,0	62,5	62,5	25,0	1,8	4,5	0,8
3 Challenge	1,5 l/ha	A	103	20,0	50,0	30,0	20,0	10,0	5,0	5,0	5,0
Boxer	0,75 l/ha	B	206	20,0	20,0	15,0	60,0	2,0	2,0	30,0	30,0
Wing P	1 l/ha	B	305	50,0	20,0	10,0	60,0	10,0	2,0	2,0	2,0
Boxer	0,75 l/ha	C	402	80,0	0,0	60,0	2,0	25,0	0,0	2,0	2,0
Wing P	1,5 l/ha	C									
				Mean =	42,5	22,5	28,8	35,5	11,8	2,3	9,8
4 Challenge	1,5 l/ha	A	104	80,0	80,0	90,0	2,0	2,0	0,0	2,0	2,0
Challenge	1 l/ha	B	205	90,0	90,0	95,0	1,0	1,0	0,0	0,0	2,0
Wing P	1 l/ha	B	302	80,0	50,0	90,0	1,0	10,0	1,0	1,0	1,0
Boxer	0,75 l/ha	C	408	70,0	60,0	70,0	1,0	15,0	0,0	0,0	10,0
Wing P	1,5 l/ha	C									
				Mean =	80,0	70,0	86,3	1,3	7,0	0,3	3,8
5 Challenge	1 l/ha	A	105	60,0	70,0	70,0	10,0	2,0	0,0	0,0	5,0
Stomp	1 l/ha	A	207	60,0	50,0	60,0	20,0	1,0	1,0	1,0	5,0
Boxer	0,5 l/ha	B	308	30,0	50,0	90,0	1,0	0,0	0,0	0,0	10,0
Challenge	0,5 l/ha	B	401	100,0	100,0	95,0	1,0	20,0	0,0	0,0	0,0
Wing P	0,5 l/ha	B									
Boxer	0,75 l/ha	C									
Wing P	1,5 l/ha	C									
				Mean =	62,5	67,5	78,8	8,0	5,8	0,3	5,0
6 Challenge	1,5 l/ha	A	106	100,0	100,0	95,0	2,0	0,0	0,0	0,0	0,0
Stomp	2 l/ha	A	201	100,0	90,0	90,0	1,0	1,0	0,0	0,0	0,0
Boxer	0,5 l/ha	B	304	95,0	100,0	95,0	1,0	1,0	0,0	0,0	0,0
Challenge	0,25 l/ha	B	403	100,0	100,0	95,0	0,0	1,0	0,0	0,0	0,0
Wing P	0,5 l/ha	B									
Boxer	0,5 l/ha	C									
Challenge	0,25 l/ha	C									
Wing P	1 l/ha	C									
				Mean =	98,8	97,5	93,8	1,0	0,8	0,0	0,0
7 Challenge	1,5 l/ha	A	107	100,0	100,0	90,0	5,0	0,0	0,0	0,0	0,0
Stomp	2 l/ha	A	208	95,0	100,0	95,0	1,0	1,0	0,0	0,0	1,0
Wing P	1 l/ha	A	301	100,0	100,0	100,0	0,0	0,0	0,0	0,0	0,0
Wing P	1 l/ha	B	406	100,0	100,0	95,0	1,0	0,0	0,0	0,0	0,0
Boxer	1 l/ha	C									
Challenge	0,5 l/ha	C									
				Mean =	98,8	100,0	95,0	1,8	0,3	0,0	0,3
8 Toki	0,06 kg/ha	C	108	50,0	20,0	15,0	80,0	5,0	5,0	5,0	5,0
			202	10,0	10,0	10,0	40,0	10,0	30,0	10,0	10,0
			306	20,0	10,0	10,0	80,0	2,0	15,0	5,0	5,0
			404	10,0	10,0	10,0	40,0	5,0	40,0	5,0	5,0
			Mean =	22,5	12,5	11,3	60,0	5,5	22,5	6,3	6,3

Pest Type	W; Weed	W; Weed							W; Weed	
Pest Code	POAAN	TTTTT							CHEAL	
Pest Scientific Name	Poa annua	Weed plants							Chenopodium alb>	
Pest Name	Annual bluegrass	Weed plants							common lambsqua>	
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	
BBCH Scale	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	
Crop Scientific Name	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	
Crop Name	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	
Rating Date	14-6-2021	14-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021	
Part Rated	PLANT; p	PLANT; p	PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; P	
Rating Type	GROUND	GROUND	VIGOR	CHLOROSIS	NECROSIS	RESHAPING	PHYGEN	EFFICI	EFFICI	
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	0-10; 0; 10	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	
Number of Subsamples	1	1	1	1	1	1	1	1	1	
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	
Crop Stage Majority/Min/Max	14; 14; 14	14; 14; 14	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	
Pest Stage Majority/Min/Max	26; 26; 26	26; 26; 26							26; 26; 26	
Pest Density	16,25 PLA/m2	249,25 PLA/m2							85,25 PLA/m2	
Data Entry Date	3-11-2021	3-11-2021	16-7-2021	16-7-2021	16-7-2021	16-7-2021	16-7-2021	16-7-2021	23-7-2021	
Rating Timing	A4	A4	A5	A5	A5	A5	A5	A5	A5	
Days After First/Last Applic.	42; 7	42; 7	50; 15	50; 15	50; 15	50; 15	50; 15	50; 15	50; 15	
Trt-Eval Interval	7 DA-C	7 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C	
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code Plot	45	46	47	48	49	50	51	52
1 UNTREATE D		101	5,0	80,0	7,0	0,0	0,0	0,0	0,0	0,0
		204	5,0	85,0	10,0	0,0	0,0	0,0	0,0	0,0
		303	5,0	80,0	10,0	0,0	0,0	0,0	0,0	0,0
		407	10,0	95,0	10,0	0,0	0,0	0,0	0,0	0,0
		Mean =	6,3	85,0	9,3	0,0	0,0	0,0	0,0	0,0
2 Stomp	2 l/ha A	102	2,0	10,0	7,0	0,0	0,0	40,0	40,0	50,0
Boxer	0,75 l/ha B	203	5,0	10,0	8,0	5,0	5,0	15,0	15,0	70,0
Wing P	1 l/ha B	307	1,0	80,0	9,0	5,0	5,0	0,0	10,0	20,0
Boxer	0,75 l/ha C	405	2,0	20,0	9,0	10,0	5,0	0,0	15,0	60,0
		Mean =	2,5	30,0	8,3	5,0	3,8	13,8	20,0	50,0
3 Challenge	1,5 l/ha A	103	2,0	40,0	8,0	5,0	15,0	20,0	25,0	30,0
Boxer	0,75 l/ha B	206	1,0	70,0	7,0	0,0	10,0	30,0	35,0	40,0
Wing P	1 l/ha B	305	5,0	70,0	8,0	5,0	5,0	0,0	10,0	20,0
Boxer	0,75 l/ha C	402	5,0	25,0	8,0	5,0	0,0	10,0	15,0	70,0
		Mean =	3,3	51,3	7,8	3,8	7,5	15,0	21,3	40,0
4 Challenge	1,5 l/ha A	104	1,0	5,0	9,0	5,0	10,0	0,0	15,0	80,0
Challenge	1 l/ha B	205	1,0	2,0	8,0	10,0	5,0	0,0	20,0	95,0
Wing P	1 l/ha B	302	1,0	2,0	9,0	5,0	5,0	5,0	10,0	95,0
Boxer	0,75 l/ha C	408	2,0	15,0	9,0	5,0	5,0	5,0	10,0	90,0
		Mean =	1,3	6,0	8,8	6,3	6,3	2,5	13,8	90,0
5 Challenge	1 l/ha A	105	2,0	15,0	10,0	10,0	5,0	5,0	20,0	40,0
Stomp	1 l/ha A	207	1,0	20,0	9,0	5,0	5,0	5,0	10,0	60,0
Boxer	0,5 l/ha B	308	5,0	10,0	9,0	5,0	0,0	5,0	5,0	80,0
Challenge	0,5 l/ha B	401	0,0	5,0	9,0	5,0	5,0	0,0	10,0	95,0
		Mean =	2,0	12,5	9,3	6,3	3,8	3,8	11,3	68,8
6 Challenge	1,5 l/ha A	106	0,0	2,0	10,0	0,0	0,0	0,0	0,0	90,0
Stomp	2 l/ha A	201	1,0	1,0	10,0	0,0	0,0	0,0	0,0	95,0
Boxer	0,5 l/ha B	304	1,0	2,0	10,0	5,0	0,0	0,0	5,0	95,0
Challenge	0,25 l/ha B	403	0,0	1,0	10,0	5,0	0,0	0,0	5,0	90,0
		Mean =	0,5	1,5	10,0	2,5	0,0	0,0	2,5	92,5
7 Challenge	1,5 l/ha A	107	0,0	5,0	9,0	5,0	0,0	20,0	20,0	85,0
Stomp	2 l/ha A	208	0,0	2,0	10,0	5,0	0,0	0,0	5,0	90,0
Wing P	1 l/ha A	301	0,0	0,0	10,0	5,0	0,0	0,0	5,0	100,0
Wing P	1 l/ha B	406	0,0	0,0	8,0	5,0	0,0	15,0	20,0	90,0
		Mean =	0,0	1,8	9,3	5,0	0,0	8,8	12,5	91,3
8 Toki	0,06 kg/ha C	108	5,0	85,0	7,0	10,0	30,0	10,0	40,0	10,0
		202	5,0	60,0	6,0	20,0	10,0	10,0	30,0	10,0
		306	5,0	80,0	8,0	20,0	20,0	10,0	50,0	0,0
		404	5,0	50,0	8,0	10,0	20,0	5,0	20,0	10,0
		Mean =	5,0	68,8	7,3	15,0	20,0	8,8	35,0	7,5

Pest Type	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed	W; Weed		
Pest Code	ECHCC	STEME	SOLNI	POAAN	TTTTT	CHEAL	ECHCC		
Pest Scientific Name	Echinochloa cru>	Stellaria media	Solanum nigrum	Poa annua	Weed plants	Chenopodium alb>	Echinochloa cru>		
Pest Name	Echinochloa cru>	Common chickweed	Black nightshade	Annual bluegrass	Weed plants	common lambsqua>	Echinochloa cru>		
Crop Type, Code	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA	C; PAVSA		
BBCH Scale	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC	BDIC		
Crop Scientific Name	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa	Pastinaca sativa		
Crop Name	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip	parsnip		
Rating Date	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021	22-6-2021		
Part Rated	PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT; p	PLANT; p		
Rating Type	EFFICI	EFFICI	EFFICI	EFFICI	EFFICI	GROUND	GROUND		
Rating Unit/Min/Max	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100	%; 0; 100		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Scale	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH		
Crop Stage Majority/Min/Max	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15	15; 15; 15		
Pest Stage Majority/Min/Max	22; 22; 22	61; 61; 61	18; 18; 18	26; 26; 26	26; 26; 26	26; 26; 26	22; 22; 22		
Pest Density	39 PLA/m2	73,75 PLA/m2	35 PLA/m2	16,25 PLA/m2	249,25 PLA/m2	85,25 PLA/m2	39 PLA/m2		
Data Entry Date	23-7-2021	23-7-2021	23-7-2021	23-7-2021	23-7-2021	23-7-2021	23-7-2021		
Rating Timing	A5	A5	A5	A5	A5	A5	A5		
Days After First/Last Applic.	50; 15	50; 15	50; 15	50; 15	50; 15	50; 15	50; 15		
Trt-Eval Interval	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C	15 DA-C		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code Plot	53	54	55	56	57	58	59
1 UNTREATE D		101	0,0	0,0	0,0	0,0	0,0	70,0	25,0
		204	0,0	0,0	0,0	0,0	0,0	90,0	15,0
		303	0,0	0,0	0,0	0,0	0,0	60,0	20,0
		407	0,0	0,0	0,0	0,0	0,0	90,0	25,0
		Mean =	0,0	0,0	0,0	0,0	0,0	77,5	21,3
2 Stomp	2 l/ha	A 102	50,0	70,0	100,0	80,0	60,0	20,0	10,0
Boxer	0,75 l/ha	B 203	0,0	90,0	60,0	50,0	70,0	15,0	10,0
Wing P	1 l/ha	B 307	100,0	90,0	80,0	80,0	30,0	85,0	1,0
Boxer	0,75 l/ha	C 405	60,0	40,0	90,0	70,0	50,0	20,0	10,0
Wing P	1,5 l/ha	C							
		Mean =	52,5	72,5	82,5	70,0	52,5	35,0	7,8
3 Challenge	1,5 l/ha	A 103	0,0	70,0	20,0	80,0	20,0	70,0	20,0
Boxer	0,75 l/ha	B 206	80,0	90,0	20,0	20,0	15,0	60,0	2,0
Wing P	1 l/ha	B 305	20,0	80,0	50,0	20,0	20,0	70,0	10,0
Boxer	0,75 l/ha	C 402	0,0	90,0	80,0	0,0	20,0	5,0	50,0
Wing P	1,5 l/ha	C							
		Mean =	25,0	82,5	42,5	30,0	18,8	51,3	20,5
4 Challenge	1,5 l/ha	A 104	20,0	100,0	80,0	80,0	80,0	5,0	10,0
Challenge	1 l/ha	B 205	50,0	100,0	90,0	90,0	95,0	5,0	10,0
Wing P	1 l/ha	B 302	20,0	100,0	80,0	50,0	70,0	1,0	15,0
Boxer	0,75 l/ha	C 408	0,0	100,0	20,0	60,0	50,0	5,0	25,0
Wing P	1,5 l/ha	C							
		Mean =	22,5	100,0	67,5	70,0	73,8	4,0	15,0
5 Challenge	1 l/ha	A 105	60,0	90,0	60,0	70,0	60,0	25,0	5,0
Stomp	1 l/ha	A 207	80,0	95,0	60,0	50,0	60,0	30,0	1,0
Boxer	0,5 l/ha	B 308	90,0	100,0	0,0	50,0	50,0	10,0	1,0
Challenge	0,5 l/ha	B 401	0,0	100,0	70,0	100,0	60,0	1,0	30,0
Wing P	0,5 l/ha	B							
Boxer	0,75 l/ha	C							
Wing P	1,5 l/ha	C							
		Mean =	57,5	96,3	47,5	67,5	57,5	16,5	9,3
6 Challenge	1,5 l/ha	A 106	90,0	90,0	90,0	90,0	90,0	5,0	1,0
Stomp	2 l/ha	A 201	0,0	100,0	100,0	90,0	80,0	1,0	20,0
Boxer	0,5 l/ha	B 304	80,0	100,0	95,0	100,0	85,0	1,0	5,0
Challenge	0,25 l/ha	B 403	70,0	100,0	100,0	100,0	70,0	1,0	10,0
Wing P	0,5 l/ha	B							
Boxer	0,5 l/ha	C							
Challenge	0,25 l/ha	C							
Wing P	1 l/ha	C							
		Mean =	60,0	97,5	96,3	95,0	81,3	2,0	9,0
7 Challenge	1,5 l/ha	A 107	100,0	100,0	100,0	100,0	90,0	10,0	0,0
Stomp	2 l/ha	A 208	100,0	100,0	95,0	100,0	90,0	5,0	1,0
Wing P	1 l/ha	A 301	50,0	100,0	100,0	100,0	90,0	0,0	10,0
Wing P	1 l/ha	B 406	100,0	100,0	100,0	100,0	90,0	5,0	0,0
Boxer	1 l/ha	C							
Challenge	0,5 l/ha	C							
		Mean =	87,5	100,0	98,8	100,0	90,0	5,0	2,8
8 Toki	0,06 kg/ha	C 108	50,0	10,0	50,0	20,0	5,0	90,0	5,0
		202	0,0	0,0	0,0	0,0	10,0	80,0	25,0
		306	50,0	0,0	0,0	0,0	0,0	80,0	2,0
		404	10,0	20,0	10,0	10,0	10,0	50,0	5,0
		Mean =	27,5	7,5	15,0	7,5	6,3	75,0	9,3

Demo onkruidbestreiding in pastinaak

Trial ID: 5590 StichtingTOG Pastinaak	Location: Maritime EPPO zone	Trial Year: 2021
Protocol ID: 5590 StichtingTOG Pastinaak	Investigator (Creator): Conny Vervoort	
Project ID:	Study Director:	
	Sponsor Contact: Geert Hermans	
<u>Pest Type</u>		
W, Weed = Weed or volunteer crop		
<u>Pest Code</u>		
CHEAL, Chenopodium album, common lambsquarters = US		
TTTTT, Weed plants, Weed plants = US		
ECHCC, Echinochloa crus-galli caudata, Echinochloa crus-galli caudata = US		
STEME, Stellaria media, Common chickweed = US		
SOLNI, Solanum nigrum, Black nightshade = US		
POAAN, Poa annua, Annual bluegrass = US		
<u>Crop Type, Code</u>		
C = EPPO species (Bayer) codes		
PAVSA, BDIC, Pastinaca sativa, parsnip = US		
<u>Part Rated</u>		
PLANT = plant		
P = Pest is Part Rated		
C = Crop is Part Rated		
<u>Rating Type</u>		
EFFICI = efficiency		
VIGOR = vigor		
PHYGEN = phytotoxicity - general / injury		
GROUND = groundcover		
<u>Rating Unit/Min/Max</u>		
%, 0, 100 = percent		
0-10, 0, 10 = 0-10 index/scale		
<u>Crop Stage Scale</u>		
BBCH = BBCH uniform plant stages		
<u>Crop Stage Majority/Min/Max</u>		
11 = First true leaf, leaf pair or whorl unfolded		
12 = 2 true leaves, leaf pairs or whorls unfolded		
14 = 4 true leaves, leaf pairs or whorls unfolded		
15 = 5 true leaves, leaf pairs or whorls unfolded		
<u>Pest Stage Majority/Min/Max</u>		
10 = G,M=First true leaf emerged from coleoptile; D=Cotyledons completely unfolded; P=First leaves separated		
12 = 2 true leaves, leaf pairs or whorls unfolded		
14 = 4 true leaves, leaf pairs or whorls unfolded		
11 = First true leaf, leaf pair or whorl unfolded; P=First leaves unfolded		
24 = 4 side shoots visible; G=4 tillers visible		
16 = 6 true leaves, leaf pairs or whorls unfolded		
26 = 6 side shoots visible; G=6 tillers visible		
22 = 2 side shoots visible; G=2 tillers visible		
61 = Beginning of flowering: 10% of flowers open		
18 = 8 true leaves, leaf pairs or whorls unfolded		
PLA/m2 = plants per square meter		
<u>Rating Timing</u>		
A1 = 1st Assessment According to Trial Schedule		
A2 = 2nd Assessment According to trial Schedule		
A3 = 3rd Assessment According to Trial Schedule		
A4 = 4th Assessment According to Trial Schedule		
A5 = 5th Assessment According to Trial Schedule		

Bijlagen 3 proef plattengrond

108 8	208 7	308 5	408 4
107 7	207 5	307 2	407 1
106 6	206 3	306 8	406 7
105 5	205 4	305 3	405 2
104 4	204 1	304 6	404 8
103 3	203 2	303 1	403 6
102 2	202 8	302 4	402 3
101 1	201 6	301 7	401 5

Bijlagen 4 weer data

No.	Date	Moisture Total	Unit	Min Temp	Max Temp	Avg Temp	Temp Unit	Avg % Relative Humidity	Avg Wind	Unit
1.	25-2-2021	3,4	mm	6,9	17	11,4	C	79	1,4	MPS
2.	26-2-2021	0,1	mm	-0,4	11,1	6,5	C	77	2,5	MPS
3.	27-2-2021	0	mm	-0,7	6,8	2,8	C	93	1	MPS
4.	28-2-2021	0	mm	-1,2	10,7	4,6	C	86	2,7	MPS
5.	1-3-2021	0	mm	1,9	9,2	4,8	C	89	3,9	MPS
6.	2-3-2021	0	mm	-1,3	15,7	6,9	C	78	1,7	MPS
7.	3-3-2021	0	mm	1	15,4	7,3	C	85	1,2	MPS
8.	4-3-2021	0,8	mm	3,3	4,9	4,2	C	91	2,9	MPS
9.	5-3-2021	0,1	mm	-2,7	7,1	2,4	C	69	3,5	MPS
10.	6-3-2021	0	mm	-4,4	7,2	0,9	C	75	1,9	MPS
11.	7-3-2021	0	mm	-5	6,8	1,5	C	74	1,7	MPS
12.	8-3-2021	0,1	mm	-2	9,5	4,4	C	71	1,7	MPS
13.	9-3-2021	2,2	mm	3,6	9,2	5,6	C	86	2,2	MPS
14.	10-3-2021	3,2	mm	2,1	10,4	6,4	C	81	5,7	MPS
15.	11-3-2021	1,4	mm	6,9	13,3	9,7	C	72	8,2	MPS
16.	12-3-2021	4,1	mm	4,5	8,9	7	C	77	5,7	MPS
17.	13-3-2021	6,2	mm	5,4	9,9	7,4	C	73	6,8	MPS
18.	14-3-2021	7,4	mm	3,9	9,2	6	C	84	4	MPS
19.	15-3-2021	3,9	mm	4,2	9,2	6,4	C	85	5	MPS
20.	16-3-2021	5,5	mm	3,5	6,9	5,4	C	91	2,3	MPS
21.	17-3-2021	0,1	mm	2,4	8	5,3	C	85	3,7	MPS
22.	18-3-2021	2	mm	-1,2	7,1	4	C	89	1,6	MPS
23.	19-3-2021	0	mm	-0,7	9,8	4,4	C	74	4	MPS
24.	20-3-2021	0,1	mm	-2	9,3	4,5	C	78	2	MPS
25.	21-3-2021	0,2	mm	0,8	8,6	6,1	C	78	3,8	MPS
26.	22-3-2021	0,1	mm	0,6	8,4	5,8	C	79	1,8	MPS
27.	23-3-2021	0	mm	1	12,8	6,8	C	80	2,2	MPS
28.	24-3-2021	0	mm	1	15,6	8,3	C	74	2,2	MPS
29.	25-3-2021	0,1	mm	3,1	13,6	8,2	C	78	2,5	MPS
30.	26-3-2021	2,2	mm	4,2	14,1	9,4	C	73	5,2	MPS
31.	27-3-2021	3,1	mm	3,2	10	6,6	C	72	4,2	MPS
32.	28-3-2021	0	mm	4,9	14	9,7	C	69	4,6	MPS
33.	29-3-2021	0	mm	7,9	20,4	13	C	55	3,7	MPS
34.	30-3-2021	0	mm	1,8	23,2	13	C	57	1,2	MPS
35.	31-3-2021	0	mm	3,8	24,5	14,9	C	53	0,6	MPS
36.	1-4-2021	0	mm	2,9	16,1	10,4	C	74	3,9	MPS
37.	2-4-2021	0	mm	1,7	8,4	5,5	C	78	4,2	MPS
38.	3-4-2021	0,1	mm	4,5	11,7	7,4	C	66	4,6	MPS
39.	4-4-2021	0	mm	4	8,5	6	C	73	1,9	MPS
40.	5-4-2021	5,1	mm	0	7,4	3,4	C	82	5,3	MPS
41.	6-4-2021	6,7	mm	-0,3	5	1,5	C	89	4,6	MPS
42.	7-4-2021	8,4	mm	0	6,6	2,9	C	85	5,8	MPS

43.	8-4-2021	0	mm	0,6	10	4,9	C	64	3,2	MPS
44.	9-4-2021	0,1	mm	2,7	13,2	8,1	C	65	2	MPS
45.	10-4-2021	11,3	mm	2,7	8,3	5,6	C	91	4,4	MPS
46.	11-4-2021	0,8	mm	-1,3	8,9	4,3	C	76	4,4	MPS
47.	12-4-2021	1,1	mm	-2	8,9	3,2	C	75	2,5	MPS
48.	13-4-2021	0,1	mm	-2,7	9,8	3,7	C	67	1,6	MPS
49.	14-4-2021	0	mm	-2,5	10	4,2	C	69	2,5	MPS
50.	15-4-2021	0	mm	-3,7	10	4,3	C	71	1,9	MPS
51.	16-4-2021	0	mm	-1	13	6,5	C	64	3,9	MPS
52.	17-4-2021	0	mm	1,2	13	7,2	C	66	3,9	MPS
53.	18-4-2021	0	mm	-1,8	15,1	7,7	C	75	2,1	MPS
54.	19-4-2021	0,2	mm	1,3	12,4	7,7	C	87	0,5	MPS
55.	20-4-2021	0	mm	0,6	17,8	10,3	C	73	1,3	MPS
56.	21-4-2021	0	mm	2,1	14,7	8,9	C	71	4,3	MPS
57.	22-4-2021	0	mm	-3,1	12,6	6,2	C	68	2,9	MPS
58.	23-4-2021	0	mm	-0,9	14,4	7,5	C	69	2,8	MPS
59.	24-4-2021	0	mm	0,9	14,9	8	C	63	4,1	MPS
60.	25-4-2021	0	mm	2,4	12,1	7,1	C	64	4,2	MPS
61.	26-4-2021	0	mm	-0,2	14,2	7,6	C	63	4	MPS
62.	27-4-2021	0	mm	1,3	16,5	9,5	C	50	3,1	MPS
63.	28-4-2021	0	mm	1,2	18,3	11,1	C	53	3,9	MPS
64.	29-4-2021	2,9	mm	3,4	10,3	7,4	C	80	4,5	MPS
65.	30-4-2021	0,1	mm	2,8	11	7,8	C	81	1,9	MPS
66.	1-5-2021	0,1	mm	-0,9	13,1	6,7	C	73	2,8	MPS
67.	2-5-2021	0,1	mm	-0,9	12,4	6,5	C	69	3,4	MPS
68.	3-5-2021	0,1	mm	1,2	15	10,3	C	55	5	MPS
69.	4-5-2021	8,4	mm	5	12,7	9,5	C	73	7,3	MPS
70.	5-5-2021	2,4	mm	3,8	11,7	7	C	75	4,5	MPS
71.	6-5-2021	1,1	mm	2,2	11,7	6,7	C	78	1,6	MPS
72.	7-5-2021	1,7	mm	0,9	13,1	6,7	C	73	2,9	MPS
73.	8-5-2021	1,2	mm	1,3	18,5	11,8	C	70	4,6	MPS
74.	9-5-2021	0,9	mm	11,9	26,1	19,1	C	65	4,2	MPS
75.	10-5-2021	1,3	mm	12,1	20,7	16,5	C	68	3,6	MPS
76.	11-5-2021	0,6	mm	9,9	18,5	13,9	C	75	1	MPS
77.	12-5-2021	0,7	mm	6,4	17,4	11,7	C	78	0,7	MPS
78.	13-5-2021	2,3	mm	4,2	20	12	C	79	0,4	MPS
79.	14-5-2021	0,7	mm	4,8	17,7	11,2	C	80	0,9	MPS
80.	15-5-2021	5,7	mm	7,1	14,1	10,9	C	87	2,6	MPS
81.	16-5-2021	4,9	mm	9,1	15,9	11,4	C	82	2,7	MPS
82.	17-5-2021	5,4	mm	6,8	15,1	11,2	C	86	3	MPS
83.	18-5-2021	0,8	mm	8	16,2	12,2	C	74	3	MPS
84.	19-5-2021	3,1	mm	6,2	15,3	10,8	C	82	1,9	MPS
85.	20-5-2021	0,1	mm	4,1	16,4	11,9	C	73	3,8	MPS
86.	21-5-2021	4,2	mm	9,4	16,7	12,9	C	64	6,4	MPS
87.	22-5-2021	12	mm	9,4	13,8	10,6	C	87	4,5	MPS
88.	23-5-2021	0,1	mm	9,6	15,9	12,5	C	66	3,9	MPS
89.	24-5-2021	8,5	mm	7,8	16,9	11,5	C	82	4,1	MPS
90.	25-5-2021	2,2	mm	5,8	14,9	10,4	C	82	3,6	MPS
91.	26-5-2021	3,6	mm	8,1	14,3	11,1	C	81	4,2	MPS
92.	27-5-2021	0,1	mm	5	13,6	10,3	C	82	4,6	MPS
93.	28-5-2021	0	mm	1,7	18,9	12	C	73	1,4	MPS
94.	29-5-2021	0	mm	6,9	19,9	14,3	C	72	3,2	MPS
95.	30-5-2021	0	mm	6,7	22,7	15,4	C	64	3	MPS
96.	31-5-2021	0	mm	9,6	24,1	18,1	C	56	2,9	MPS
97.	1-6-2021	0	mm	11,6	25,7	19,8	C	45	3,4	MPS