Landbounavorsingsraad

Graangewasse

Potchefstroom

Agricultural Research Council

Grain Crops

Potchefstroom

Republiek van Suid Afrika

Republic of South Africa

VERSLAG VAN DIE NASIONALE SOJABOON KULTIVARPROEWE/ 2020/21

REPORT OF THE NATIONAL SOYBEAN CULTIVAR TRIALS

Verantwoordelike beampte:

Responsible officer:

AS de Beer

L Bronkhorst

N Cochrane

BEDANKINGS

Dank is verskuldig aan die volgende persone vir hul onderskeie bydraes in die verwesenliking van hierdie verslag:

1 Alle medewerkers en koöperateurs soos gelys op bladsy 11.

2 Mev. H. Vermeulen vir rekenarisering van data en saamstel van die verslag.

3 Me Nicolene Cochrane vir haar hulp met die verwerking en interpertering van die data.

4 Die Navorsings Bestuurder, GG; en sojabooncultivarevaluasiekomitee, onder wie se wakende oog die proewe uitgevoer is.

5 Kollegas (Me L. Bronkhorst, Mnre N. Mogapi, C. Ramatlotlo en S. Seutwladi) en personeel van GG wie op direkte of indirekte wyse bystand verleen het.

6 Die saadmaatskappye (Tabel 1). Olie- en Proteïensade Ontwikkelingstrust (OPOT) en Landbounavorsingsraad (LNR) wie die projek finansieer.

ACKNOWLEDGEMENTS

Credit is due to the following persons for their respective contributions to this report:

1 All the collaborators and co-operators as listed on page 11.

2 Mrs. H. Vermeulen for processing of data and for compiling the report.

3 Me Nicolene Cochrane for the processing and interpretation of the data.

4 The Research Manager (GC), and the soybean cultivar evaluation committee under whose watchful eye the trials were executed.

5 Collegues (Me L. Bronkhorst, Mr's N. Mogapi, C Ramatlotlo and S. Seutwladi) and personnel of GC who rendered assistance in a direct or indirect way.

6 The Seed Companies (Table 1), Oil- and Protein Seeds Development Trust (OPDT) and Agricultural Research Council (ARC) for financing the project.

INHOUD/INDEX

TABEL TABLE		BLADSY PAGE

1 INTRODUCTION

The National Soybean Cultivar Trials (project M101/62 (P05000002) were planted for the 43th successive year this past growing season. A total of 24 trials (of the planned 26 trials) were planted at 24 localities, illustrated in the locality list.

1.1 AIM

The aim of the project was primarily the following:

(I) To compare cultivars for agronomic and economic performance;

(ii) to test the adaptability of cultivars and new releases for specific areas and cultivation practices.

2 MATERIALS AND METHODS

2.1 GENERAL

The trials were planted as randomized block designs as well as a Latinized row-column design using three replications and 30 cultivars. Cultivar characteristics are shown in Table 1.

Each trial plot consisted of four, 5 m rows. Four metres were harvested from each of the middle two rows, in order to avoid border effects. Soil form, fertilization and weed control are indicated together with row spacing in Table 2. All seeds were inoculated with Bradyrhizobium japonicum bacteria at planting.

The localities where trials were planted represent a wide range of climatic conditions. Trials were carried out on the ARC and Departmental Research Stations as well as on privately owned farms. Observations were recorded by responsible officers and collaborators as indicated in the list of collaborators. Planting time and cultivation practice were executed to correspond with that of commercial plantings in the specific areas. Rainfall and irrigation are indicated in Table 3. Note that rainfall is only recorded from October to April and not for the specific growing season of a trial.

2.2 OBSERVATIONS

A brief definition of some of the observations in the trials is as follow:

2.2.1 Date of flowering: The time at which one fully open flower per plant was observed across 50% of the plots.

2.2.2 Physiological maturity: The number of days when 50% of the pods appear yellow or brown.

2.2.3 Date of harvest maturity: When 95% of the pods for a given plot had turned brown. This is an indication of length of growing season, (number of days from date of planting to date of maturity).

2.2.4 Plant height: The average height in centimetre (cm) of plants from the soil surface to the growth point at maturity.

2.2.5 Pod height: The average height in centimetre (cm) of the lowest pods on the plant from soil surface at maturity.

2.2.6 Lodging: Lodging at time of harvest was rated on the following scale:

1 = No lodging
2 = Few lodging, will not hamper mechanical harvesting
3 = Few lodging, lodging less than what will hamper mechanical harvesting
4 = Few lodging, will hamper mechanical harvesting, with yield loss
5 = Fair number of plants lodged, will hamper mechanical harvesting, with yield loss
6 = Many plants lodged, will hamper mechanical harvesting, with yield loss
7 = A large number of plants lodged, will hamper mechanical harvesting, with yield loss

8 = Nearly all plants lodged, will hamper mechanical harvesting, yield loss

9 = All plants lodged, will hamper mechanical harvesting, yield loss

2.2.7 Green stem: The percentage green stems at harvest rated on a 1 (normally mature) to 5 (more than 80% green stems) scale.

2.2.8 Shattering: Measured at time of harvest. Shattering is reported on a scale of 1 (no shattering) to 5 (more than 91-100% pods shattered).

2.2.9 Plant count three (3) weeks after emergence: The number of plants counted on 5 m of the two inner rows. This data will be used to calculate the germination percentage and will be compared with the germination percentage of different soil types.

2.2.10 100 seeds mass: Determined on an air dry basis from a randomly selected sample retained on a 4,75 mm standard grading screen.

2.2.11 Undesirable seed: The mass of undesirable seed was determined in a random 100 g sample with seed size greater than 4,75 mm (excluding mechanical damaged seeds).

2.2.12 Protein and oil percentage: The analysis was done by the SAGL (Southern African Grain Laboratory NPC) by using the “Soxhlet” apparatus (oil percentage) and the “Dumas” method (protein percentage).

2.2.13 Grain yield: Four metres of the two centre rows were harvested by hand at soil level and threshed. The grain moisture was determined and yield calculated on a basis of 12,5% moisture content.

2.3 THE EVALUATION OF TRIALS

The yield data of the individual trials were subjected to analysis of variance (ANOVA)

with a randomized complete block design (RCBD) as well as a Latinized row-column design.

The localities with coefficient of variance higher than 25% were rejected from the analysis.

The trial means (x-axis) versus the cultivar means (y-axis) is plotted. A regression line is then fitted with the trial means as x variable and cultivar means as predictor variable. Out of the regression estimates, the yield probability percentage above the mean for each cultivar at different yield potentials is then calculated and presented in a table as a guideline for the use of different cultivars under different circumstances.

A yield probability of more than 50% indicated above average yield and a yield probability of less than 50% indicated a below average yield.

3 DISCUSSION OF RESULTS

3.1 GENERAL

The rainfall and irrigation data are shown in Table 3.

One (1) of the 24 trials planted could not be included (4.2%) in the report compared to the three (3) out of 18 trials (16.7%) in the 2019/20 season.

The following trial could not be included in the report for the following reasons:

1. Hoopstad – high CV%.

As in the previous seasons the evaluation of the trials was based on a number of parameters. No conclusion can be made on a single parameter.

3.2 DISCUSSION OF TABLES

3.2.1 Days to flowering (Table 4), physiologically mature (Table 5) and length of the growing season (Table 6)

The number of days from planting to flowering (Table 4) is an effective measure for the grouping of cultivars because the relative order of rank for this characteristic is repeated to a great extent over localities and years. As expected the average days to flowering was the shortest in the warm areas (42 days Marble Hall) and the longest in the cooler areas (78 days at Clarens).

The number of days to physiological maturity is shown in Table 5. The longest average days to maturity was experienced at Clarens (145 days).

The number of days to harvest maturity (Table 6) was used to determine the length of the growing season of a cultivar. The number of days to harvest maturity is however, more dependent on climatic changes and planting date for soybeans and, the number of days to flowering is therefore a more reliable maturity grouping criterion.

3.2.2 Plant height (Table 7)

The indeterminate cultivar P71T74 R (MG 7.1) had a mean plant height of 111 cm (highest) in the warm area compared to 60 cm (lowest) of the determinate cultivar LS 6851 R (MG 5.5) in the moderate region.

The average plant height between localities varied from a mean of 63 cm at Barberspan to 101 cm at Schweizer-Reneke PD1.

3.2.3 Pod height (Table 8)

The variation in pod and plant height between cultivars is linked with the length of the growing season of a cultivar. The cultivars P64T39 R (MG 6.4; indeterminate) and P71T74 R (MG 7.1; indeterminate), had a mean pod height of 22 cm in the warm area, but also had an above average pod height in the cool and moderate areas.
Other cultivars with above average pod heights for all the climate areas are SSS 5052 (tuc) (MG 5.5; indeterminate), NS 5909 R (MG 5.9; indeterminate), LS 6860 R (MG 6.0; indeterminate), PAN 1521 R (MG 5.7; indeterminate), LS 6164 R (MG 6.1; indeterminate), PAN 1555 R (MG 5.7, indeterminate), DM 6.8i RR (MG 6.8; indeterminate), SSS 6560 (tuc) (MG 6.2; indeterminate), P61T38 R (MG 6.1;

determinate), NS 6448 R (MG 6.4; semi-determinate), PAN 1644 R (MG 6.7; indeterminate) and DM 68R09 (MG 6.6; indeterminate).

DM 52R19 (MG 4.7) (indeterminate) had the lowest reading of 4 cm. Considerable harvest losses can occur due to low pod height; thus pod height is an important factor influencing cultivar choice. Differences in pod height between localities can mainly be attributed to differences in row width and climate. A pod height of at least 7.5 cm (combine harvesting height) is preferable.

3.2.4 Lodging (Table 9)

The highest overall lodging occurred in the trial at Bapsfontein. The highest lodging figures was reported for P61T38 R and P71T74 R at Belfast in the cool area.

3.2.5 Green stem (Table 10)

A high percentage of green stem, was recorded at Kroonstad as well as Schweizer-Reneke PD1 and PD2 while the cultivars DM 5351 RSF, LS 6851 R, DM 59R03, DM 60T05, SSS 6560 (tuc), LS 6164 R, DM 68R09, DM 6.8i RR, P71T74 R and NS 5909 R showed an above average tendency for green stem for all the climatic regions. Plants also retained their leaves that could hamper the harvesting process.

3.2.6 Shattering with harvesting (Table 11)

The highest shattering occurred at Bapsfontein in the cool area and Groblersdal in the warm area.

3.2.7 Number of plants three (3) weeks after emergence (Table 12)

Enough certified seed was provided to establish 400 000 plants ha^{-1} for the irrigation and high rainfall areas and 350 000 for dryland. The lowest plants ha^{-1} count were recorded at Leeudoringstad due to physical damage caused during the spraying of the commercial crop adjacent to the trial.

3.2.8 Percentage undesirable seed (Table 13)

The lowest mean of 0.25% undesirable seeds was recorded for the warm region. The range varied from 1.82% at Belfast to 0.01% at Bergville.

3.2.9 Mass (g) 100^{-1} seeds (Table 14)

The variation in seed mass among localities ranged between 13.54 g 100^{-1} seeds at Villiers to 19.31 g 100^{-1} seeds at Schweizer-Reneke PD2. The highest seed mass was recorded for PAN 1479 R in the moderate region, while SSS 5052 (tuc), had the smallest seed in the cool area.

1.2.10 Oil percentage (Table 15)

The cultivar DM 52R19 had, the highest average oil percentage for all the regions (20.16% cool, 21.60% moderate, 22.68% warm). The average oil percentage are 21.12% for the warm, 20.49% for the moderate and 18.94% for the cool area.

1.2.11 Crude Protein percentage (Table 16)

The cultivars LG60155 R, DM 5302 RSF, PAN 1555 R, RA 568 R, DM 60T05 and PAN 1644 R had an above 40% average for all climate regions. The overall average are 39.70% for the warm, 39.61% for the moderate and 40.16% for the cool area.

3.2.12 Profat (Table 17)

The inclusion of this table in the report was requested by Dr Erhard Bredenham as the total value of oil and protein is a much better indicator for the selection of a cultivar than the single oil or protein factor. The cultivars DM 5953 RSF and NS 5258 R, had the highest average profat value for all the regions.

3.2.10 Yield (Table 18)

Due to the sensitivity of soybean cultivars to environmental conditions, it is preferable to divide the soybean production areas into cool, moderate and warm regions. A better

yield can be established by choosing a cultivar suitably adapted for a specific region. It is also necessary to use data from more than one year to select between cultivars. Due to the significant cultivar and locality interaction, conclusions on cultivar performance should not be made from average yield data alone. The mean yield over localities has therefore been omitted.

4 INTERPRETATION OF YIELD RESULTS

4.1 INTRODUCTION

A stated aim of the national soybean cultivar trials is the evaluation of cultivars for their adaptability to a potential production area, and for their yield performance. Adaptability is especially important because of the fact that soybean cultivars are known to be restricted in terms of recommended production area. This fact is also demonstrated by the results discussed in this report.

Because of genotypic restriction in adaptability the statistical analysis of data over all trial entries and localities tend to demonstrate strong interaction components which confound interpretation. Interaction makes genotype rankings at one site inapplicable to another site. The larger the interaction the more information is lost if interaction is not analysed effectively. This will be a lesser problem for homogeneous areas than for non-homogeneous areas. However, a purpose of the national trials is to identify homogeneous areas or homogeneous growing conditions based on cultivar performance. Localities were therefore grouped together based on past research experience and with the assistance of photo thermal charts provided by the Institute for Soil, Climate and Water. Localities were grouped in cool, moderate and warm production areas.

4.2 YIELD PROBABILITY AND YIELD (Tables 19, 20, 21, 22, 23 & 24)

A minimum number of successful trials per climatic area are needed to calculate saved yield probability values. Yield probability tables are set up for cool-, moderate and warm regions, if enough data is available.

Yield probability of a cultivar is the chance to get an above average yield at a particular yield potential. For instance, if the yield probability of a cultivar, at a particular yield potential equals 60%, the chance to get a yield above the mean of all cultivars is 60% with a 40% chance of obtaining a yield below the mean. Thus a 60% probability indicated a 10% change of an above average yield, while a 40% probability indicated a 10% change of getting a below average yield.

DM 5351 RSF, DM 5953 RSF and PAN 1521 R showed an above average yield probability (Table 19) for all the yield potentials in the cool area. For the moderate area P64T39 R and DM 6.8i RR showed above average figures over the whole production potential range (Table 21). SSS 5052 (tuc), PAN 1521 R, DM 6.8i RR and P71T74 R also performed above average for the warm areas (Table 23).

Lokaliteite, medewerkers en proeflokaliteit van kultivarproewe soos beplan vir, 2020/21
Localities, co-operators and trial locality of the cultivar trials, 2019/20

Nr No	Lokaliteit Locality	Proeflokaliteit Trial locality	Verantwoordelike beampte Responsible officer
1	Barberspan	J Basson	G de Beer & L Bronkhorst
2	Bapsfontein	Corteva Agriscience Research Centre	A Mathebula
3	Belfast	G Roos	L Bronkhorst
4	Bergville	J Jackson	R Wessels
5-6	Bethlehem	Kleingraan Instituut ARC	L Bronkhorst
7	Brits K2	K2 Navorsingstasie	F Middleton
8	Cedara	Departmaent of Agriculture	J Arathoon
9	Clarens	D Terblanche	R Wessels
10	Delmas-Pannar	Pannar Saad Navorsingsplaas	A Mathebula
11	Greytown	Pannar Proefplaas	A Jarvie
12	Groblersdal (Agricol)	R Louw	R van Niekerk & C Schoeman
13	Groblersdal (Agri Seed)	-	D van Staden
14	Hoopstad	R Taljaard	G de Beer & L Bronkhorst
15	Kinross	Vosstoffel Boerdery	L Bronkhorst
16	Kroonstad	Hoërskool Kroonstad	L Bronkhorst
17	Leeudoringstad	D Bergh	G de Beer & L Bronkhorst
18	Lichtenburg Wes	-	G de Beer & L Bronkhorst
19	Marble Hall	P Louw	D Leeuwner
20	Potchefstroom	Limagrain Research Station	F Middleton
21-22	Schweizer Reneke	J du Plessis	G de Beer & L Bronkhorst
23	Standerton	T Schoonraad	C Schoeman
24	Stoffberg	P Prinsloo	R van Niekerk & C Schoeman
25	Villiers	-	D van Staden
26	Winterton	Terry Muirhead	F Middleton

Tabel 1 Sojaboonsaad eienskappe en inligting oor verskaffers, 2020/21
Table 1 Soybean seed characteristics and information about agents, 2020/21

Kultivar Cultivar	Volwassenheids-groeperings Maturity Group	Groeiwyse Growth habit *1	Hilum kleur Hilum colour *2	Blomkleur Flower colour *3	Haarkleur Pubescence *4	Op varieteits lys On variety list	Verskaffer Agent	Telersregte Breeding rights
PAN 1479	4.7	I	BL	P	T	JA/YES	Pannar	JA/YES
DM 52R19	4.7	I	DB	P	LB	NEE/NO	Agicol	-
DM 5953 RSF	4.8	I	IB	P	T	JA/YES	GDM Seeds	JA/YES
RA 4918 R	4.9	I	BL	P	T	JA/YES	Agri Seed	JA/YES
DM 5351 RSF	5.1	I	IB	W	T	JA/YES	GDM Seeds	JA/YES
NS 5258 R	5.2	I	BL	W	B	JA/.YES	Limagrain (K2)	NEE/NO
SSS 5449 (tuc)	5.2	I	B	P	G	JA/YES	Syngenta (Sensako)	JA/YES
PAN 1532 R	5.3	I	LB	P	G	JA/YES	Pannar	JA/YES
RA 565 R	5.5	I	B	P	G	JA/YES	Agri Seed	JA/YES
LS 6851 R	5.5	D	B	P	W	JA/YES	Limagrain	JA/YES
LG60155R	5.5	I	KL	W	G	NEE/NO	Limagrain	-
SSS 5052 (tuc)	5.5	I	B	W	G	JA/YES	Sensako	JA/YES
DM 5302 RSF	5.7	I	LB	P	G	JA/YES	GDM Seeds	JA/YES
PAN 1555 R	5.7	I	B	P	T	JA/YES	Pannar	JA/YES
PAN 1521 R	5.7	I	IB	P	G	JA/YES	Pannar	JA/YES
RA 568 R	5.8	I	B	P	G	JA/YES	Agri Seed	JA/YES
NS 5909 R	5.9	I	IB	P	G	JA/YES	Limagrain (K2)	NEE/NO
RA 660 R	6.0	I	B	P	G	JA/YES	Agri Seed	JA/YES
DM 59R03	6.0	I	LB	W	G	NEE/NO	GDM Seeds	-
DM 60R05	6.0	I	LB	W	G	NEE/NO	GDM Seeds	-
SSS 6560 (tuc)	6.2	I	B	W	G	JA/YES	Sensako	JA/YES
LS 6164 R	6.1	I	LB	W	G	JA/YES	Limagrain	JA/YES
P61T38 R	6.1	D	LB	W	G	JA/YES	Pioneer	JA/YES
LS 6860 R	6.2	I	B	P	W	JA/YES	Limagrain	JA/YES
NS 6448 R	6.4	SD	LB	P	G	JA/YES	Limagrain (K2)	NEE/NO
P64T39 R	6.4	I	KL	W	G	JA/YES	Pioneer	JA/YES
DM 68R09	6.6	I	B	W	G	NEE/NO	GDM Seeds	-
PAN 1644 R	6.7	I	IB	P	G	JA/YES	Pannar	NEE/NO
DM 6.8i RR	6.8	I	B	P	G	JA/YES	GDM Seeds	JA/YES
P71T74 R	7.1	I	KL	W	G	JA/YES	Pioneer	JA/YES

*1 D - Bepaald/determinate; I - Onbepaald/indeterminate; SD - Semi-Bepaald/semi deteminate
*2 BL - Swart/black; IB - Onvollodig swart/imperfect black; B - Bruin/brown; LB - Ligbruin/buff; G - Grys/grey; KL - Kleurloos/buff
*3 P - Pers/purple; W - Wit/white
*4 B - Bruin/brown; G - Grys/grey; W - Wit/white; T – Taankleurig/Tawny

Tabel 2 Algemene inligting aangaande grond en verbouiingpraktyke by die onderskeie proeflokaliteite van die kultivarproewe, 2020/21
Table 2 General information in connection with soil and cultivation practices at the different trial localities, 2020/21

Lokaliteit Locality	Plantdatum Date of planting	Spasiëring Spacing (cm)	Onkruid beheer Weed control
Barberspan/D	26/11/2020	90	Strongarm, Alachlor, Round-up
Bapsfontein/B/I	26/11/2020	90	Metagan Gold, Karate, Touchdown, Functional
Belfast/D	02/11/2020	75	Farmer sprayed
Bergville/B/I	02/12/2020	75	-
Bethlehem PD1/D	03/11/2020	75	Strongarm, Alachlor
Bethlehem PD2/D	03/12/2020	75	Strongarm, Alachlor
Brits Limagrain/B/I	25/11/2020	45	-
Cedara/D	17/11/2020	45	Metalachlor 915 S, Bateleur Gold,Round-up Power Max
Clarens/D	20/11/2020	90	Strongarm, Alanex
Delmas/D	Nie geplant/Not planted	75	-
Frankfort/D (Villiers)	27/11/2020	76	-
Greytown/D	10/12/2020	75	Glyphosate
Groblersdal Agricol/B/I	28/11/2020	90	Round-up Power max
Groblersdal Agri Seed/B/I	30/11/2021	90	-
Hoopstad/D	24/11/2020	75	Round-up
Kinross/D	16/11/2020	75	Strongarm, Alanex
Kroonstad/D	17/12/2020	75	Strongarm, Alanex
Leeudoringstad/D	18/11/2020	75	Strongarm, Alanex
Lichtenburg Wes/D	Nie geplant/Not planted	75	-
Marble Hall/B/I	30/11/2020	75	Farmer sprayed
Potchefstroom Limagrain/D	10/12/2020	75	-
Schweizer Reneke/ PD1/D	11/11/2020	110	Round-up
Schweizer Reneke/ PD2/D	07/12/2020	110	Round-up
Standerton/D	19/11/2020	90	Round-up Power max
Stoffberg/D	27/11/2020	90	Round-up Power max
Winterton/D	04/12/2020	75	Round-up

Tabel 3 Reënval en besproeiing vir die verskillende lokaliteite (mm), 2020/21
Table 3 Rainfall and irrigation at the different localities (mm), 2020/21

Lokaliteit	Maandelikse reënval (mm)/							Totaal	Besproeiing	Totaal
Locality	Monthly rainfall (mm)							Total	Irrigation	Total
	Okt	Nov	Des	Jan	Feb	Mrt	Apr	*		**
Cedara	62,48	188,21	111,25	123,19	84,83	38,86	63,25	672,07	0	672,07
Groblersdal (Agricoll)	-	0	53	82	56	48	-	239	410	649
Greytown	-	93,97	117,86	116,6	58,72	43,3	57,93	488,38	0	488,38
Hoopstad	0	71	162	136	109	64	18	560	0	560
Schweizer Reneke	12,7	69,6	117,1	176,3	139,2	61,2	25,7	601,8	0	601,8
Standerton	-	45	99	101	86	48	21	400	0	400
Stoffberg	-	16	91	128	89	58	23	405	0	405

* Vir reënval/For rainfall
* Vir reënval en besproeiing/For rainfall and irrigation

Tabel 4 Die aantal dae vanaf plant tot 50% blomstadium van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 4 The number of days from planting to 50% flowering stage of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool								Matig/Moderate								Warm					
	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	59	53	59	72	53	50	46	56	35	35	44	42	38	32	43	38	35	36	35	35	34	35
DM 52R19	59	53	59	72	53	52	43	56	34	35	45	42	38	44	44	40	38	38	35	36	34	36
DM 5953 RSF	59	57	59	72	53	56	46	57	36	35	51	42	41	35	46	41	40	37	35	36	34	36
RA 4918 R	59	67	59	72	53	55	46	59	36	41	49	56	45	47	45	46	43	37	35	36	35	37
DM 5351 RSF	59	57	59	72	53	56	45	57	37	38	44	42	40	32	45	40	41	37	35	37	36	37
NS 5258 R	59	53	59	72	70	51	43	58	37	31	49	42	40	44	49	42	45	41	35	35	36	38
SSS 5449 (tuc)	66	67	64	72	70	61	49	64	39	45	63	48	55	51	53	51	35	42	35	54	47	43
PAN 1532 R	74	70	66	82	60	63	50	66	42	50	65	48	54	53	50	52	45	42	39	55	50	46
RA 565 R	82	70	69	48	70	64	51	65	43	52	64	48	55	52	55	53	46	42	39	55	49	46
LS 6851 R	66	57	66	74	70	64	49	64	43	52	64	48	55	49	57	53	41	43	49	51	46	46
LG60155R	74	64	69	82	53	67	52	66	48	59	68	55	47	51	58	55	41	45	39	55	52	46
SSS 5052 (tuc)	66	64	69	82	65	66	50	66	45	56	66	55	60	52	60	56	37	45	39	59	50	46
DM 5302 RSF	66	57	64	72	70	63	50	63	50	52	62	48	59	50	56	54	40	45	35	52	47	44
PAN 1555 R	74	64	69	82	70	66	52	68	49	59	70	62	62	57	58	60	55	46	43	57	53	51
PAN 1521 R	74	64	69	82	70	67	52	68	49	52	64	55	59	52	60	56	43	46	39	57	51	47
RA 568 R	74	57	66	82	70	64	48	66	53	56	64	55	60	52	61	57	37	46	39	58	48	46
NS 5909 R	74	70	66	82	70	68	54	69	49	59	65	60	62	53	61	58	51	47	43	61	53	51
RA 660 R	79	64	69	82	70	69	52	69	52	59	66	55	62	52	63	58	48	47	49	58	51	51
DM 59R03	82	74	66	82	70	70	51	71	50	52	65	55	62	51	62	57	40	46	49	60	49	49
DM 60T05	74	64	75	82	70	69	53	70	50	56	64	62	62	55	63	59	45	53	39	60	52	50
SSS 6560 (tuc)	71	70	66	82	70	70	52	69	50	52	66	48	61	53	63	56	48	48	43	58	50	49
LS 6164 R	82	64	67	82	70	70	52	70	48	56	66	55	62	51	62	57	50	49	43	59	47	50
P61T38 R	74	74	66	82	70	71	55	70	47	59	69	55	57	54	62	58	56	49	43	59	51	52
LS 6860 R	89	70	69	82	70	71	56	72	49	59	71	62	64	55	64	61	55	49	43	61	53	52
NS 6448 R	74	64	69	82	70	72	55	69	43	56	70	64	63	57	62	59	51	51	49	61	54	53
P64T39 R	82	70	75	84	70	72	52	72	45	49	68	60	62	52	63	57	48	50	39	61	54	50
DM 68R09	82	70	41	82	70	72	57	68	56	59	70	60	65	60	64	62	58	51	49	62	55	55
PAN 1644 R	82	70	66	82	53	73	54	69	48	59	69	55	65	56	66	60	58	52	53	60	56	56
DM 6.8i RR	82	70	69	82	70	76	54	72	55	59	69	71	65	64	67	64	53	52	49	60	56	54
P71T74 R	82	74	69	82	70	77	56	73	57	56	68	60	66	57	69	62	59	54	53	62	58	57
Gem/Mean	73	65	65	78	66	66	51	66	46	51	63	54	56	51	58	54	46	46	42	54	48	47

Tabel 5 Die aantal dae vanaf plant tot fisiologiesrypstadium van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 5 The number of days from planting to physiological maturity of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool								Matig/Moderate								Warm					
	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	128	122	117	130	120	116	103	119	98	111	118	104	121	105	99	108	101	96	95	111	109	102
DM 52R19	128	122	117	130	120	116	110	120	105	111	123	104	121	108	100	110	100	98	95	110	110	103
DM 5953 RSF	128	122	117	130	124	117	108	121	120	104	122	104	121	111	100	112	105	96	95	110	109	103
RA 4918 R	128	122	117	130	124	118	106	121	106	100	123	104	120	109	103	109	99	96	95	121	109	104
DM 5351 RSF	133	122	117	130	124	119	111	122	124	107	121	104	121	112	101	113	103	96	95	114	115	105
NS 5258 R	128	117	117	130	120	118	107	120	112	104	121	104	121	105	102	110	99	99	95	114	113	104
SSS 5449 (tuc)	133	133	132	144	124	120	108	128	113	104	123	104	126	110	104	112	99	97	95	121	117	106
PAN 1532 R	138	138	132	144	130	121	117	131	122	100	133	117	130	116	108	118	102	100	100	129	119	110
RA 565 R	148	138	132	144	136	121	113	133	131	104	131	117	130	115	106	119	99	101	95	132	117	109
LS 6851 R	133	138	134	144	136	122	118	132	133	115	137	117	127	115	119	123	99	102	95	134	124	111
LG60155R	138	138	132	151	126	123	115	132	121	107	129	117	127	125	113	120	99	100	95	130	121	109
SSS 5052 (tuc)	136	138	134	144	130	123	115	131	121	100	132	117	132	115	116	119	102	101	95	134	124	111
DM 5302 RSF	135	138	126	144	129	124	106	129	121	100	127	112	126	113	117	117	100	98	95	122	117	106
PAN 1555 R	138	138	132	144	143	126	117	134	122	100	133	117	129	119	118	120	103	102	100	134	124	112
PAN 1521 R	135	138	117	144	120	125	114	128	122	111	129	112	128	113	119	119	100	101	95	134	120	110
RA 568 R	136	138	132	144	124	126	111	130	127	104	130	117	129	112	118	120	99	100	95	131	116	108
NS 5909 R	136	138	132	151	136	127	120	134	120	113	135	117	133	117	119	122	105	102	95	134	125	112
RA 660 R	148	138	132	144	124	128	117	133	121	107	134	117	133	118	117	121	100	100	95	136	121	110
DM 59R03	148	138	132	144	136	128	116	135	121	107	132	117	136	117	118	121	102	101	95	137	122	111
DM 60T05	153	138	132	144	136	129	119	136	121	107	132	112	132	117	116	120	103	101	95	137	126	112
SSS 6560 (tuc)	148	138	132	151	120	128	121	134	124	113	134	117	132	123	119	123	105	103	102	137	120	113
LS 6164 R	159	138	132	144	143	130	122	138	121	118	136	117	133	131	120	125	103	103	97	139	124	113
P61T38 R	153	145	132	144	136	129	123	137	121	113	140	117	131	128	121	124	110	104	100	138	125	115
LS 6860 R	148	154	132	161	143	131	121	141	121	115	139	124	141	124	120	126	106	102	97	138	128	114
NS 6448 R	148	145	134	151	143	133	124	140	124	107	141	120	138	128	121	126	102	104	95	138	126	113
P64T39 R	153	154	134	161	143	134	120	143	127	107	136	124	136	125	121	125	105	104	100	137	126	114
DM 68R09	153	138	132	161	143	135	125	141	124	113	137	117	138	132	124	126	113	105	107	138	122	117
PAN 1644 R	153	145	132	144	124	137	121	137	123	111	134	117	139	119	123	124	111	106	100	137	126	116
DM 6.8i RR	153	154	132	151	143	138	125	142	127	115	141	124	144	134	126	130	112	106	97	137	130	116
P71T74 R	153	145	134	161	143	140	125	143	133	104	138	124	144	133	128	129	112	108	100	142	132	119
Gem/Mean	142	137	129	145	131	126	116	132	121	108	131	115	131	118	115	120	103	101	97	130	121	110

Tabel 6 Die aantal dae vanaf plant tot oesstadium van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 6 The number of days from planting to maturity of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool										Matig/Moderate								Warm						
	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Villiers	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	137	156	158	132	144	147	139	136	137	143	124	133	146	117	142	151	117	133	132	116	119	104	126	122	120
DM 52R19	123	156	138	132	144	143	139	136	137	139	124	133	146	117	142	151	117	133	132	116	119	113	126	122	121
DM 5953 RSF	138	136	138	132	144	143	139	136	137	138	133	133	146	117	142	151	117	134	132	116	119	113	126	122	121
RA 4918 R	148	156	138	132	144	143	139	136	137	141	124	133	146	117	142	151	117	133	132	116	119	113	139	122	124
DM 5351 RSF	135	156	143	132	144	143	139	136	137	141	140	133	146	117	142	151	117	135	135	116	119	113	148	128	127
NS 5258 R	134	156	138	132	144	143	139	136	137	140	124	133	146	117	142	151	124	134	132	116	119	113	139	128	125
SSS 5449 (tuc)	133	156	153	142	161	143	139	136	137	144	124	133	146	117	142	151	124	134	132	116	119	113	148	128	126
PAN 1532 R	130	160	153	147	161	152	139	136	137	146	133	133	156	132	148	151	124	140	132	116	119	114	148	142	128
RA 565 R	129	156	153	147	161	147	139	136	137	145	140	133	148	132	148	151	124	139	132	116	119	113	148	128	126
LS 6851 R	123	169	153	147	163	156	139	136	137	147	140	133	156	132	142	151	124	140	132	116	119	113	148	142	128
LG60155R	152	156	153	147	161	152	139	136	137	148	133	133	148	132	142	151	124	138	132	116	119	113	139	142	127
SSS 5052 (tuc)	152	164	153	147	169	156	139	136	137	150	133	133	162	137	142	151	124	140	132	124	119	113	151	142	130
DM 5302 RSF	137	156	153	147	161	143	139	136	137	145	133	133	148	117	142	151	124	135	132	124	119	113	139	133	127
PAN 1555 R	135	156	153	147	161	156	139	136	137	147	133	133	156	137	148	151	124	140	135	124	119	113	148	139	130
PAN 1521 R	139	156	153	137	161	156	147	136	137	147	133	133	148	134	142	151	131	139	132	124	119	113	148	142	130
RA 568 R	120	156	153	147	161	143	147	136	137	144	140	133	148	132	148	151	131	140	132	124	119	113	139	142	128
NS 5909 R	122	164	153	144	169	156	147	136	137	148	133	133	170	139	148	151	131	144	132	124	119	113	154	142	131
RA 660 R	147	156	153	147	161	143	147	136	137	147	133	133	156	132	148	151	124	140	132	124	119	113	148	142	130
DM 59R03	122	156	158	152	171	156	147	136	137	148	133	133	156	139	148	151	131	142	132	124	119	113	154	142	131
DM 60T05	122	165	153	152	169	156	147	136	137	149	133	133	162	139	148	151	131	142	132	124	119	113	154	142	131
SSS 6560 (tuc)	148	168	153	154	180	156	147	136	137	153	140	133	170	137	148	151	131	144	132	124	119	114	154	142	131
LS 6164 R	122	168	153	154	176	156	147	144	137	151	133	143	170	137	148	151	131	145	132	124	119	113	154	142	131
P61T38 R	136	168	153	147	167	156	147	136	137	150	133	143	170	137	148	151	131	145	132	124	119	113	154	142	131
LS 6860 R	154	168	168	158	180	156	147	144	137	157	133	143	162	139	148	151	131	144	132	130	119	113	154	142	132
NS 6448 R	120	168	158	154	171	156	152	136	137	150	133	133	162	139	148	151	131	142	132	130	119	113	154	142	132
P64T39 R	121	169	168	167	180	156	152	136	137	154	140	133	162	143	148	151	131	144	132	130	119	113	154	142	132
DM 68R09	133	164	158	154	176	156	152	136	137	152	140	143	160	148	155	141	131	145	132	130	119	114	154	142	132
PAN 1644 R	138	160	153	154	165	156	152	139	137	150	133	143	156	143	148	151	136	144	132	130	119	113	154	142	132
DM 6.8i RR	122	168	168	167	176	156	152	144	137	154	140	143	170	152	155	151	136	150	132	130	119	113	154	142	132
P71T74 R	147	169	168	167	180	156	152	144	137	158	140	143	170	152	155	151	136	150	132	130	119	114	154	142	132
Gem/Mean	134	160	153	147	164	151	144	137	137	148	134	135	156	133	146	151	127	140	132	122	119	113	147	137	128

Tabel 7 Die planthoogte van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21

Table 7 The plant height of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate									Warm					
	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	114	83	77	47	60	57	75	77	74	50	58	89	89	58	60	80	57	68	72	85	57	90	90	79
DM 52R19	80	60	64	57	43	55	60	74	62	60	48	75	68	48	65	82	65	64	70	85	58	80	77	74
DM 5953 RSF	120	77	82	65	67	70	100	90	84	60	56	83	79	55	60	86	65	68	77	80	64	95	86	80
RA 4918 R	74	80	78	52	48	68	70	75	68	80	58	80	74	62	55	81	65	69	82	85	66	85	80	79
DM 5351 RSF	86	90	81	52	52	63	85	90	75	65	57	94	91	68	55	90	70	74	90	85	65	95	87	84
NS 5258 R	100	73	67	45	38	43	75	65	64	60	58	83	81	50	67	80	67	68	73	80	56	105	92	81
SSS 5449 (tuc)	99	100	88	75	58	87	85	82	84	50	55	87	83	73	50	89	70	70	73	85	60	95	90	81
PAN 1532 R	91	90	87	60	65	77	100	81	81	55	66	84	77	65	77	83	72	72	70	85	72	85	75	77
RA 565 R	85	93	88	58	73	72	95	86	81	59	58	92	78	62	60	87	75	71	75	80	70	100	92	83
LS 6851 R	96	83	75	52	58	72	90	74	75	54	47	72	59	55	55	73	69	60	60	65	48	85	76	67
LG60155R	92	93	85	70	52	77	90	70	79	55	54	84	70	53	55	78	64	64	65	70	55	95	72	71
SSS 5052 (tuc)	107	103	100	72	77	80	95	88	90	70	84	103	92	77	70	98	88	85	83	100	67	110	90	90
DM 5302 RSF	89	87	87	50	67	57	90	73	75	60	51	80	72	58	65	81	71	67	75	90	54	95	85	80
PAN 1555 R	90	100	97	70	77	93	105	94	91	60	88	103	92	85	75	88	86	85	100	95	84	110	90	96
PAN 1521 R	101	95	100	95	85	92	105	99	97	65	99	97	86	82	87	97	92	88	87	90	71	112	90	90
RA 568 R	82	78	77	57	55	67	80	63	70	60	49	73	68	63	75	67	73	66	63	75	52	90	77	71
NS 5909 R	102	107	93	70	78	88	95	91	91	55	88	109	94	78	75	93	88	85	87	85	65	105	95	87
RA 660 R	106	82	75	53	62	68	80	84	76	60	61	80	77	62	70	76	75	70	72	70	58	90	85	75
DM 59R03	76	95	113	98	82	103	117	101	98	65	78	99	90	78	75	103	68	82	83	100	72	110	110	95
DM 60T05	111	93	95	60	68	70	90	91	85	55	56	96	90	63	70	76	73	72	77	75	69	90	95	81
SSS 6560 (tuc)	97	103	107	85	88	93	100	100	97	70	106	108	100	87	80	92	80	90	82	100	83	120	107	98
LS 6164 R	95	105	112	87	92	97	120	107	102	65	95	121	99	95	90	109	97	96	93	120	70	117	118	104
P61T38 R	97	85	77	57	62	73	85	74	76	58	44	83	86	57	50	84	57	65	67	80	64	75	80	73
LS 6860 R	118	122	115	92	92	95	90	97	103	60	119	106	98	88	107	110	94	98	98	110	80	117	96	100
NS 6448 R	109	102	87	57	63	78	100	89	86	63	82	96	86	68	80	87	84	81	75	90	73	100	96	87
P64T39 R	102	105	118	95	92	95	100	95	100	70	76	106	93	92	95	105	93	91	98	100	76	117	100	98
DM 68R09	103	98	102	72	77	82	85	98	90	60	89	100	85	67	90	97	72	83	97	95	84	107	106	98
PAN 1644 R	80	98	108	83	77	85	105	97	92	70	85	95	91	73	80	92	84	84	95	115	79	105	107	100
DM 6.8i RR	96	117	120	80	92	90	110	123	103	80	133	128	112	85	100	110	98	106	100	115	93	120	120	110
P71T74 R	119	122	112	85	87	102	110	106	105	90	89	120	109	95	118	91	100	102	107	117	91	117	125	111
Gem/Mean	97	94	92	68	70	78	93	88	85	63	73	94	86	70	74	89	77	78	82	90	68	101	93	87

Tabel 8 Die peulhoogte van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 8 The pod height of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate									Warm					
	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	16	9	7	5	7	5	5	8	8	4	4	11	9	5	6	10	2	6	5	4	7	10	19	9
DM 52R19	11	1	4	5	3	1	3	5	4	9	5	9	8	2	6	12	5	7	6	7	3	9	11	7
DM 5953 RSF	17	4	6	7	7	6	15	6	9	7	10	11	11	6	9	16	8	10	5	7	5	11	15	9
RA 4918 R	11	10	7	7	5	3	3	5	6	9	6	10	10	7	5	11	6	8	8	7	3	14	14	9
DM 5351 RSF	17	8	6	7	7	6	6	7	8	7	4	11	11	7	5	12	10	8	6	8	6	20	13	11
NS 5258 R	14	7	3	3	3	3	3	4	5	4	4	9	11	3	9	8	3	6	5	6	3	22	16	10
SSS 5449 (tuc)	16	9	10	8	8	9	12	10	10	4	9	16	18	7	5	21	6	11	8	5	3	19	20	11
PAN 1532 R	9	10	9	7	7	9	19	8	10	5	15	20	14	7	15	14	8	12	7	6	11	22	24	14
RA 565 R	10	11	10	6	8	9	18	9	10	14	7	19	17	7	9	17	8	12	6	4	7	20	20	11
LS 6851 R	12	9	8	8	6	7	9	10	9	6	7	18	12	7	5	9	9	9	10	2	7	19	15	11
LG60155R	9	10	8	7	5	6	17	5	8	4	8	16	13	2	5	15	5	9	4	3	6	17	15	9
SSS 5052 (tuc)	12	13	13	9	8	10	18	10	12	14	16	24	23	10	8	21	21	17	10	14	7	28	19	16
DM 5302 RSF	13	9	8	5	7	6	12	7	8	9	8	17	13	6	6	18	14	11	7	11	3	17	19	11
PAN 1555 R	16	15	13	8	11	13	15	11	13	9	20	28	23	14	11	25	13	18	14	13	12	30	24	19
PAN 1521 R	12	11	13	12	13	12	26	8	13	7	18	22	16	8	15	21	15	15	9	11	9	25	19	15
RA 568 R	10	9	7	6	7	7	7	6	7	9	8	19	13	7	12	19	13	13	7	4	7	15	22	11
NS 5909 R	8	16	14	10	9	13	7	9	11	9	21	27	22	12	15	26	19	19	9	12	10	28	25	17
RA 660 R	13	13	8	7	7	7	12	9	10	7	12	19	16	7	11	19	14	13	6	3	9	20	19	11
DM 59R03	9	12	12	13	11	10	23	11	13	9	14	23	13	8	13	21	4	13	7	11	5	24	27	15
DM 60T05	25	12	12	9	6	10	8	10	12	9	11	24	16	9	10	16	18	14	8	8	9	17	25	13
SSS 6560 (tuc)	14	15	12	11	9	10	23	7	13	9	17	26	21	12	13	21	9	16	9	20	10	30	28	19
LS 6164 R	17	13	13	11	11	11	26	12	14	6	13	27	23	12	20	28	21	19	12	21	10	30	30	21
P61T38 R	11	14	13	9	10	13	23	7	12	10	14	24	20	12	8	21	10	15	7	9	14	19	23	15
LS 6860 R	15	16	14	14	10	11	18	12	14	6	24	24	20	13	27	21	15	19	11	22	10	27	28	20
NS 6448 R	12	14	10	8	7	8	21	10	11	7	19	23	19	10	11	19	16	16	7	14	9	23	26	16
P64T39 R	13	15	13	9	9	12	23	10	13	10	12	27	20	12	17	26	16	17	36	20	10	25	20	22
DM 68R09	19	11	14	8	8	9	9	11	11	7	19	23	15	8	13	23	12	15	10	8	9	19	29	15
PAN 1644 R	13	12	13	9	9	10	24	9	12	10	17	21	19	9	12	17	19	15	10	20	9	24	26	18
DM 6.8i RR	12	13	14	9	10	10	25	13	13	14	25	22	19	11	28	25	17	20	7	22	10	25	40	21
P71T74 R	19	14	13	11	9	12	28	15	15	14	8	27	25	14	27	22	18	19	10	22	12	30	37	22
Gem/Mean	14	11	10	8	8	9	15	9	10	8	13	20	16	8	12	18	12	13	9	11	8	21	22	14

Tabel 9 Omvalwaarnemings (1-5) van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 9 Lodging dat (1-5) of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate								Warm						
	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Winterton	Gem/Mean	Barberspan	Bergville	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 52R19	1,67	1,67	1,00	1,00	1,00	1,00	1,00	1,00	1,17	1,00	1,00	1,33	1,00	1,00	1,00	1,00	1,05	1,00	1,00	1,33	1,00	1,00	1,00	1,06
DM 5953 RSF	2,00	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,17	1,00	1,00	1,33	1,00	1,00	1,00	1,00	1,05	1,00	1,00	1,00	1,00	1,00	1,00	1,00
RA 4918 R	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,67	1,00	1,00	1,00	1,11
DM 5351 RSF	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,33	1,00	1,00	1,00	1,00	1,05	1,00	1,00	1,67	1,00	1,00	1,00	1,11
NS 5258 R	2,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,17	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
SSS 5449 (tuc)	1,67	1,00	1,33	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
PAN 1532 R	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,33	1,00	1,00	1,00	1,06
RA 565 R	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
LS 6851 R	1,67	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,21	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
LG60155R	1,33	1,00	2,00	1,00	1,00	1,00	1,00	1,00	1,17	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,67	1,00	1,00	1,00	1,11
SSS 5052 (tuc)	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,33	1,00	1,00	1,00	1,06
DM 5302 RSF	1,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,08	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
PAN 1555 R	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,33	1,00	1,00	1,00	1,00	1,05	1,00	1,00	1,00	1,00	1,00	1,00	1,00
PAN 1521 R	2,00	1,67	1,33	1,67	1,67	1,00	1,00	1,00	1,42	1,00	1,00	1,33	1,00	1,00	1,00	1,00	1,05	1,00	1,00	1,33	1,00	1,00	1,00	1,06
RA 568 R	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,04	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
NS 5909 R	2,00	2,33	1,00	1,00	1,00	1,00	1,00	1,00	1,29	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
RA 660 R	1,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,08	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 59R03	2,00	2,67	2,67	1,00	1,00	1,00	1,00	1,00	1,54	1,00	2,00	1,00	1,00	1,00	1,00	1,00	1,14	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 60T05	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
SSS 6560 (tuc)	2,33	1,33	1,00	1,00	1,33	1,00	1,00	1,00	1,25	1,00	1,00	1,67	1,00	1,00	1,00	1,00	1,10	1,00	1,00	1,00	1,00	1,00	1,00	1,00
LS 6164 R	3,00	1,67	1,00	1,00	1,33	1,00	2,00	1,00	1,50	1,00	1,00	2,00	1,00	1,00	1,00	1,00	1,14	1,00	1,00	1,00	1,00	1,00	1,00	1,00
P61T38 R	1,67	3,33	1,00	1,00	1,00	1,00	1,00	1,00	1,38	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
LS 6860 R	2,67	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,33	1,00	1,00	1,67	1,00	1,00	1,00	1,00	1,10	1,00	1,00	1,33	1,00	1,00	1,00	1,06
NS 6448 R	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
P64T39 R	2,00	3,00	1,67	1,00	1,00	1,00	1,00	1,00	1,46	1,00	1,00	1,33	1,00	1,00	1,00	1,00	1,05	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 68R09	2,00	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,17	1,00	2,00	1,33	1,00	1,00	1,00	1,00	1,19	1,00	1,00	3,00	1,00	1,00	1,00	1,33
PAN 1644 R	2,00	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,17	1,00	2,00	1,00	1,00	1,00	1,00	1,00	1,14	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 6.8i RR	2,67	3,00	1,00	1,00	2,33	1,00	1,00	1,00	1,63	1,00	1,00	2,00	1,00	1,00	1,00	1,00	1,14	1,00	1,00	2,33	1,00	1,00	1,00	1,22
P71T74 R	2,67	3,67	1,00	1,00	1,67	1,00	1,00	1,00	1,63	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,67	1,00	2,00	1,00	1,28
Gem/Mean	2,01	1,58	1,13	1,02	1,11	1,00	1,03	1,00	1,24	1,00	1,10	1,19	1,00	1,00	1,00	1,00	1,04	1,00	1,00	1,26	1,00	1,03	1,00	1,05

Tabel 10 Groenstam (1-5) van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 10 Greenstem (1-5) of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate								Warm					
	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	2,00	4,67	4,67	1,67	1,33	4,67	1,00	1,00	2,63	2,00	1,00	1,33	3,33	5,00	1,00	1,00	2,10	1,00	1,00	1,67	2,00	2,00	1,53
DM 52R19	1,00	1,67	1,33	1,00	1,00	3,00	1,00	1,00	1,38	3,00	1,00	1,00	3,33	2,00	1,00	1,00	1,76	1,00	1,00	1,00	2,00	3,00	1,60
DM 5953 RSF	1,00	1,00	1,33	1,00	1,00	1,00	1,00	1,00	1,04	4,00	1,00	1,00	2,00	1,00	1,00	1,00	1,57	1,00	1,00	1,33	2,00	2,00	1,47
RA 4918 R	1,00	1,00	1,00	1,00	1,00	1,67	1,00	1,00	1,08	4,00	1,00	1,00	3,00	3,00	1,00	1,00	2,00	1,00	1,00	1,00	3,00	2,00	1,60
DM 5351 RSF	1,33	4,67	5,00	2,00	2,33	4,67	1,00	1,00	2,75	4,00	1,00	1,00	4,67	4,00	1,00	1,00	2,38	1,00	1,00	1,00	5,00	5,00	2,60
NS 5258 R	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,04	1,00	1,00	1,00	3,33	2,00	1,00	1,00	1,48	1,00	1,00	1,00	2,00	4,00	1,80
SSS 5449 (tuc)	1,00	3,33	1,00	2,33	3,00	1,00	1,00	1,00	1,71	2,00	1,00	1,00	4,67	2,00	1,00	1,00	1,81	1,00	1,00	1,00	4,00	4,00	2,20
PAN 1532 R	1,67	1,67	1,67	2,33	3,00	1,33	1,00	1,00	1,71	2,00	1,00	1,00	3,33	2,00	1,00	1,00	1,62	1,00	1,00	2,33	4,00	3,00	2,27
RA 565 R	1,67	1,33	1,00	1,00	2,33	1,33	1,00	1,00	1,33	4,00	1,00	1,33	2,00	1,00	1,00	1,00	1,62	1,00	1,00	1,00	4,00	4,00	2,20
LS 6851 R	1,33	2,33	1,00	2,00	4,00	1,67	1,00	1,00	1,79	5,00	1,00	1,00	1,67	3,00	1,00	1,00	1,95	1,00	1,00	1,67	3,00	5,00	2,33
LG60155R	1,00	1,00	1,00	1,00	2,33	1,00	1,00	1,00	1,17	3,00	1,00	1,00	1,67	2,00	1,00	1,00	1,52	1,00	1,00	1,00	4,00	4,00	2,20
SSS 5052 (tuc)	1,67	3,33	1,00	1,33	4,67	1,33	1,00	1,00	1,92	1,00	1,00	1,00	4,00	1,00	1,00	1,00	1,43	1,00	1,00	1,00	5,00	5,00	2,60
DM 5302 RSF	1,33	1,00	1,00	1,00	1,33	1,00	1,00	1,00	1,08	1,00	1,00	1,00	4,00	2,00	1,00	1,00	1,57	1,00	1,00	1,00	4,00	5,00	2,40
PAN 1555 R	1,00	1,33	1,00	3,33	2,00	1,00	1,00	1,00	1,46	1,00	1,00	1,00	4,67	2,00	1,00	1,00	1,67	1,00	1,00	2,00	2,00	4,00	2,00
PAN 1521 R	1,33	1,67	1,00	1,67	2,00	1,00	1,00	1,00	1,33	2,00	1,00	1,00	2,67	2,00	1,00	1,00	1,52	1,00	1,00	1,00	2,00	4,00	1,80
RA 568 R	1,00	1,00	1,00	1,00	1,67	2,00	1,00	1,00	1,21	5,00	1,00	1,67	1,33	3,00	1,00	1,00	2,00	1,00	1,00	1,00	3,00	5,00	2,20
NS 5909 R	3,00	3,00	2,33	4,00	4,67	1,67	1,00	1,00	2,58	2,00	1,00	2,33	3,67	2,00	1,00	1,00	1,86	1,00	1,00	1,00	5,00	5,00	2,60
RA 660 R	1,00	1,00	1,00	1,00	3,00	1,33	1,00	1,00	1,29	1,00	1,00	1,00	1,67	2,00	1,00	1,00	1,24	1,00	1,00	1,00	2,00	4,00	1,80
DM 59R03	1,33	2,33	3,33	1,67	4,00	1,67	1,00	1,00	2,04	4,00	1,00	1,33	3,00	2,00	1,00	1,00	1,90	1,00	1,00	1,00	5,00	4,00	2,40
DM 60T05	1,67	3,33	1,67	2,67	5,00	2,00	1,00	1,00	2,29	2,00	1,00	2,67	4,00	2,00	1,00	1,00	1,95	1,00	1,00	1,00	5,00	4,00	2,40
SSS 6560 (tuc)	2,00	2,33	2,00	1,33	3,67	1,33	1,00	1,00	1,83	5,00	1,00	2,00	4,33	2,00	1,00	1,00	2,33	1,00	1,00	3,00	4,00	4,00	2,60
LS 6164 R	3,67	3,33	2,00	1,67	3,67	2,33	1,00	1,00	2,33	1,00	1,00	2,33	4,67	3,00	1,00	1,00	2,00	1,00	1,00	1,67	4,00	4,00	2,33
P61T38 R	2,33	2,33	1,67	4,00	3,67	2,33	1,00	1,00	2,29	2,00	1,00	2,33	4,33	1,00	1,00	1,00	1,81	1,00	1,00	1,67	4,00	3,00	2,13
LS 6860 R	3,00	4,33	2,67	2,00	2,67	3,00	1,00	1,00	2,46	1,00	1,00	1,00	4,33	2,00	1,00	1,00	1,62	1,00	1,00	1,33	4,00	3,00	2,07
NS 6448 R	2,00	2,33	1,67	1,00	3,67	1,00	1,00	1,00	1,71	2,67	1,00	1,33	3,00	2,00	1,00	1,00	1,71	1,00	1,00	1,67	3,00	3,00	1,93
P64T39 R	2,33	3,00	3,00	1,00	3,33	1,33	1,00	1,00	2,00	2,00	1,00	1,00	3,33	2,00	1,00	1,00	1,62	1,00	1,00	1,00	3,00	5,00	2,20
DM 68R09	2,33	3,67	3,00	2,67	4,00	1,00	1,00	1,00	2,33	5,00	1,00	1,67	4,00	4,00	1,00	1,00	2,52	1,00	1,00	2,67	3,00	4,00	2,33
PAN 1644 R	2,00	1,00	1,33	1,00	1,33	1,00	1,00	1,00	1,21	2,00	1,00	1,67	3,33	2,00	1,00	1,00	1,71	1,00	1,00	2,33	4,00	4,00	2,47
DM 6.8i RR	2,67	3,67	2,67	1,00	3,33	2,33	1,00	1,00	2,21	3,00	1,00	2,00	4,67	4,00	1,00	1,00	2,38	1,00	1,00	1,00	5,00	5,00	2,60
P71T74 R	3,00	3,67	3,33	1,00	3,00	2,67	1,00	1,00	2,33	5,00	1,00	3,00	4,00	4,00	1,00	1,00	2,71	1,00	1,00	2,33	5,00	5,00	2,87
Gem/Mean	1,77	2,38	1,89	1,69	2,77	1,79	1,00	1,00	1,78	2,72	1,00	1,43	3,40	2,37	1,00	1,00	1,85	1,00	1,00	1,42	3,57	3,93	2,18

Tabel 11 Oopspring (1-5) van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 11 Shattering (1-5) of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate						Warm					
	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Winterton	Gem/Mean	Barberspan	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	2,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,17	1,00	1,00	1,00	1,00	2,00	1,20	1,00	3,00	1,00	1,00	1,00	1,40
DM 52R19	2,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,17	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 5953 RSF	2,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,21	1,00	1,00	1,00	1,00	2,00	1,20	1,00	2,00	1,00	1,00	1,00	1,20
RA 4918 R	3,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,25	1,00	1,00	1,00	1,00	2,00	1,20	1,00	2,00	1,00	1,00	1,00	1,20
DM 5351 RSF	2,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,21	1,00	1,00	1,00	1,00	2,00	1,20	1,00	2,00	1,00	1,00	1,00	1,20
NS 5258 R	1,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,08	1,00	1,00	1,00	1,00	2,00	1,20	1,00	2,00	1,00	1,00	1,00	1,20
SSS 5449 (tuc)	2,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,21	1,00	1,00	1,00	1,00	2,00	1,20	1,00	3,00	4,00	1,00	1,00	2,00
PAN 1532 R	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
RA 565 R	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,04	1,00	5,00	1,00	1,00	1,00	1,80	1,00	1,00	1,00	1,00	1,00	1,00
LS 6851 R	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,04	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
LG60155R	1,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,08	1,00	1,00	1,00	1,00	1,00	1,00	1,00	3,00	1,00	1,00	1,00	1,40
SSS 5052 (tuc)	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	1,20
DM 5302 RSF	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	1,20
PAN 1555 R	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	1,20
PAN 1521 R	2,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
RA 568 R	1,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,08	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
NS 5909 R	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	1,20
RA 660 R	1,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,08	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 59R03	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,20	1,00	1,00	1,00	1,00	1,00	1,00
DM 60T05	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,04	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
SSS 6560 (tuc)	1,33	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,04	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
LS 6164 R	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
P61T38 R	1,33	1,00	1,00	1,00	1,67	1,00	1,00	1,00	1,13	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
LS 6860 R	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
NS 6448 R	1,67	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,08	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	1,20
P64T39 R	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 68R09	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
PAN 1644 R	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
DM 6.8i RR	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	2,00	1,00	1,00	1,00	1,20
P71T74 R	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
Gem/Mean	1,56	1,00	1,00	1,00	1,02	1,00	1,00	1,00	1,07	1,00	1,13	1,00	1,00	1,23	1,07	1,00	1,53	1,10	1,00	1,00	1,13

Tabel 12 Die planttelling geoes (x 1000) van die verskillende sojaboonkultivars by die verskillende proeflokaliteite, 2020/21
Table 12 The number of plant harvested (x 1000) of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate							Warm				
	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Winterton	Gem/Mean	Barberspan	Cedara	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Groblersdal (Agricol)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	242	264	208	264	228	266	248	210	241	235	342	272	178	313	260	267	320	276	201	207	251
DM 52R19	170	276	183	201	218	219	263	170	213	191	249	250	146	227	253	219	322	278	222	123	236
DM 5953 RSF	154	249	220	271	208	246	258	234	230	322	406	228	169	343	259	288	317	280	243	193	258
RA 4918 R	85	256	223	274	202	256	254	269	227	253	363	259	138	292	246	259	314	263	223	249	262
DM 5351 RSF	194	247	213	270	223	271	259	306	248	268	422	274	204	303	246	286	314	257	231	130	233
NS 5258 R	233	277	158	267	203	241	260	189	229	120	319	247	224	303	255	244	316	272	229	223	260
SSS 5449 (tuc)	256	253	175	263	216	237	256	223	235	192	346	244	102	280	252	236	319	270	228	240	264
PAN 1532 R	157	277	203	252	209	264	260	283	238	211	392	258	194	309	250	269	317	265	242	248	268
RA 565 R	200	243	211	259	218	251	261	252	237	242	353	250	168	331	259	267	322	263	250	239	269
LS 6851 R	222	253	156	268	213	235	253	282	235	304	348	261	156	279	256	267	326	267	239	128	240
LG60155R	155	272	168	260	214	217	261	192	217	112	256	223	166	224	253	206	324	252	239	221	259
SSS 5052 (tuc)	202	279	203	258	223	296	256	339	257	339	458	273	209	310	256	308	318	262	216	240	259
DM 5302 RSF	211	254	192	267	197	235	255	244	232	238	318	235	155	344	250	257	316	258	226	231	258
PAN 1555 R	245	254	224	254	227	269	260	268	250	229	348	256	178	271	252	256	320	248	250	251	267
PAN 1521 R	138	256	206	247	231	289	259	288	239	271	388	262	215	304	244	281	318	268	231	258	269
RA 568 R	214	269	188	252	190	253	261	268	237	248	350	246	148	324	250	261	317	272	225	266	270
NS 5909 R	254	245	206	272	216	252	263	238	243	122	326	258	138	304	252	233	315	282	188	240	256
RA 660 R	183	261	222	283	232	228	257	280	243	160	310	260	143	243	249	228	317	279	229	232	265
DM 59R03	187	256	197	260	208	223	255	233	227	122	339	273	197	302	258	249	314	258	231	231	259
DM 60T05	272	268	263	272	212	278	259	329	269	225	506	257	222	259	243	285	312	281	252	206	263
SSS 6560 (tuc)	251	254	173	265	212	246	259	237	237	192	336	261	168	273	246	246	311	268	253	238	267
LS 6164 R	241	277	204	253	220	256	261	265	247	163	388	278	230	288	253	267	317	270	250	249	272
P61T38 R	235	267	137	259	221	224	260	230	229	133	332	258	160	291	248	237	325	272	231	245	268
LS 6860 R	175	226	205	272	220	222	257	226	225	156	324	234	117	276	257	227	330	258	231	240	265
NS 6448 R	182	247	151	273	209	120	260	229	209	127	220	241	146	256	250	207	333	260	237	202	258
P64T39 R	264	264	227	275	200	263	259	308	258	214	465	267	285	321	256	301	324	260	235	223	260
DM 68R09	194	245	201	276	210	232	259	204	228	186	350	252	179	242	247	243	321	248	215	225	252
PAN 1644 R	244	278	192	264	208	248	265	254	244	184	378	255	188	289	248	257	319	259	220	234	258
DM 6.8i RR	220	264	192	269	214	208	264	252	235	176	318	251	113	282	246	231	327	267	217	247	264
P71T74 R	249	252	206	257	224	242	259	263	244	286	376	262	235	314	251	287	321	265	232	200	255
Gem/Mean	208	259	197	263	214	243	259	252	237	207	354	255	176	290	252	256	320	266	231	222	260

Tabel 13 Persentasie ongewenste sade van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 13 Percentage undesirable seed of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate									Warm					
	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Villiers	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	0,00	0,43	0,17	0,00	0,62	0,00	0,25	0,02	0,19	0,40	0,00	0,00	1,22	0,00	0,00	0,00	0,48	0,26	0,28	0,00	0,00	0,00	0,03	0,06
DM 52R19	0,27	0,57	1,00	0,00	0,24	0,15	0,44	0,19	0,36	0,44	0,00	0,03	0,27	0,41	0,00	0,00	0,00	0,14	0,00	0,50	0,06	0,30	0,30	0,23
DM 5953 RSF	0,48	0,00	0,17	0,27	0,69	0,04	0,19	0,00	0,23	1,10	0,00	0,26	0,65	0,13	0,04	0,24	0,00	0,30	0,14	0,20	0,25	0,14	0,28	0,20
RA 4918 R	0,48	0,09	0,00	0,00	0,25	0,16	0,00	0,08	0,13	0,78	0,00	0,08	0,46	0,30	0,18	0,00	0,14	0,24	0,00	0,16	0,00	0,35	0,67	0,24
DM 5351 RSF	0,00	0,11	0,00	0,07	0,35	0,18	0,08	0,00	0,10	0,46	0,00	0,12	0,61	0,00	0,23	0,07	0,15	0,21	0,00	0,50	0,59	0,27	0,00	0,27
NS 5258 R	0,66	0,19	0,00	0,33	0,04	0,00	0,25	0,06	0,19	0,91	0,00	0,18	0,95	0,31	0,15	0,18	0,24	0,37	0,00	0,62	0,43	0,25	0,05	0,27
SSS 5449 (tuc)	2,27	0,00	0,53	0,00	0,09	0,25	1,07	0,07	0,54	1,28	0,00	0,14	0,33	0,00	0,29	0,58	0,32	0,37	0,00	0,05	0,32	0,00	0,42	0,16
PAN 1532 R	2,34	0,32	0,00	0,00	0,17	0,27	0,57	0,05	0,47	0,68	0,00	0,34	0,32	0,00	0,32	0,11	0,00	0,22	0,25	0,35	0,24	0,11	0,35	0,26
RA 565 R	2,35	0,36	0,00	0,13	0,11	0,47	0,21	0,04	0,46	1,30	0,00	0,02	0,32	0,06	0,03	0,31	0,00	0,26	0,00	0,08	0,27	0,09	0,07	0,10
LS 6851 R	1,39	0,58	0,39	0,16	0,12	0,80	0,35	0,16	0,49	0,21	0,15	0,35	0,62	0,20	0,26	0,20	0,13	0,27	0,29	0,39	0,09	0,44	0,04	0,25
LG60155R	3,70	0,24	0,22	0,45	0,56	0,22	1,68	0,07	0,89	0,49	0,00	0,30	0,08	0,95	0,09	0,30	0,08	0,29	0,86	0,13	0,06	0,18	0,17	0,28
SSS 5052 (tuc)	0,76	0,56	0,14	0,00	0,55	0,41	0,75	0,17	0,42	1,51	0,00	0,34	0,37	0,35	0,24	0,17	0,00	0,37	0,00	0,23	0,23	0,36	0,13	0,19
DM 5302 RSF	0,98	0,00	0,00	0,25	0,04	0,00	0,30	0,23	0,23	0,37	0,00	0,02	0,12	0,28	0,04	0,41	0,00	0,16	0,00	0,16	0,12	0,30	0,58	0,23
PAN 1555 R	1,04	0,52	0,00	0,12	0,11	0,36	0,08	0,07	0,29	0,67	0,00	0,11	0,11	0,40	0,06	0,23	0,30	0,24	0,16	0,47	0,44	0,08	0,26	0,28
PAN 1521 R	1,50	0,96	0,45	0,00	0,51	0,09	0,56	0,16	0,53	0,05	0,00	0,15	0,50	0,33	0,05	0,10	0,13	0,16	0,00	0,18	0,25	0,29	0,46	0,24
RA 568 R	1,40	0,73	0,44	0,47	0,59	0,25	0,33	0,00	0,53	0,45	0,00	0,08	0,30	0,00	0,15	0,46	0,39	0,23	0,00	0,52	1,41	0,46	0,16	0,51
NS 5909 R	1,00	0,28	0,46	0,20	0,06	0,19	0,00	0,25	0,31	0,60	0,00	0,42	0,71	0,49	0,00	0,55	0,11	0,36	0,16	0,74	0,23	0,38	0,10	0,32
RA 660 R	4,85	0,32	0,35	0,35	0,31	0,55	0,14	0,42	0,91	0,85	0,00	0,23	0,35	0,13	0,13	0,15	0,00	0,23	0,00	0,06	0,09	0,13	0,05	0,07
DM 59R03	4,55	0,29	0,12	0,47	0,15	0,18	0,06	0,21	0,75	0,26	0,00	0,22	0,71	0,51	0,08	0,26	0,38	0,30	0,00	0,17	0,22	0,17	0,00	0,11
DM 60T05	1,36	0,76	0,13	0,16	0,12	0,43	0,23	0,08	0,41	0,81	0,00	0,13	0,18	0,14	0,04	0,00	0,30	0,20	0,15	0,43	0,24	0,29	0,00	0,22
SSS 6560 (tuc)	1,26	0,67	0,28	0,58	0,35	0,23	0,24	0,07	0,46	1,08	0,00	0,06	0,07	0,32	0,04	0,44	0,23	0,28	0,00	0,14	0,95	0,06	0,41	0,31
LS 6164 R	1,29	0,29	0,20	0,51	0,18	0,35	0,07	0,12	0,38	0,31	0,00	0,08	0,24	0,27	0,22	0,41	0,04	0,20	0,00	0,38	0,36	0,67	0,21	0,32
P61T38 R	2,03	0,62	0,15	0,22	0,26	0,38	0,50	0,05	0,53	0,92	0,00	0,10	0,50	0,27	0,82	0,38	0,00	0,37	0,29	0,34	0,69	0,16	0,61	0,42
LS 6860 R	2,07	0,00	0,33	0,00	0,67	0,25	0,51	0,32	0,52	0,52	0,00	0,00	0,31	0,00	0,18	0,05	0,17	0,15	0,11	0,38	0,04	0,11	0,29	0,19
NS 6448 R	1,35	0,00	0,32	0,17	0,75	0,18	0,25	0,14	0,40	0,58	0,00	0,13	0,69	0,55	0,15	0,68	0,34	0,39	0,06	1,15	0,15	0,07	0,40	0,37
P64T39 R	3,47	0,81	0,00	2,51	0,21	0,60	0,55	0,45	1,08	1,34	0,00	0,42	0,52	0,29	0,22	0,15	0,00	0,37	0,21	0,52	0,31	0,09	0,72	0,37
DM 68R09	1,57	0,17	0,21	0,25	0,17	0,86	0,56	0,29	0,51	0,61	0,00	0,24	0,97	0,27	0,32	0,26	0,00	0,33	0,00	0,87	0,20	0,08	0,20	0,27
PAN 1644 R	7,23	0,28	0,23	0,11	0,93	0,52	0,45	0,25	1,25	0,69	0,05	0,14	1,14	0,17	0,39	0,21	0,26	0,38	0,15	0,76	0,54	0,27	0,20	0,38
DM 6.8i RR	2,01	0,22	0,18	0,07	0,07	0,15	0,20	0,12	0,38	1,12	0,00	0,47	0,72	0,68	0,19	0,22	0,00	0,43	0,37	0,33	0,00	0,29	0,53	0,30
P71T74 R	0,87	0,36	0,00	0,50	0,22	0,37	0,52	0,15	0,37	0,24	0,00	0,04	0,77	0,14	0,10	0,63	0,00	0,24	0,00	0,45	0,16	0,23	0,15	0,20
Gem/Mean	1,82	0,36	0,22	0,28	0,32	0,30	0,38	0,14	0,48	0,70	0,01	0,17	0,50	0,27	0,17	0,26	0,14	0,28	0,12	0,38	0,30	0,22	0,26	0,25

Tabel 14 Massa van 100 sade (g) van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21

Table 14 Mass 100 seeds (g) of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate									Warm					
	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Villiers	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	18,05	18,82	17,10	16,97	18,74	18,01	16,73	17,34	17,72	16,33	20,53	18,30	18,64	17,19	20,40	17,01	16,92	18,17	15,70	19,88	17,37	18,80	17,60	17,87
DM 52R19	17,61	17,65	16,16	15,79	18,45	15,41	14,80	15,80	16,46	14,60	23,25	17,29	15,75	16,64	19,40	15,41	16,05	17,30	16,33	15,57	14,43	16,80	17,80	16,19
DM 5953 RSF	17,21	18,22	15,49	15,30	17,20	16,60	13,46	16,25	16,22	17,40	19,52	16,11	14,87	14,86	16,47	15,33	15,42	16,25	16,22	15,04	13,34	19,00	17,27	16,17
RA 4918 R	15,86	16,20	14,94	14,41	16,80	17,29	14,20	16,72	15,80	15,13	16,84	18,09	16,38	15,70	16,27	14,96	14,52	15,99	15,80	14,20	13,74	17,07	17,27	15,61
DM 5351 RSF	17,93	18,22	15,76	15,17	18,63	16,72	13,77	17,83	16,75	15,67	17,71	18,51	16,96	16,66	18,47	17,07	15,51	17,07	15,78	17,73	13,36	17,73	17,73	16,47
NS 5258 R	15,72	15,10	14,07	14,19	17,19	14,81	12,42	14,61	14,76	13,20	15,70	16,43	14,39	13,93	16,53	13,01	14,22	14,68	14,30	12,95	13,16	16,40	17,60	14,88
SSS 5449 (tuc)	11,90	13,29	12,47	13,57	12,71	12,84	11,41	13,95	12,77	11,93	14,90	14,28	13,94	14,50	16,00	11,77	11,37	13,59	13,72	15,08	13,55	17,93	16,13	15,28
PAN 1532 R	13,65	13,61	14,12	15,68	14,34	13,78	14,47	15,09	14,34	13,13	16,18	17,11	14,41	15,71	15,67	14,16	14,31	15,09	15,05	12,88	13,78	17,20	19,80	15,74
RA 565 R	12,63	14,15	14,78	14,07	14,67	14,61	13,32	16,03	14,28	16,20	16,52	17,75	15,83	17,17	19,13	15,90	13,00	16,44	15,97	14,41	13,97	19,20	20,67	16,84
LS 6851 R	14,12	11,78	13,12	12,79	13,11	12,02	11,20	13,12	12,66	17,47	15,39	16,40	12,63	13,99	15,20	12,56	11,84	14,43	12,65	11,37	14,32	16,47	17,53	14,47
LG60155R	10,54	14,55	14,59	13,87	16,11	13,09	11,52	16,38	13,83	14,20	17,29	16,07	14,78	16,49	18,47	14,03	14,72	15,76	15,53	15,29	14,67	19,13	19,00	16,72
SSS 5052 (tuc)	12,95	12,35	12,67	13,78	12,52	11,48	10,60	14,49	12,60	15,00	15,34	16,41	14,00	15,14	15,00	13,44	12,34	14,58	15,44	13,61	13,36	17,60	18,53	15,71
DM 5302 RSF	13,20	15,64	14,94	15,57	15,28	15,35	13,68	14,65	14,79	20,67	17,32	16,22	15,12	16,05	19,40	13,52	14,70	16,63	16,27	17,20	14,18	19,20	19,93	17,36
PAN 1555 R	13,89	15,26	16,65	16,48	15,96	13,94	15,16	16,45	15,47	16,47	17,90	16,75	15,40	17,99	17,67	16,73	15,53	16,80	16,19	13,00	15,46	21,00	21,73	17,48
PAN 1521 R	13,67	15,35	14,37	14,79	17,08	14,28	13,63	16,41	14,95	17,00	16,00	17,75	14,31	17,97	17,00	13,99	14,16	16,02	15,77	15,42	16,15	19,53	21,40	17,66
RA 568 R	13,33	13,66	13,65	15,04	15,44	14,24	12,62	15,32	14,16	13,53	15,82	16,52	14,28	14,68	15,40	13,78	13,82	14,73	14,92	13,43	11,78	18,47	21,20	15,96
NS 5909 R	13,55	14,59	15,23	14,80	14,40	13,32	12,72	16,50	14,39	14,13	17,81	18,06	13,64	15,77	16,53	14,42	13,83	15,53	15,41	14,17	13,15	18,53	20,87	16,43
RA 660 R	13,15	13,51	14,23	14,44	11,52	13,04	13,13	15,47	13,56	14,47	16,42	16,36	13,19	16,31	16,67	13,94	14,03	15,17	13,86	12,03	12,78	17,67	19,27	15,12
DM 59R03	12,48	18,14	16,48	15,28	18,10	13,21	16,02	16,62	15,79	13,80	17,73	18,34	16,23	18,28	19,47	16,02	15,14	16,88	16,86	15,88	14,87	20,67	20,87	17,83
DM 60T05	12,83	14,00	14,32	14,24	13,91	13,53	12,14	15,74	13,84	15,73	15,55	16,00	13,59	15,31	16,00	13,94	13,92	15,01	15,00	12,93	13,27	17,80	18,47	15,49
SSS 6560 (tuc)	13,06	14,02	13,48	13,52	14,17	13,24	12,67	16,09	13,78	14,27	17,11	18,01	14,81	15,90	16,13	16,03	13,64	15,74	15,41	13,37	13,97	17,80	19,20	15,95
LS 6164 R	12,01	14,09	13,77	12,72	14,24	12,60	13,28	16,61	13,67	12,87	16,57	17,82	14,56	14,72	15,27	15,22	14,21	15,15	16,01	14,43	14,60	17,87	18,87	16,35
P61T38 R	14,01	14,50	14,15	14,51	15,45	13,46	13,68	15,61	14,42	12,20	17,24	17,50	13,84	16,42	14,67	16,74	15,00	15,45	14,21	11,27	13,46	16,80	20,33	15,21
LS 6860 R	16,61	17,25	16,82	16,79	17,30	15,81	14,60	18,45	16,70	16,27	19,23	18,14	15,75	18,41	18,00	17,42	18,10	17,66	17,67	14,55	15,97	18,67	21,73	17,72
NS 6448 R	14,58	13,88	15,16	14,30	16,30	12,30	13,83	15,74	14,51	12,40	17,44	17,29	14,89	16,51	15,07	15,91	13,24	15,34	14,58	11,47	12,45	18,40	19,67	15,31
P64T39 R	14,43	16,74	15,25	13,62	18,06	13,14	14,37	16,71	15,29	18,20	16,71	16,99	15,44	15,57	17,27	16,20	14,39	16,34	14,42	13,62	14,00	18,40	21,40	16,37
DM 68R09	15,15	15,11	14,50	14,04	17,18	11,97	13,26	15,66	14,61	13,27	15,67	17,02	14,87	15,47	18,07	16,06	13,63	15,51	14,34	10,55	13,00	18,07	19,40	15,07
PAN 1644 R	13,60	15,39	14,13	14,28	14,43	13,44	14,05	16,36	14,46	15,00	17,97	17,08	14,09	16,20	15,73	15,76	14,36	15,78	14,97	13,04	12,38	19,20	20,00	15,92
DM 6.8i RR	14,51	15,90	15,42	14,59	13,91	14,82	14,78	18,64	15,32	17,93	18,67	19,45	15,80	16,61	14,87	17,21	16,10	17,08	16,39	16,95	15,52	21,53	19,13	17,90
P71T74 R	13,51	15,30	14,36	13,87	15,32	14,15	14,74	18,32	14,95	20,20	17,40	18,06	15,86	16,49	18,33	17,36	16,64	17,54	16,16	14,14	13,42	20,73	19,00	16,69
Gem/Mean	14,19	15,21	14,74	14,62	15,62	14,08	13,54	16,10	14,76	15,29	17,26	17,20	14,94	16,09	16,95	15,16	14,49	15,92	15,36	14,18	13,98	18,46	19,31	16,26

Tabel 15 Oliepersentasie op vogvrye basis van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21

Table 15 Oil percentage on moisture free basis of the different soybean cultivars at the different trial localities, 2020/21

	Koel/Cool									Matig/Moderate									Warm					
Kultivar Cultivar	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Villiers	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	16,07	17,51	18,97	19,11	19,52	18,12	18,37	21,16	18,60	20,05	20,41	20,10	19,32	18,96	20,52	19,47	20,54	19,92	22,70	20,10	21,84	19,86	21,73	21,25
DM 52R19	18,37	20,16	19,67	21,14	20,33	18,82	19,45	23,36	20,16	22,21	22,31	21,29	21,59	19,91	22,49	20,87	22,15	21,60	23,41	21,55	23,26	21,74	23,42	22,68
DM 5953 RSF	18,11	20,30	19,61	19,77	19,67	20,26	19,41	23,40	20,07	19,54	22,36	21,69	20,52	20,16	23,04	20,71	22,26	21,29	22,77	21,22	22,34	21,30	21,91	21,91
RA 4918 R	17,60	20,17	20,41	20,40	18,97	19,61	20,05	22,68	19,99	21,12	21,75	21,29	20,80	20,11	22,02	20,72	22,83	21,33	22,53	20,81	22,45	20,13	21,74	21,53
DM 5351 RSF	16,77	18,67	19,65	20,35	19,41	18,80	19,52	22,78	19,49	20,85	21,56	20,55	20,53	19,25	22,20	20,35	21,32	20,83	22,39	21,30	21,28	20,11	22,04	21,42
NS 5258 R	16,85	20,13	19,12	20,10	20,04	19,23	19,98	22,62	19,76	21,78	21,40	20,91	20,16	20,15	22,48	19,78	22,32	21,12	22,78	20,56	22,55	21,02	21,51	21,68
SSS 5449 (tuc)	16,82	19,28	19,10	19,76	19,02	20,00	19,03	22,48	19,44	21,57	21,38	21,54	20,51	19,94	21,50	19,67	22,69	21,10	22,92	21,57	22,64	20,16	20,72	21,60
PAN 1532 R	14,99	19,10	19,09	19,05	18,66	18,49	18,95	21,55	18,74	21,13	20,66	20,21	20,27	18,84	21,96	19,80	21,24	20,51	21,62	19,60	21,51	19,68	20,54	20,59
RA 565 R	16,80	19,50	19,62	19,92	20,53	19,24	19,41	22,66	19,71	19,32	21,64	20,99	20,80	19,45	22,05	20,61	22,25	20,89	23,19	21,47	22,62	20,83	21,27	21,88
LS 6851 R	16,86	19,84	19,06	19,63	19,35	19,36	19,95	22,36	19,55	19,43	21,21	21,45	21,09	19,54	21,76	21,24	20,81	20,82	23,18	20,96	23,83	21,08	21,12	22,03
LG60155R	16,34	18,45	18,76	19,44	19,30	18,36	18,64	21,52	18,85	21,90	20,77	19,88	20,58	19,11	21,54	19,42	21,38	20,57	23,00	20,70	21,40	20,05	21,41	21,31
SSS 5052 (tuc)	16,53	18,28	18,30	18,30	19,72	18,85	18,17	21,70	18,73	20,09	20,86	20,64	19,12	19,33	21,12	20,86	20,24	20,28	21,94	20,59	20,66	19,96	20,14	20,66
DM 5302 RSF	15,95	18,65	18,62	18,82	17,81	18,50	18,38	20,85	18,45	18,58	20,41	20,10	19,46	18,94	20,89	19,24	20,09	19,71	21,69	21,13	22,21	19,91	20,37	21,06
PAN 1555 R	16,59	18,83	18,27	18,61	19,23	18,38	19,01	21,53	18,81	20,49	20,66	20,73	19,73	17,96	21,30	19,56	21,08	20,19	22,12	19,54	20,35	20,10	19,29	20,28
PAN 1521 R	16,47	18,53	17,77	19,03	18,93	18,52	18,95	21,44	18,71	20,87	21,06	20,63	20,12	18,98	21,11	19,27	20,03	20,26	21,94	20,31	22,37	19,94	19,58	20,83
RA 568 R	17,47	19,83	19,74	20,22	19,32	19,56	19,02	22,74	19,74	19,89	21,21	21,92	20,49	19,40	22,07	20,28	21,05	20,79	22,62	21,47	22,02	20,42	20,62	21,43
NS 5909 R	17,27	18,94	18,92	19,26	20,22	18,87	19,51	22,61	19,45	20,33	21,19	21,68	20,25	19,05	22,12	20,68	20,53	20,73	23,13	20,63	21,57	21,16	22,07	21,71
RA 660 R	16,01	19,64	19,51	19,95	19,94	18,55	19,76	22,74	19,51	21,85	21,15	21,57	20,46	19,61	22,53	21,16	21,21	21,19	22,58	20,74	21,72	21,13	22,14	21,66
DM 59R03	15,73	18,00	17,94	17,29	18,45	18,17	19,10	21,85	18,32	20,44	20,55	20,08	19,86	18,97	21,70	20,18	22,24	20,50	22,60	21,08	22,37	20,03	20,71	21,36
DM 60T05	15,83	18,20	17,79	18,02	18,73	17,53	17,54	20,81	18,06	20,50	20,30	20,23	19,76	18,12	20,89	19,35	19,71	19,86	22,11	19,84	21,62	20,00	20,67	20,85
SSS 6560 (tuc)	17,08	18,19	18,38	17,47	19,62	19,08	19,23	21,47	18,82	21,38	20,40	21,37	20,77	18,99	21,11	19,88	21,55	20,68	22,72	20,09	21,26	20,50	21,17	21,15
LS 6164 R	16,46	18,90	18,18	17,15	18,75	18,11	18,77	21,31	18,45	21,35	20,77	20,95	20,25	17,64	21,55	19,36	20,20	20,26	22,27	20,29	21,42	20,27	19,17	20,68
P61T38 R	16,37	18,92	18,49	18,31	18,94	19,05	19,05	20,92	18,76	20,13	20,49	20,93	21,01	18,43	20,84	19,58	20,62	20,25	22,10	18,89	20,27	20,55	19,70	20,30
LS 6860 R	15,81	17,93	17,57	17,43	18,67	17,88	18,85	22,01	18,27	20,55	21,00	21,16	20,35	17,64	21,61	19,73	20,87	20,36	22,73	20,20	21,83	20,28	18,68	20,74
NS 6448 R	17,72	19,80	19,48	18,10	20,26	19,17	20,08	21,84	19,56	20,97	21,15	21,50	20,66	18,84	22,19	20,30	20,69	20,79	22,36	19,05	21,74	21,12	22,12	21,28
P64T39 R	16,54	17,74	18,44	17,02	19,11	18,28	19,63	21,44	18,53	20,96	20,40	20,54	20,04	18,91	21,53	20,04	20,69	20,39	22,63	19,83	22,47	19,87	20,83	21,13
DM 68R09	15,38	17,90	17,84	17,44	18,13	18,17	18,54	21,12	18,07	20,64	20,04	20,28	20,74	17,74	21,33	19,83	20,91	20,19	22,06	19,70	20,28	19,47	20,20	20,34
PAN 1644 R	15,47	18,64	18,78	18,77	19,28	18,22	18,42	20,74	18,54	19,94	19,90	20,32	19,45	19,13	21,79	20,30	19,99	20,10	22,43	19,14	20,64	19,47	20,35	20,41
DM 6.8i RR	16,03	17,43	17,43	16,96	18,70	17,30	18,64	20,37	17,86	19,38	20,19	20,21	20,01	16,17	20,86	18,01	20,19	19,38	21,79	21,23	21,22	19,40	18,15	20,36
P71T74 R	15,56	16,63	17,47	16,42	17,46	17,12	17,57	19,22	17,18	18,87	19,07	19,48	19,08	17,00	19,68	18,01	19,22	18,80	21,41	18,73	19,36	20,26	17,97	19,55
Gem/Mean	16,53	18,80	18,73	18,77	19,20	18,65	19,03	21,78	18,94	20,54	20,88	20,81	20,26	18,88	21,59	19,94	21,03	20,49	22,46	20,41	21,70	20,33	20,71	21,12

Tabel 16 Ru-proteïenpersentasie op vogvrye basis van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2020/21
Table 16 Percentage crude protein on moisture free basis of the different soybean cultivars at the different trial localities, 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate									Warm					
	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Villiers	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	42,89	42,07	41,62	40,69	41,11	41,34	41,09	40,00	41,35	35,36	42,38	40,28	42,67	40,50	42,92	41,63	40,63	40,80	39,51	42,36	42,05	37,22	34,96	39,22
DM 52R19	40,26	39,48	39,29	38,83	39,55	39,52	40,83	38,33	39,51	32,20	39,15	38,94	41,69	38,52	39,81	40,38	38,48	38,65	39,35	40,72	39,83	33,16	31,81	36,97
DM 5953 RSF	40,78	40,51	39,85	40,12	39,94	40,26	41,20	38,38	40,13	38,45	39,60	37,89	42,62	39,38	37,10	40,20	38,85	39,26	40,38	42,67	40,56	36,50	35,40	39,10
RA 4918 R	40,48	40,64	39,25	39,01	42,04	40,28	39,98	38,11	39,97	33,28	40,12	38,24	42,06	37,86	41,37	40,67	37,79	38,92	39,55	41,39	39,28	37,11	36,84	38,83
DM 5351 RSF	40,41	41,04	39,27	37,00	38,31	40,25	39,30	36,90	39,06	35,13	39,53	38,21	41,74	39,11	40,75	40,02	37,60	39,01	38,88	40,46	39,26	37,73	35,55	38,38
NS 5258 R	42,74	40,29	40,05	39,60	42,26	41,99	41,12	40,06	41,01	31,94	41,10	40,76	43,30	39,23	39,77	42,22	39,14	39,68	40,51	43,07	41,36	37,29	35,73	39,59
SSS 5449 (tuc)	42,21	40,38	39,49	40,75	39,58	39,49	40,83	38,65	40,17	34,59	40,59	39,27	43,15	38,95	41,50	43,21	38,40	39,96	40,54	42,43	41,95	38,98	38,18	40,42
PAN 1532 R	42,71	39,34	39,15	40,30	40,54	40,37	39,49	39,07	40,12	31,40	40,96	40,99	41,41	39,10	37,41	40,41	39,34	38,88	40,76	43,03	41,95	37,38	38,37	40,30
RA 565 R	41,32	39,64	38,28	39,82	38,62	39,56	39,60	38,77	39,45	38,71	40,15	39,02	41,76	38,57	39,94	40,06	37,96	39,52	39,11	41,52	40,33	36,18	36,71	38,77
LS 6851 R	42,91	39,68	38,25	41,12	41,86	39,19	38,55	39,43	40,12	41,80	41,52	40,69	41,98	39,77	40,72	39,16	40,69	40,79	39,74	42,04	40,48	37,48	34,91	38,93
LG60155R	41,92	41,49	39,38	41,15	40,65	42,38	41,05	41,89	41,24	31,10	41,51	42,42	41,65	40,08	42,67	42,00	41,03	40,31	39,94	44,15	41,83	38,19	36,93	40,21
SSS 5052 (tuc)	41,82	41,52	39,28	41,45	39,54	39,73	39,96	38,49	40,22	35,18	40,08	40,69	43,03	39,63	40,03	37,95	41,43	39,75	40,05	41,52	41,22	37,97	37,40	39,63
DM 5302 RSF	42,61	41,76	39,37	41,42	42,04	42,27	41,11	41,64	41,53	40,89	41,96	41,96	43,34	39,93	42,17	41,40	42,66	41,79	41,37	43,28	41,15	39,11	39,13	40,81
PAN 1555 R	41,01	40,54	38,63	40,59	39,87	40,42	39,93	39,50	40,06	35,37	40,99	40,75	42,74	41,05	42,04	41,23	40,77	40,62	41,27	42,25	43,28	39,73	39,20	41,15
PAN 1521 R	41,44	40,55	41,12	40,05	39,96	41,08	38,98	39,74	40,37	32,16	39,93	40,76	42,11	40,26	39,40	40,39	41,07	39,51	40,25	43,08	41,10	38,87	37,31	40,12
RA 568 R	41,47	41,02	38,03	39,69	40,12	40,68	40,47	38,88	40,05	40,21	40,63	39,07	42,22	38,71	39,47	41,82	42,19	40,54	39,98	42,36	40,69	38,96	38,27	40,05
NS 5909 R	41,02	39,37	38,54	38,91	39,50	40,26	37,60	38,35	39,19	35,49	40,04	40,30	41,27	39,06	39,19	39,06	40,07	39,31	39,34	41,80	40,59	36,62	34,23	38,52
RA 660 R	42,68	40,96	38,76	40,30	40,61	40,68	39,73	38,07	40,22	32,20	40,97	40,86	41,93	38,42	39,41	39,43	41,06	39,29	41,06	42,86	40,85	38,77	36,62	40,03
DM 59R03	42,80	40,23	40,92	41,54	40,95	40,58	38,69	39,55	40,66	36,02	40,76	40,09	42,17	40,52	40,00	39,38	39,10	39,75	39,96	42,67	40,21	39,83	37,54	40,04
DM 60T05	44,21	41,94	40,39	42,92	40,79	43,61	41,15	40,53	41,94	35,09	40,71	41,72	42,66	40,78	41,31	41,21	41,56	40,63	40,28	42,86	41,11	41,10	37,84	40,64
SSS 6560 (tuc)	42,36	40,94	38,95	41,80	39,62	40,15	38,14	39,37	40,17	32,11	41,09	39,74	41,11	39,76	41,16	41,03	38,79	39,35	40,44	42,74	41,23	38,66	36,71	39,96
LS 6164 R	42,31	39,09	39,05	41,61	40,02	40,14	38,34	38,88	39,93	32,47	39,97	39,86	41,67	39,61	37,99	41,00	40,27	39,11	40,38	42,14	40,85	38,74	36,77	39,78
P61T38 R	42,62	39,59	38,57	40,65	41,42	39,09	37,97	40,63	40,07	32,13	41,35	42,63	40,61	40,03	40,46	40,85	39,58	39,71	40,10	42,70	41,33	39,45	37,46	40,21
LS 6860 R	41,94	38,22	37,76	39,22	40,01	38,96	37,66	38,25	39,00	32,04	39,10	37,37	41,09	38,92	37,83	38,89	37,95	37,90	38,98	42,51	40,62	38,42	37,14	39,53
NS 6448 R	42,20	38,71	38,88	40,60	39,22	40,30	37,84	38,85	39,57	30,96	40,31	39,13	41,06	40,20	39,78	40,81	40,61	39,11	40,01	43,10	39,92	38,29	36,38	39,54
P64T39 R	42,45	40,49	39,19	41,77	39,98	41,71	38,99	39,54	40,51	32,89	40,51	40,08	41,59	39,24	40,51	40,34	39,50	39,33	40,87	43,25	41,17	39,72	36,16	40,23
DM 68R09	42,93	40,25	38,51	40,12	40,11	40,31	39,47	38,69	40,05	32,06	40,98	39,86	40,52	40,00	38,87	40,08	39,14	38,94	40,72	41,58	41,26	39,32	38,59	40,29
PAN 1644 R	42,53	40,54	38,84	41,09	40,38	40,89	40,19	40,30	40,60	35,54	41,47	40,97	43,67	40,62	39,59	40,82	41,92	40,58	41,07	43,00	42,19	40,36	38,41	41,01
DM 6.8i RR	40,06	37,07	37,34	38,97	37,95	39,07	36,52	38,78	38,22	30,74	39,61	38,43	39,65	39,07	36,82	39,89	37,53	37,72	38,94	41,10	40,03	37,95	36,55	38,91
P71T74 R	41,97	40,39	38,46	40,82	40,60	40,35	38,69	40,32	40,20	35,89	40,56	40,72	40,60	39,64	38,92	41,43	39,75	39,69	40,30	42,41	41,88	38,36	36,65	39,92
Gem/Mean	41,97	40,26	39,15	40,40	40,24	40,50	39,48	39,27	40,16	34,45	40,59	40,06	41,90	39,55	39,96	40,57	39,83	39,61	40,12	42,37	40,99	38,25	36,79	39,70

Tabel 17 Gemiddelde van die olie-en proteïen persentasie saamgevoeg (Protolie), 2020/21
Table 17 Average of the oil and protein percentage joined (Profat), 2020/21

Kultivar Cultivar	Koel/Cool									Matig/Moderate									Warm					
	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Villiers	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	58,96	59,58	60,59	59,80	60,63	59,46	59,46	61,16	59,96	55,41	62,79	60,38	61,99	59,46	60,33	61,10	61,17	60,33	62,21	62,46	63,89	57,08	56,69	60,47
DM 52R19	58,63	59,64	58,96	59,97	59,88	58,34	60,28	61,69	59,67	54,41	61,46	60,23	63,28	58,43	59,59	61,25	60,63	59,91	62,76	62,27	63,09	54,90	55,23	59,65
DM 5953 RSF	58,89	60,81	59,46	59,89	59,61	60,52	60,61	61,78	60,20	57,99	61,96	59,58	63,14	59,54	64,41	60,91	61,11	61,08	63,15	63,89	62,90	57,80	57,31	61,01
RA 4918 R	58,08	60,81	59,66	59,41	61,01	59,89	60,03	60,79	59,96	54,40	61,87	59,53	62,86	57,97	62,77	61,39	60,62	60,18	62,08	62,20	61,73	57,24	58,58	60,37
DM 5351 RSF	57,18	59,71	58,92	57,35	57,72	59,05	58,82	59,68	58,55	55,98	61,09	58,76	62,27	58,36	61,97	60,37	58,92	59,72	61,27	61,76	60,54	57,84	57,59	59,80
NS 5258 R	59,59	60,42	59,17	59,70	62,30	61,22	61,10	62,68	60,77	53,72	62,50	61,67	63,46	59,38	63,98	62,00	61,46	61,02	63,29	63,63	63,91	58,31	57,24	61,28
SSS 5449 (tuc)	59,03	59,66	58,59	60,51	58,60	59,49	59,86	61,13	59,61	56,16	61,97	60,81	63,66	58,89	58,91	62,88	61,09	60,55	63,46	64,00	64,59	59,14	58,90	62,02
PAN 1532 R	57,70	58,44	58,24	59,35	59,20	58,86	58,44	60,62	58,86	52,53	61,62	61,20	61,68	57,94	61,90	60,21	60,58	59,71	62,38	62,63	63,46	57,06	58,91	60,89
RA 565 R	58,12	59,14	57,90	59,74	59,15	58,80	59,01	61,43	59,16	58,03	61,79	60,01	62,56	58,02	62,77	60,67	60,21	60,51	62,30	62,99	62,95	57,01	57,98	60,65
LS 6851 R	59,77	59,52	57,31	60,75	61,21	58,55	58,50	61,79	59,68	61,23	62,73	62,14	63,07	59,31	64,43	60,40	61,50	61,85	62,92	63,00	64,31	58,56	56,03	60,96
LG60155R	58,26	59,94	58,14	60,59	59,95	60,74	59,69	63,41	60,09	53,00	62,28	62,30	62,23	59,19	61,57	61,42	62,41	60,55	62,94	64,85	63,23	58,24	58,34	61,52
SSS 5052 (tuc)	58,35	59,80	57,58	59,75	59,26	58,58	58,13	60,19	58,96	55,27	60,94	61,33	62,15	58,96	63,29	58,81	61,67	60,30	61,99	62,11	61,88	57,93	57,54	60,29
DM 5302 RSF	58,56	60,41	57,99	60,24	59,85	60,77	59,49	62,49	59,98	59,47	62,37	62,06	62,80	58,87	62,93	60,64	62,75	61,49	63,06	64,41	63,36	59,02	59,50	61,87
PAN 1555 R	57,60	59,37	56,90	59,20	59,10	58,80	58,94	61,03	58,87	55,86	61,65	61,48	62,47	59,01	60,70	60,79	61,85	60,48	63,39	61,79	63,63	59,83	58,49	61,43
PAN 1521 R	57,91	59,08	58,89	59,08	58,89	59,60	57,93	61,18	59,07	53,03	60,99	61,39	62,23	59,24	60,58	59,66	61,10	59,78	62,19	63,39	63,47	58,81	56,89	60,95
RA 568 R	58,94	60,85	57,77	59,91	59,44	60,24	59,49	61,62	59,78	60,10	61,84	60,99	62,71	58,11	61,26	62,10	63,24	61,29	62,60	63,83	62,71	59,38	58,89	61,48
NS 5909 R	58,29	58,31	57,46	58,17	59,72	59,13	57,11	60,96	58,64	55,82	61,23	61,98	61,52	58,11	61,53	59,74	60,60	60,07	62,47	62,43	62,16	57,78	56,30	60,23
RA 660 R	58,69	60,60	58,27	60,25	60,55	59,23	59,49	60,81	59,74	54,05	62,12	62,43	62,39	58,03	62,53	60,59	62,27	60,55	63,64	63,60	62,57	59,90	58,76	61,69
DM 59R03	58,53	58,23	58,86	58,83	59,40	58,75	57,79	61,40	58,97	56,46	61,31	60,17	62,03	59,49	63,01	59,56	61,34	60,42	62,56	63,75	62,58	59,86	58,25	61,40
DM 60T05	60,04	60,14	58,18	60,94	59,52	61,14	58,69	61,34	60,00	55,59	61,01	61,95	62,42	58,90	62,05	60,56	61,27	60,47	62,39	62,70	62,73	61,10	58,51	61,49
SSS 6560 (tuc)	59,44	59,13	57,33	59,27	59,24	59,23	57,37	60,84	58,98	53,49	61,49	61,11	61,88	58,75	59,10	60,91	60,34	59,63	63,16	62,83	62,49	59,16	57,88	61,10
LS 6164 R	58,77	57,99	57,23	58,76	58,77	58,25	57,11	60,19	58,38	53,82	60,74	60,81	61,92	57,25	62,01	60,36	60,47	59,67	62,65	62,43	62,27	59,01	55,94	60,46
P61T38 R	58,99	58,51	57,06	58,96	60,36	58,14	57,02	61,55	58,82	52,26	61,84	63,56	61,62	58,46	58,67	60,43	60,20	59,63	62,20	61,59	61,60	60,00	57,16	60,51
LS 6860 R	57,75	56,15	55,33	56,65	58,68	56,84	56,51	60,26	57,27	52,59	60,10	58,53	61,44	56,56	61,39	58,62	58,82	58,51	61,71	62,71	62,45	58,70	55,82	60,28
NS 6448 R	59,92	58,51	58,36	58,70	59,48	59,47	57,92	60,69	59,13	51,93	61,46	60,63	61,72	59,04	62,70	61,11	61,30	59,99	62,37	62,15	61,66	59,41	58,50	60,82
P64T39 R	58,99	58,23	57,63	58,79	59,09	59,99	58,62	60,98	59,04	53,85	60,91	60,62	61,63	58,15	60,40	60,38	60,19	59,52	63,50	63,08	63,64	59,59	56,99	61,36
DM 68R09	58,31	58,15	56,35	57,56	58,24	58,48	58,01	59,81	58,11	52,70	61,02	60,14	61,26	57,74	60,92	59,91	60,05	59,22	62,78	61,28	61,54	58,79	58,79	60,64
PAN 1644 R	58,00	59,18	57,62	59,86	59,66	59,11	58,61	61,04	59,14	55,48	61,37	61,29	63,12	59,75	58,61	61,12	61,91	60,33	63,50	62,14	62,83	59,83	58,76	61,41
DM 6.8i RR	56,09	54,50	54,77	55,93	56,65	56,37	55,16	59,15	56,08	50,12	59,80	58,64	59,66	55,24	59,78	57,90	57,72	57,36	60,73	62,33	61,25	57,35	54,70	59,27
P71T74 R	57,53	57,02	55,93	57,24	58,06	57,47	56,26	59,54	57,38	54,76	59,63	60,20	59,68	56,64	19,68	59,44	58,97	53,63	61,71	61,14	61,24	58,62	54,62	59,47
Gem/Mean	58,50	59,06	57,88	59,17	59,44	59,15	58,51	61,04	59,09	54,98	61,46	60,86	62,16	58,43	60,13	60,51	60,86	59,92	62,58	62,78	62,69	58,57	57,50	60,82

Tabel 18 Die saadopbrengs van elke kultivar by die verskillende lokaliteite, 2020/21
Table 18 The The seed yield of the cultivars at the different localities, 2020/21

Kultivar Cultivar	Koel/Cool										Matig/Moderate									Warm						
	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Villiers	Winterton	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean	Brits	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem/Mean
PAN 1479 R	2984	3951	3007	2074	2125	1795	2132	1903	3397	2597	1726	3396	4299	2274	2392	1946	2566	3456	2757	3508	3716	3471	2986	2795	2216	3115
DM 52R19	2223	3505	3363	2615	1768	2471	2912	2297	4088	2805	1759	3496	5012	2514	2153	1746	3577	4313	3071	3973	4433	3749	2670	3250	1891	3327
DM 5953 RSF	2874	3730	4592	4521	3092	3578	2434	2355	4612	3532	3321	4201	4337	2599	2380	2075	3110	3631	3207	3955	3363	3402	3517	3332	2323	3315
RA 4918 R	3081	4064	3633	2732	2090	2173	2503	2607	4530	3046	1706	3584	4747	2511	3532	2000	2832	3852	3096	5117	4076	3455	3089	3779	2474	3665
DM 5351 RSF	2288	4140	4119	3195	2051	3149	2874	2789	4585	3244	1647	3476	4826	2541	2913	1402	3248	3919	2997	3308	3514	3502	2480	4311	1849	3161
NS 5258 R	3005	3334	3372	2166	1828	2425	2427	2377	4474	2823	1253	3365	4509	2405	2356	2031	2664	3801	2798	4324	3793	3195	2470	3909	2134	3304
SSS 5449 (tuc)	2920	2507	3218	2975	2134	3131	2497	2624	3486	2832	1690	2417	3666	2329	3072	1828	2404	4125	2692	3225	2467	2911	2189	3707	2423	2820
PAN 1532 R	3045	2866	3147	2888	1814	3010	3204	1321	4032	2814	1489	4061	3915	2467	2911	1679	3114	3327	2870	3954	3872	3453	3007	3400	2302	3331
RA 565 R	2994	2703	3508	2621	2490	3070	3392	2516	5082	3153	1727	4320	4066	2844	3020	1686	3436	3898	3125	3925	3410	3446	2976	3587	2655	3333
LS 6851 R	3612	2276	3315	3481	2807	2855	3024	2894	4093	3151	1869	3903	4401	2252	3068	1767	3029	3344	2954	4025	4386	3501	2677	4144	2954	3614
LG60155R	2790	1800	4047	4285	2270	3553	3062	2365	3845	3113	1627	3880	2111	2643	2810	1636	3180	3810	2712	4535	3428	2958	2924	3313	2074	3205
SSS 5052 (tuc)	3991	1975	3471	3125	2666	2526	3187	2050	3922	2990	1643	4137	2831	2529	2340	1583	3080	3150	2662	3703	3793	3400	2905	4227	2246	3379
DM 5302 RSF	3120	3636	4454	3041	2541	2874	3285	2644	3397	3221	1438	3382	3701	2601	2593	1683	2718	3670	2723	4241	3309	3294	2584	3314	2462	3201
PAN 1555 R	3272	3438	3280	3012	2785	3595	2721	2962	4281	3261	1662	3907	4092	2625	3207	1232	2612	3341	2835	3502	3597	2865	2366	4593	1976	3150
PAN 1521 R	3897	3751	4521	4111	2972	4110	3268	2542	4281	3717	2549	4270	4516	2470	3229	2071	2777	3340	3153	4667	4309	3646	3365	4172	2237	3733
RA 568 R	3278	2938	3467	2976	2803	2203	3263	2649	4253	3092	1187	3525	3569	2513	3508	1852	2718	3453	2791	4523	4543	3380	2205	4054	2467	3529
NS 5909 R	3582	2614	3743	3044	2775	3405	3187	2585	4226	3240	2123	3891	4190	2565	2933	1979	2673	3393	2968	5319	3063	3103	2630	4157	2333	3434
RA 660 R	3640	2047	3646	3008	3004	2024	3055	3077	4557	3117	1448	3820	3780	2933	3245	2348	2990	3814	3047	4070	2985	3382	2721	4627	2681	3411
DM 59R03	2811	1910	4975	3574	2890	3712	3120	2785	4005	3309	1532	4405	3858	2390	3120	2161	3361	4158	3123	4659	3442	3646	3711	4000	2260	3620
DM 60T05	3863	2873	3979	3348	2893	2495	3177	2081	4916	3292	1787	4235	4135	2532	3259	1868	2875	3989	3085	4465	4498	3395	3462	4207	2217	3707
SSS 6560 (tuc)	3010	2376	3759	2850	2177	2988	2852	2569	3922	2945	1731	3775	3590	2699	3091	1277	2808	4218	2899	3501	4122	3354	2743	4045	2429	3366
LS 6164 R	3232	2544	3630	3391	2708	3083	2680	2984	4281	3170	1676	3849	4255	2296	3549	1971	3025	3714	3042	3909	3382	3377	2816	3168	2677	3222
P61T38 R	3152	2828	3780	2932	2600	3581	2848	2833	4391	3216	1780	3977	4121	2608	2663	1573	3246	4113	3010	3204	3701	3608	2764	3976	2304	3260
LS 6860 R	2210	2002	4159	3045	2223	2932	2634	3107	4364	2964	1274	3664	3901	2677	2857	1925	2921	3397	2827	4658	3354	2706	2457	3821	2501	3249
NS 6448 R	3489	3043	3654	2781	2577	2989	2754	2425	4944	3184	2038	4115	3904	2508	3175	1864	3318	3703	3078	3718	3871	2875	2934	4161	2501	3343
P64T39 R	3402	2638	4256	4571	2416	3947	3085	2475	4612	3489	1947	4232	3894	2872	3633	2282	3386	4019	3283	4481	3526	3301	2813	3985	2081	3365
DM 68R09	3496	2707	4252	2523	2515	3501	3474	2458	4226	3239	1739	4399	4178	2828	3162	2069	3009	4074	3182	3836	4458	3072	2873	4263	2873	3563
PAN 1644 R	3814	2198	4562	3219	2712	3545	3237	2901	4971	3462	1247	4220	4252	2588	3306	1719	3098	3745	3022	3757	3682	3335	2155	4765	2086	3297
DM 6.8i RR	3880	3509	4019	3846	2732	2896	3031	3096	4640	3516	1673	3651	5085	2447	2824	2325	3666	3785	3182	4811	4466	3322	3048	4552	2483	3780
P71T74 R	3475	2150	3439	3717	2423	3335	2946	3185	5496	3352	2300	3806	4308	2531	3166	1714	3392	3542	3095	3797	4385	3035	2643	3689	2235	3297
Gem/Mean	3214	2868	3812	3189	2496	3032	2942	2582	4330	3163	1753	3845	4068	2553	2982	1843	3028	3736	2976	4089	3765	3305	2806	3910	2345	3370
CV	10,8	22,8	13,9	15,8	15,7	24,9	2,0	14,6	10,9		6,9	13,1	13,0	7,4	19,2	7,5	15,0	2,9		21,8	3,2	7,8	16,7	4,2	7,9	

Tabel 19 Opbrengswaarskynlikheid (%) van kultivars geëvalueer in 2018/19, 2019/20 en 2020/21 vir die koeler droëland produksiegebiede by verskillende opbrengspotensiaal

Table 19 Yield probability (%) of cultivars in the 2018/19, 2019/20 and 2020/21 for the cooler dryland production areas as different yield potentials

Kultivar	Opbrengswaaarskynlikheid/Yield potential (t/ha)								Regressielyn/Regression line	
Cultivar	1.0	1,5	2.0	2,5	3.0	3,5	4.0	4,5	Fprob	R2
DM 5953 RSF	70	70	71	71	72	72	71	71	0,003	0,47
DM 5351 RSF	69	67	66	63	61	58	55	53	0,005	0,42
SSS 5449 (tuc)	64	56	49	40	32	24	19	14	<0.001	0,74
LS 6851 R	76	71	64	56	47	38	30	23	<0.001	0,63
SSS 5052 (tuc)	24	25	26	28	30	33	36	39	<0.001	0,79
DM 5302 RSF	76	72	66	59	52	45	38	32	<0.001	0,61
PAN 1521 R	74	74	74	73	72	71	69	68	<0.001	0,67
NS 5909 R	18	23	28	36	44	53	61	68	<0.001	0,85
LS 6164 R	54	51	49	46	44	41	39	37	<0.001	0,79
P61T38 R	35	36	36	38	40	42	44	45	<0.001	0,80
LS 6860 R	16	18	21	25	30	35	41	48	<0.001	0,83
NS 6448 R	53	51	48	44	41	38	35	33	<0.001	0,60
P64T39 R	40	46	52	58	65	70	75	80	<0.001	0,66
PAN 1644 R	22	28	34	42	50	59	67	73	<0.001	0,84

Tabel 20 Graanopbrengs (kg/ha^{-1}) van kultivars gedurende die 2019/20 en 2020/21 groeiseisoen ten opsigte van die verskillende lokaliteite wat in die koeler produksiegebiede geleë is
Table 20 Grain yield (kg/ha^{-1}) of cultivars during the 2019/20 and 2020/21 growing season for the various localities situated in the cooler production areas

Kultivar Cultivar	2019/20							2020/21									
	Bapsfontein	Belfast	Bethlehem	Clarens	Kinross	Winterton	Gem/Mean	Bapsfontein	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Kinross	Standerton	Villiers	Winterton	Gem/Mean
PAN 1479 R	-	-	-	-	-	-	-	2984	3951	3007	2074	2125	1795	2132	1903	3397	2597
DM 52R19	-	-	-	-	-	-	-	2223	3505	3363	2615	1768	2471	2912	2297	4088	2805
DM 5953 RSF	3952	3535	4871	3500	5325	4434	4269	2874	3730	4592	4521	3092	3578	2434	2355	4612	3532
RA 4918 R	-	-	-	-	-	-	-	3081	4064	3633	2732	2090	2173	2503	2607	4530	3046
DM 5351 RSF	3909	3761	4113	2506	2780	4807	3646	2288	4140	4119	3195	2051	3149	2874	2789	4585	3244
NS 5258 R	-	-	-	-	-	-	-	3005	3334	3372	2166	1828	2425	2427	2377	4474	2823
SSS 5449 (tuc)	4178	2976	3555	1878	3442	3768	3300	2920	2507	3218	2975	2134	3131	2497	2624	3486	2832
PAN 1532 R	-	-	-	-	-	-	-	3045	2866	3147	2888	1814	3010	3204	1321	4032	2873
RA 565 R	-	-	-	-	-	-	-	2994	2703	3508	2621	2490	3070	3392	2516	5082	3153
LS 6851 R	3899	3217	2894	2058	2757	4586	3235	3612	2276	3315	3481	2807	2855	3024	2894	4093	3151
LG60155R	-	-	-	-	-	-	-	2790	1800	4047	4285	2270	3553	3062	2365	3845	3113
SSS 5052 (tuc)	5309	2420	2675	1525	4446	4407	3464	3991	1975	3471	3125	2666	2526	3187	2050	3922	2990
DM 5302 RSF	3578	3664	3086	1966	3677	3954	3321	3120	3636	4454	3041	2541	2874	3285	2644	3397	3221
PAN 1555 R	3760	3252	2435	1753	4053	4287	3257	3272	3438	3280	3012	2785	3595	2721	2962	4281	3261
PAN 1521 R	3778	3199	3727	3049	5101	4653	3918	3897	3751	4521	4111	2972	4110	3268	2542	4281	3717
RA 568 R	-	-	-	-	-	-	-	3278	2938	3467	2976	2803	2203	3263	2649	4253	3092
NS 5909 R	4112	3355	2407	1806	5136	4816	3605	3582	2614	3743	3044	2775	3405	3187	2585	4226	3240
RA 660 R	-	-	-	-	-	-	-	3640	2047	3646	3008	3004	2024	3055	3077	4557	3117
DM 59R03	-	-	-	-	-	-	-	2811	1910	4975	3574	2890	3712	3120	2785	4005	3309
DM 60T05	-	-	-	-	-	-	-	3863	2873	3979	3348	2893	2495	3177	2081	4916	3292
SSS 6560 (tuc)	3971	3083	2199	2124	4483	4687	3425	3010	2376	3759	2850	2177	2988	2852	2569	3922	2945
LS 6164 R	3877	3336	2071	1871	3698	4467	3220	3232	2544	3630	3391	2708	3083	2680	2984	4281	3170
P61T38 R	5470	3020	2341	1755	3431	4933	3492	3152	2828	3780	2932	2600	3581	2848	2833	4391	3216
LS 6860 R	4436	2310	1923	1597	3661	4686	3102	2210	2002	4159	3045	2223	2932	2634	3107	4364	2964
NS 6448 R	4310	3393	2207	1903	2480	4129	3070	3489	3043	3654	2781	2577	2989	2754	2425	4944	3184
P64T39 R	4132	3031	2640	2040	5588	4715	3691	3402	2638	4256	4571	2416	3947	3085	2475	4612	3489
DM 68R09	-	-	-	-	-	-	-	3496	2707	4252	2523	2515	3501	3474	2458	4226	3239
PAN 1644 R	3986	2741	2288	2073	4504	4444	3339	3814	2198	4562	3219	2712	3545	3237	2901	4971	3462
DM 6.8i RR	4568	3244	2623	1977	5116	4604	3689	3880	3509	4019	3846	2732	2896	3031	3096	4640	3391
P71T74 R	4270	3138	2490	1458	5680	4938	3662	3475	2150	3439	3717	2423	3335	2946	3185	5496	3352
P48T48 R	4074	2627	3039	2309	2079	4354	3080	-	-	-	-	-	-	-	-	-	-
LDC 5.3	3505	2931	2710	2444	4994	4413	3500	-	-	-	-	-	-	-	-	-	-
NA 5509 R	4130	2881	2968	1661	4385	4614	3440	-	-	-	-	-	-	-	-	-	-
PAN 1575 R	3959	3323	2927	1689	4114	4379	3399	-	-	-	-	-	-	-	-	-	-
LDC 5.9	4574	3026	2430	1907	5425	4183	3591	-	-	-	-	-	-	-	-	-	-
DM 5901 RSF	4855	3077	2818	1825	3990	4556	3520	-	-	-	-	-	-	-	-	-	-
PAN 1663	4140	3235	2871	1620	3976	4672	3419	-	-	-	-	-	-	-	-	-	-
LS 6161 R	4103	2632	2596	1781	3506	4507	3188	-	-	-	-	-	-	-	-	-	-
LS 6868 R	3905	2342	2411	1177	3475	4411	2954	-	-	-	-	-	-	-	-	-	-
DM 6968 RSF	3667	2464	2304	1380	5016	4468	3216	-	-	-	-	-	-	-	-	-	-
Gem/Mean	4157	3043	2772	1951	4154	4495	3429	3214	2868	3812	3189	2496	3032	2942	2582	4330	3161

Tabel 21 Opbrengswaarskynlikheid (%) van kultivars geëvalueer in 2018/19, 2019/20 en 2020/21 vir die matige droëland produksiegebiede by verskillende opbrengspotensiaal
Table 21 Yield probability (%) of cultivars in the 2018/19, 2019/20 and 2020/21 for the moderate dryland production areas as different yield potentials

Kultivar	Opbrengspotensiaal/Yield potential (t/ha)								Regressielyn/Regression line	
Cultivar	1,0	1,5	2,0	2,5	3,0	3,5	4,0	4,5	Fprob	R2
DM 5953 RSF	74	69	63	56	48	41	34	28	<0.001	0,76
DM 5351 RSF	8	14	23	37	52	68	81	89	<0.001	0,94
SSS 5449 (tuc)	63	53	44	35	26	18	13	9	<0.001	0,89
LS 6851 R	15	19	23	29	34	41	49	56	<0.001	0,96
SSS 5052 (tuc)	78	69	59	46	34	24	16	10	<0.001	0,76
DM 5302 RSF	38	31	24	17	13	9	7	5	<0.001	0,93
PAN 1521 R	75	70	66	60	53	48	41	35	<0.001	0,89
NS 5909 R	24	29	34	40	47	53	60	66	<0.001	0,96
LS 6164 R	72	67	62	57	51	44	39	34	<0.001	0,85
P61T38 R	12	18	27	39	52	66	76	85	<0.001	0,97
LS 6860 R	44	44	44	44	43	44	44	44	<0.001	0,96
NS 6448 R	44	50	55	62	68	72	77	81	<0.001	0,93
P64T39 R	73	75	78	80	81	82	83	84	<0.001	0,95
PAN 1644 R	44	46	50	54	58	61	65	68	<0.001	0,94
DM 6.8i RR	59	63	67	71	75	78	81	83	<0.001	0,91
P71T74 R	39	44	50	57	63	69	75	78	<0.001	0,93

Tabel 22 Graanopbrengs (kg/ha^{-1}) van kultivars gedurende die 2019/20 en 2020/21 groeiseisoen ten opsigte van die verskillende lokaliteite wat in die matige produksiegebiede geleë is
Table 22 Grain yield (kg/ha^{-1}) of cultivars during the 2019/20 and 2020/21 growing season for the various localities situated in the moderate production areas

Kultivar Cultivar	2019/20							2020/21								
	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Stoffberg	Gem/Mean	Barberspan	Bergville	Cedara	Greytown	Kroonstad	Leeudoringstad	Potchefstroom	Stoffberg	Gem/Mean
PAN 1479 R	-	-	-	-	-	-	-	1726	3396	4299	2274	2392	1946	2566	3456	2757
DM 52R19	-	-	-	-	-	-	-	1759	3496	5012	2514	2153	1746	3577	4313	3071
DM 5953 RSF	4682	3532	3635	3249	2710	1243	3175	3321	4201	4337	2599	2380	2075	3110	3631	3207
RA 4918 R	-	-	-	-	-	-	-	1706	3584	4747	2511	3532	2000	2832	3852	3096
DM 5351 RSF	3274	4286	4183	2720	2669	1204	3056	1647	3476	4826	2541	2913	1402	3248	3919	2997
NS 5258 R	-	-	-	-	-	-	-	1253	3365	4509	2405	2356	2031	2664	3801	2798
SSS 5449 (tuc)	4041	3899	3662	2535	2204	2132	3079	1690	2417	3666	2329	3072	1828	2404	4125	2692
PAN 1532 R	-	-	-	-	-	-	-	1489	4061	3915	2467	2911	1679	3114	3327	2870
RA 565 R	-	-	-	-	-	-	-	1727	4320	4066	2844	3020	1686	3436	3898	3125
LS 6851 R	4344	3370	3978	2428	2359	1630	3018	1869	3903	4401	2252	3068	1767	3029	3344	2954
LG60155R	-	-	-	-	-	-	-	1627	3880	2111	2643	2810	1636	3180	3810	2712
SSS 5052 (tuc)	3422	3447	3121	2804	2642	2735	3029	1643	4137	2831	2529	2340	1583	3080	3150	2662
DM 5302 RSF	4284	3883	3713	2312	1981	1593	2961	1438	3382	3701	2601	2593	1683	2718	3670	2723
PAN 1555 R	4793	4235	3773	2800	2773	1761	3356	1662	3907	4092	2625	3207	1232	2612	3341	2835
PAN 1521 R	3424	3147	3944	2836	2662	1744	2960	2549	4270	4516	2470	3229	2071	2777	3340	3153
RA 568 R	-	-	-	-	-	-	-	1187	3525	3569	2513	3508	1852	2718	3453	2791
NS 5909 R	4270	3747	3806	2647	2493	1650	3102	2123	3891	4190	2565	2933	1979	2673	3393	2968
RA 660 R	-	-	-	-	-	-	-	1448	3820	3780	2933	3245	2348	2990	3814	3047
DM 59R03	-	-	-	-	-	-	-	1532	4405	3858	2390	3120	2161	3361	4158	3123
DM 60T05	-	-	-	-	-	-	-	1787	4235	4135	2532	3259	1868	2875	3989	3085
SSS 6560 (tuc)	4078	3342	3976	2611	2493	1360	2977	1731	3775	3590	2699	3091	1277	2808	4218	2899
LS 6164 R	3670	3452	3666	2577	2758	2577	3117	1676	3849	4255	2296	3549	1971	3025	3714	3042
P61T38 R	4001	4143	4078	2606	2617	1410	3143	1780	3977	4121	2608	2663	1573	3246	4113	3010
LS 6860 R	3748	3898	3642	2757	3071	1795	3152	1274	3664	3901	2677	2857	1925	2921	3397	2827
NS 6448 R	4825	4692	3867	2573	3420	1662	3506	2038	4115	3904	2508	3175	1864	3318	3703	3078
P64T39 R	4347	3630	4071	3025	3143	1501	3286	1947	4232	3894	2872	3633	2282	3386	4019	3283
DM 68R09	-	-	-	-	-	-	-	1739	4399	4178	2828	3162	2069	3009	4074	3182
PAN 1644 R	4344	3998	4076	2910	3480	1524	3389	1247	4220	4252	2588	3306	1719	3098	3745	3022
DM 6.8i RR	4982	4417	4095	2755	3507	1522	3546	1673	3651	5085	2447	2824	2325	3666	3785	3182
P71T74 R	3908	3564	4316	3176	2471	991	3071	2300	3806	4308	2531	3166	1714	3392	3542	3095
P48T48 R	3718	3777	3645	3394	1057	1563	2859	-	-	-	-	-	-	-	-	-
LDC 5.3	5315	3856	3776	2692	2755	2933	3555	-	-	-	-	-	-	-	-	-
NA 5509 R	4318	3737	3683	3249	2590	1301	3146	-	-	-	-	-	-	-	-	-
PAN 1575 R	3775	4177	3242	2704	1853	1734	2914	-	-	-	-	-	-	-	-	-
LDC 5.9	4588	3709	3496	2707	3637	1138	3213	-	-	-	-	-	-	-	-	-
DM 5901 RSF	4837	3801	4257	2779	3413	1856	3491	-	-	-	-	-	-	-	-	-
PAN 1663	4133	3025	3067	2545	1316	1512	2600	-	-	-	-	-	-	-	-	-
LS 6161 R	3557	3559	3957	2749	2395	1563	2963	-	-	-	-	-	-	-	-	-
LS 6868 R	3857	3347	3782	2222	2257	1874	2890	-	-	-	-	-	-	-	-	-
DM 6968 RSF	3184	4400	3812	3008	2250	3056	3285	-	-	-	-	-	-	-	-	-
Gem/Mean	4133	3788	3797	2763	2606	1734	3137	1753	3845	4068	2553	2982	1843	3028	3736	2976

Tabel 23 Opbrengswaarskynlikheid (%) van kultivars geëvalueer in 2018/19, 2019/20 en 2020/21 vir die warm droëland produksiegebiede by verskillende opbrengspotensiaal

Table 23 Yield probability (%) of cultivars in the 2018/19, 2019/20 and 2020/21 for the warm dryland production areas as different yield potentials

Kultivar	Opbrengspotensiaal/Yield potential (t/ha)							Regressielyn/Regression line	
Cultivar	2,0	2,5	3,0	3,5	4,0	4,5	5,0	Fprob	R2
DM 5953 RSF	78	74	68	60	50	42	35	0,113	0,34
DM 5351 RSF	49	46	43	39	37	35	34	0,031	0,55
SSS 5449 (tuc)	37	32	26	22	19	18	18	0,213	0,24
LS 6851 R	55	54	52	51	49	47	46	0,026	0,59
SSS 5052 (tuc)	52	52	53	54	54	54	55	0,007	0,71
DM 5302 RSF	44	42	40	38	38	37	38	0,006	0,73
PAN 1521 R	65	66	68	68	69	67	66	0,015	0,65
NS 5909 R	25	31	39	49	60	69	75	0,027	0,58
SSS 6560 (tuc)	62	59	56	52	47	43	40	0,045	0,51
LS 6164 R	55	53	51	48	45	43	41	0,016	0,63
P61T38 R	72	66	59	49	39	32	26	0,061	0,45
LS 6860 R	16	21	29	41	54	65	74	0,005	0,76
NS 6448 R	61	60	58	54	51	48	46	0,030	0,57
P64T39 R	28	34	42	52	62	70	76	0,004	0,77
PAN 1644 R	21	24	29	37	46	55	62	0,001	0,85
DM 6.8i RR	72	71	70	67	63	58	54	0,129	0,34
P71T74 R	59	61	64	66	67	67	67	0,129	0,34

Tabel 24 Graanopbrengs (kg/ha^{-1}) van kultivars gedurende die 2019/20 en 2020/21 groeiseisoen ten opsigte van die verskillende lokaliteite wat in die warm produksiegebiede geleë is

Table 24 Grain yield (kg/ha^{-1}) of cultivars during the 2019/20 and 2020/21 growing season for the various localities situated in the warm production areas

Kultivar Cultivar	2019/20				2020/21						
	Hoopstad	Marble Hall	Schweizer-Reneke	Gem/Mean	Brits	Groblersdal (Agricol)	Groblersdal (Agri Seed)	Marble Hall	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Gem
PAN 1479 R	-	-	-	-	3508	3716	3471	2986	2795	2216	3115
DM 52R19	-	-	-	-	3973	4433	3749	2670	3250	1891	3327
DM 5953 RSF	3688	3012	2334	3012	3955	3363	3402	3517	3332	2323	3315
RA 4918 R	-	-	-	-	5117	4076	3455	3089	3779	2474	3665
DM 5351 RSF	2824	2797	2426	2682	3308	3514	3502	2480	4311	1849	3161
NS 5258 R	-	-	-	-	4324	3793	3195	2470	3909	2134	3304
SSS 5449 (tuc)	2417	2226	1595	2079	3225	2467	2911	2189	3707	2423	2820
PAN 1532 R	-	-	-	-	3954	3872	3453	3007	3400	2302	3331
RA 565 R	-	-	-	-	3925	3410	3446	2976	3587	2655	3333
LS 6851 R	3512	3012	2099	2875	4025	4386	3501	2677	4144	2954	3614
LG60155R	-	-	-	-	4535	3428	2958	2924	3313	2074	3205
SSS 5052 (tuc)	2949	3012	2197	2719	3703	3793	3400	2905	4227	2246	3379
DM 5302 RSF	3257	3415	1779	2817	4241	3309	3294	2584	3314	2462	3201
PAN 1555 R	3190	2754	2147	2697	3502	3597	2865	2366	4593	1976	3150
PAN 1521 R	3506	3222	2368	3032	4667	4309	3646	3365	4172	2237	3733
RA 568 R	-	-	-	-	4523	4543	3380	2205	4054	2467	3529
NS 5909 R	3785	3139	2601	3175	5319	3063	3103	2630	4157	2333	3434
RA 660 R	-	-	-	-	4070	2985	3382	2721	4627	2681	3411
DM 59R03	-	-	-	-	4659	3442	3646	3711	4000	2260	3620
DM 60T05	-	-	-	-	4465	4498	3395	3462	4207	2217	3707
SSS 6560 (tuc)	2947	3578	1947	2824	3501	4122	3354	2743	4045	2429	3366
LS 6164 R	2625	3549	2146	2773	3909	3382	3377	2816	3168	2677	3222
P61T38 R	2697	3447	2183	2776	3204	3701	3608	2764	3976	2304	3260
LS 6860 R	4160	3541	1937	3213	4658	3354	2706	2457	3821	2501	3249
NS 6448 R	3018	3446	2120	2861	3718	3871	2875	2934	4161	2501	3343
P64T39 R	4202	2955	2912	3356	4481	3526	3301	2813	3985	2081	3365
DM 68R09	-	-	-	-	3836	4458	3072	2873	4263	2873	3563
PAN 1644 R	3991	3429	2458	3292	3757	3682	3335	2155	4765	2086	3297
DM 6.8i RR	3395	4496	2093	3328	4811	4466	3322	3048	4552	2483	3780
P71T74 R	2954	5001	1851	3269	3797	4385	3035	2643	3689	2235	3297
P48T48 R	2864	2673	1062	2199	-	-	-	-	-	-	-
LDC 5.3	2596	2091	2153	2280	-	-	-	-	-	-	-
NA 5509 R	3458	3113	1905	2825	-	-	-	-	-	-	-
PAN 1575 R	2816	3143	1341	2434	-	-	-	-	-	-	-
LDC 5.9	3482	3035	1846	2788	-	-	-	-	-	-	-
DM 5901 RSF	3497	3478	2542	3173	-	-	-	-	-	-	-
PAN 1663	3187	3232	1664	2694	-	-	-	-	-	-	-
LS 6161 R	3069	3239	2242	2850	-	-	-	-	-	-	-
LS 6868 R	2547	1725	1186	1819	-	-	-	-	-	-	-
DM 6968 RSF	3034	3733	2456	3074	-	-	-	-	-	-	-
Gem/Mean	3202	3196	2057	2818	4089	3765	3305	2806	3910	2345	3370

Tabel 25 Saamgevatte inligting van al die lokaliteite in die koel produksiegebiede, 2020/21

Table 25 Summerised information for all the localities in the cool production areas, 2020/21

Kultivar Cultivar	Dae tot blom/ Days to flowe-ring	Fisiologies ryp/ Physological mature	Oes datum/ Harvest date	Planthoogte/ Plant height	Peulhoogte/ Pod height	Omval/ Lod-ging	Groenstam/ Green stem	Oopspring/ Shattering	Planttelling/ Number of plants	Persentasie ongewenste sade/Percentage undesirable seed	Massa 100 sade/ Mass 100 seeds	Olie persen-tasie/Oil percentage	Ru-proteïen-persentasie/ Crude protein percentage	Opbrengs/ Yield
PAN 1479 R	56	119	143	74	8	1,13	2,63	1,17	241	0,19	17,72	18,60	41,35	2597
DM 52R19	56	120	139	62	4	1,17	1,38	1,17	213	0,36	16,46	20,16	39,51	2805
DM 5953 RSF	57	121	138	84	9	1,17	1,04	1,21	230	0,23	16,22	20,07	40,13	3532
RA 4918 R	59	121	141	68	6	1,13	1,08	1,25	227	0,13	15,80	19,99	39,97	3046
DM 5351 RSF	57	122	141	75	8	1,13	2,75	1,21	248	0,10	16,75	19,49	39,06	3244
NS 5258 R	58	120	140	64	5	1,17	1,04	1,08	229	0,19	14,76	19,76	41,01	2823
SSS 5449 (tuc)	64	128	144	84	10	1,13	1,71	1,21	235	0,54	12,77	19,44	40,17	2832
PAN 1532 R	66	131	146	81	10	1,13	1,71	1,00	238	0,47	14,34	18,74	40,12	2814
RA 565 R	65	133	145	81	10	1,13	1,33	1,04	237	0,46	14,28	19,71	39,45	3153
LS 6851 R	64	132	147	75	9	1,21	1,79	1,04	235	0,49	12,66	19,55	40,12	3151
LG60155R	66	132	148	79	8	1,17	1,17	1,08	217	0,89	13,83	18,85	41,24	3113
SSS 5052 (tuc)	66	131	150	90	12	1,13	1,92	1,00	257	0,42	12,60	18,73	40,22	2990
DM 5302 RSF	63	129	145	75	8	1,08	1,08	1,13	232	0,23	14,79	18,45	41,53	3221
PAN 1555 R	68	134	147	91	13	1,13	1,46	1,00	250	0,29	15,47	18,81	40,06	3261
PAN 1521 R	68	128	147	97	13	1,42	1,33	1,13	239	0,53	14,95	18,71	40,37	3717
RA 568 R	66	130	144	70	7	1,04	1,21	1,08	237	0,53	14,16	19,74	40,05	3092
NS 5909 R	69	134	148	91	11	1,29	2,58	1,00	243	0,31	14,39	19,45	39,19	3240
RA 660 R	69	133	147	76	10	1,08	1,29	1,08	243	0,91	13,56	19,51	40,22	3117
DM 59R03	71	135	148	98	13	1,54	2,04	1,00	227	0,75	15,79	18,32	40,66	3309
DM 60T05	70	136	149	85	12	1,13	2,29	1,04	269	0,41	13,84	18,06	41,94	3292
SSS 6560 (tuc)	69	134	153	97	13	1,25	1,83	1,04	237	0,46	13,78	18,82	40,17	2945
LS 6164 R	70	138	151	102	14	1,50	2,33	1,00	247	0,38	13,67	18,45	39,93	3170
P61T38 R	70	137	150	76	12	1,38	2,29	1,13	229	0,53	14,42	18,76	40,07	3216
LS 6860 R	72	141	157	103	14	1,33	2,46	1,00	225	0,52	16,70	18,27	39,00	2964
NS 6448 R	69	140	150	86	11	1,13	1,71	1,08	209	0,40	14,51	19,56	39,57	3184
P64T39 R	72	143	154	100	13	1,46	2,00	1,00	258	1,08	15,29	18,53	40,51	3489
DM 68R09	68	141	152	90	11	1,17	2,33	1,00	228	0,51	14,61	18,07	40,05	3239
PAN 1644 R	69	137	150	92	12	1,17	1,21	1,00	244	1,25	14,46	18,54	40,60	3462
DM 6.8i RR	72	142	154	103	13	1,63	2,21	1,00	235	0,38	15,32	17,86	38,22	3516
P71T74 R	73	143	158	105	15	1,63	2,33	1,00	244	0,37	14,95	17,18	40,20	3352
Gem/Mean	66	132	148	85	10	1,24	1,78	1,07	237	0,48	14,76	18,94	40,16	3163

Tabel 26 Saamgevatte inligting van al die lokaliteite in die matige produksiegebiede, 2020/21

Table 26 Summerised information for all the localities in the moderate production areas, 2020/21

Kultivar Cultivar	Dae tot blom/ Days to flowe-ring	Fisiologies ryp/ Physological mature	Oes datum/ Harvest date	Planthoogte/ Plant height	Peulhoogte/ Pod height	Omval/ Lod-ging	Groenstam/ Green stem	Oopspring/ Shattering	Planttelling/ Number of plants	Persentasie ongewenste sade/Percentage undesirable seed	Massa 100 sade/ Mass 100 seeds	Olie persen-tasie/Oil percentage	Ru-proteïen-persentasie/ Crude protein percentage	Opbrengs/ Yield
PAN 1479 R	38	108	133	68	6	1,00	2,10	1,20	267	0,26	18,17	19,92	40,80	2757
DM 52R19	40	110	133	64	7	1,05	1,76	1,00	219	0,14	17,30	21,60	38,65	3071
DM 5953 RSF	41	112	134	68	10	1,05	1,57	1,20	288	0,30	16,25	21,29	39,26	3207
RA 4918 R	46	109	133	69	8	1,00	2,00	1,20	259	0,24	15,99	21,33	38,92	3096
DM 5351 RSF	40	113	135	74	8	1,05	2,38	1,20	286	0,21	17,07	20,83	39,01	2997
NS 5258 R	42	110	134	68	6	1,00	1,48	1,20	244	0,37	14,68	21,12	39,68	2798
SSS 5449 (tuc)	51	112	134	70	11	1,00	1,81	1,20	236	0,37	13,59	21,10	39,96	2692
PAN 1532 R	52	118	140	72	12	1,00	1,62	1,00	269	0,22	15,09	20,51	38,88	2870
RA 565 R	53	119	139	71	12	1,00	1,62	1,80	267	0,26	16,44	20,89	39,52	3125
LS 6851 R	53	123	140	60	9	1,00	1,95	1,00	267	0,27	14,43	20,82	40,79	2954
LG60155R	55	120	138	64	9	1,00	1,52	1,00	206	0,29	15,76	20,57	40,31	2712
SSS 5052 (tuc)	56	119	140	85	17	1,00	1,43	1,00	308	0,37	14,58	20,28	39,75	2662
DM 5302 RSF	54	117	135	67	11	1,00	1,57	1,00	257	0,16	16,63	19,71	41,79	2723
PAN 1555 R	60	120	140	85	18	1,05	1,67	1,00	256	0,24	16,80	20,19	40,62	2835
PAN 1521 R	56	119	139	88	15	1,05	1,52	1,00	281	0,16	16,02	20,26	39,51	3153
RA 568 R	57	120	140	66	13	1,00	2,00	1,00	261	0,23	14,73	20,79	40,54	2791
NS 5909 R	58	122	144	85	19	1,00	1,86	1,00	233	0,36	15,53	20,73	39,31	2968
RA 660 R	58	121	140	70	13	1,00	1,24	1,00	228	0,23	15,17	21,19	39,29	3047
DM 59R03	57	121	142	82	13	1,14	1,90	1,20	249	0,30	16,88	20,50	39,75	3123
DM 60T05	59	120	142	72	14	1,00	1,95	1,00	285	0,20	15,01	19,86	40,63	3085
SSS 6560 (tuc)	56	123	144	90	16	1,10	2,33	1,00	246	0,28	15,74	20,68	39,35	2899
LS 6164 R	57	125	145	96	19	1,14	2,00	1,00	267	0,20	15,15	20,26	39,11	3042
P61T38 R	58	124	145	65	15	1,00	1,81	1,00	237	0,37	15,45	20,25	39,71	3010
LS 6860 R	61	126	144	98	19	1,10	1,62	1,00	227	0,15	17,66	20,36	37,90	2827
NS 6448 R	59	126	142	81	16	1,00	1,71	1,00	207	0,39	15,34	20,79	39,11	3078
P64T39 R	57	125	144	91	17	1,05	1,62	1,00	301	0,37	16,34	20,39	39,33	3283
DM 68R09	62	126	145	83	15	1,19	2,52	1,00	243	0,33	15,51	20,19	38,94	3182
PAN 1644 R	60	124	144	84	15	1,14	1,71	1,00	257	0,38	15,78	20,10	40,58	3022
DM 6.8i RR	64	130	150	106	20	1,14	2,38	1,00	231	0,43	17,08	19,38	37,72	3182
P71T74 R	62	129	150	102	19	1,00	2,71	1,00	287	0,24	17,54	18,80	39,69	3095
Gem/Mean	54	120	140	78	13	1,04	1,85	1,07	256	0,28	15,92	20,49	39,61	2976

Tabel 27 Saamgevatte inligting van al die lokaliteite in die warmer produksiegebiede, 2020/21

Table 27 Summerised information for all the localities in the warmer production areas, 2020/21

Kultivar Cultivar	Dae tot blom/ Days to flowe-ring	Fisiologies ryp/ Physological mature	Oes datum/ Harvest date	Planthoogte/ Plant height	Peulhoogte/ Pod height	Omval/ Lod-ging	Groenstam/ Green stem	Oopspring/ Shattering	Planttelling/ Number of plants	Persentasie ongewenste sade/Percentage undesirable seed	Massa 100 sade/ Mass 100 seeds	Olie persen-tasie/Oil percentage	Ru-proteïen-persentasie/ Crude protein percentage	Opbrengs/ Yield
PAN 1479 R	35	102	120	79	9	1,00	1,53	1,40	251	0,06	17,87	21,25	39,22	3115
DM 52R19	36	103	121	74	7	1,06	1,60	1,00	236	0,23	16,19	22,68	36,97	3327
DM 5953 RSF	36	103	121	80	9	1,00	1,47	1,20	258	0,20	16,17	21,91	39,10	3315
RA 4918 R	37	104	124	79	9	1,11	1,60	1,20	262	0,24	15,61	21,53	38,83	3665
DM 5351 RSF	37	105	127	84	11	1,11	2,60	1,20	233	0,27	16,47	21,42	38,38	3161
NS 5258 R	38	104	125	81	10	1,00	1,80	1,20	260	0,27	14,88	21,68	39,59	3304
SSS 5449 (tuc)	43	106	126	81	11	1,00	2,20	2,00	264	0,16	15,28	21,60	40,42	2820
PAN 1532 R	46	110	128	77	14	1,06	2,27	1,00	268	0,26	15,74	20,59	40,30	3331
RA 565 R	46	109	126	83	11	1,00	2,20	1,00	269	0,10	16,84	21,88	38,77	3333
LS 6851 R	46	111	128	67	11	1,00	2,33	1,00	240	0,25	14,47	22,03	38,93	3614
LG60155R	46	109	127	71	9	1,11	2,20	1,40	259	0,28	16,72	21,31	40,21	3205
SSS 5052 (tuc)	46	111	130	90	16	1,06	2,60	1,20	259	0,19	15,71	20,66	39,63	3379
DM 5302 RSF	44	106	127	80	11	1,00	2,40	1,20	258	0,23	17,36	21,06	40,81	3201
PAN 1555 R	51	112	130	96	19	1,00	2,00	1,20	267	0,28	17,48	20,28	41,15	3150
PAN 1521 R	47	110	130	90	15	1,06	1,80	1,00	269	0,24	17,66	20,83	40,12	3733
RA 568 R	46	108	128	71	11	1,00	2,20	1,00	270	0,51	15,96	21,43	40,05	3529
NS 5909 R	51	112	131	87	17	1,00	2,60	1,20	256	0,32	16,43	21,71	38,52	3434
RA 660 R	51	110	130	75	11	1,00	1,80	1,00	265	0,07	15,12	21,66	40,03	3411
DM 59R03	49	111	131	95	15	1,00	2,40	1,00	259	0,11	17,83	21,36	40,04	3620
DM 60T05	50	112	131	81	13	1,00	2,40	1,00	263	0,22	15,49	20,85	40,64	3707
SSS 6560 (tuc)	49	113	131	98	19	1,00	2,60	1,00	267	0,31	15,95	21,15	39,96	3366
LS 6164 R	50	113	131	104	21	1,00	2,33	1,00	272	0,32	16,35	20,68	39,78	3222
P61T38 R	52	115	131	73	15	1,00	2,13	1,00	268	0,42	15,21	20,30	40,21	3260
LS 6860 R	52	114	132	100	20	1,06	2,07	1,00	265	0,19	17,72	20,74	39,53	3249
NS 6448 R	53	113	132	87	16	1,00	1,93	1,20	258	0,37	15,31	21,28	39,54	3343
P64T39 R	50	114	132	98	22	1,00	2,20	1,00	260	0,37	16,37	21,13	40,23	3365
DM 68R09	55	117	132	98	15	1,33	2,33	1,00	252	0,27	15,07	20,34	40,29	3563
PAN 1644 R	56	116	132	100	18	1,00	2,47	1,00	258	0,38	15,92	20,41	41,01	3297
DM 6.8i RR	54	116	132	110	21	1,22	2,60	1,20	264	0,30	17,90	20,36	38,91	3780
P71T74 R	57	119	132	111	22	1,28	2,87	1,00	255	0,20	16,69	19,55	39,92	3297
Gem/Mean	47	110	128	87	14	1,05	2,18	1,13	260	0,25	16,26	21,12	39,70	3370