

South African Soybean Crop

Quality Report 2024/2025 Season



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Index

	Page
Introduction	1 - 2
Provincial contribution to the production of the 2024/25 crop (Graph 1)	1
Production	2 - 4
Soybean production overview, dryland vs irrigation over two seasons (Table 1)	2
Total RSA area utilised for soybean production from 2014/15 to 2024/25 (Graph 2)	3
Soybean production in RSA from 2014/15 to 2024/25 (Graph 3)	3
RSA soybean yield from 2014/15 to 2024/25 seasons (Graph 4)	3
Area utilised for soybean production in the Free State, Mpumalanga and North West since 2014/15 (Graphs 5, 7 and 9)	4
Soybean production in the Free State, Mpumalanga and North West since 2014/15 (Graphs 6, 8 and 10)	4
Supply and Demand	5
Soybean supply and demand overview for the 2025/26 marketing season (Mar 2025 – Jan 2026) (Graph 11)	5
SAGIS Soybean Supply and Demand Table (Table S1)	6
Soybean: Supply and demand graphs over 10 marketing seasons (Graphs 12 - 15)	7
SAGIS Import (Table S2) and Export (Table S3) figures per country	8
SAGIS Import (Table S4) and Export (Table S5) figures per harbour	9
Quality of soybeans imported from the Ukraine and USA for the period March 2025 - Feb 2026	10
SAGIS Oil Seeds Products Manufactured (per month) (Table S6)	11
SAGIS Oil Seeds Products Imported (per month) (Table S7)	12
SAGIS Oil Seeds Products Exported (per month) (Table S8)	13
RSA Production Regions	14
RSA Provinces (Figure 1)	14
RSA Crop Production Regions (Figure 2)	15
Soybean Crop Quality 2024/25 - Summary of results	16 - 20
Average % sclerotia per province over five seasons (Graph 16)	16

	Page
Average % foreign matter per province over five seasons (Graph 17)	17
Average % soybeans and parts of soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve per province over five seasons (Graph 18)	17
Average % defective soybeans on the 4.75 mm round hole sieve per province over five seasons (Graph 19)	18
Average % soiled soybeans per province over five seasons (Graph 20)	18
Approximation of test weight per province over three seasons (Table 2)	18
Comparison of the test weight per province over five seasons (Graph 21)	19
Comparison of weighted average nutritional component values on a dry and 'as is' basis over five seasons (Table 3)	19
Average crude protein content per province over five seasons (Graph 22)	20
Average crude fat content per province over five seasons (Graph 23)	20
Average crude fibre content per province over five seasons (Graph 24)	20
Average ash content per province over five seasons (Graph 25)	20
South African Soybean Crop Quality Averages 2024/25 vs 2023/24 (Table 4)	21
List of grain production region with silo/intake stands and type of storage structure	22 - 24
Regional soybean quality for the 2024/25 season	25 – 31
Methods	32 - 33
SANAS Certificate and Schedule of Accreditation	34 - 37
2024/25 Report of the ARC Grain Crops National Soybean Cultivar Trials	38 - 80
Grading Regulations for Soybeans, Government Notice NO. R. 370 of 21 April 2017	81 - 91



South African

Commercial Soybean Quality for the 2024/2025 Season

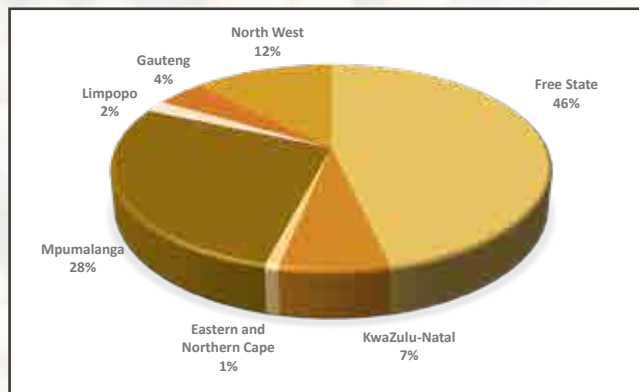
Acknowledgements

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- The Oilseeds Advisory Committee (OAC) as well as the Oil & Protein Seed Development Trust (OPDT) for its financial support in conducting this survey.
- Agbiz Grain and its members for providing the samples to make the survey possible.
- The Crop Estimates Committee (CEC) of the Department of Agriculture (NDA) for providing production related figures.
- South African Grain Information Service (SAGIS) for providing supply and demand figures relating to soybeans.

Introduction

The final commercial soybean crop figure of the 2024/25 season, as overseen by the National Crop Estimates Liaison Committee (CELC), is 2 800 000 tons. This all-time high record crop represents a year-on-year increase of almost 52% (952 000 tons). The major soybean producing provinces, namely the Free State and Mpumalanga, contributed 74% of the total crop.



Graph 1: Provincial contribution to the production of the 2024/25 soybean crop
Figures provided by the CEC.

During the harvesting season, a representative sample of each delivery of soybeans at the various silos was taken according to the prescribed grading regulations. The sampling procedure for the samples used in this survey is described on page 32. Two hundred and fifty composite soybean samples, representing the different production regions where soybeans are cultivated, were analysed for quality. The samples were graded, milled and analysed for moisture, crude protein, crude fat, crude fibre and ash content.

This is the fourteenth annual soybean crop quality survey performed by The Southern African Grain Laboratory NPC (SAGL). SAGL was established in 1997 at the request of the Grain Industry. SAGL is an ISO 17025 accredited testing laboratory and participates in various proficiency testing schemes, both nationally and internationally, as part of our ongoing quality assurance procedures to demonstrate technical competency and international comparability.

The goal of this crop quality survey is the compilation of a detailed database, accumulating quality data collected over several seasons on the national commercial soybean crop, which is essential in assisting with decision making processes. The data reveal general tendencies, highlight quality differences in the commercial soybeans produced in different local production regions and provide important information on the quality of commercial soybeans intended for export when applicable.

The results of this survey are available on the SAGL website (www.sagl.co.za). Hard copy reports are distributed to all Directly Affected Groups and interested parties. The report is also available to read or download from the website.

In addition to the quality information, production figures (obtained from the Crop Estimates Committee (CEC)) relating to hectares planted, tons produced and yields obtained on a national as well as provincial basis, over an eleven-season period, are provided in this report. SAGIS (South African Grain Information Service) supply and demand information is provided in table and graph format. Import and export figures over several seasons as well as information on the manufacture, import and export of oil seeds products, are also included.

The 2024/25 Report of the National Soybean Cultivar Trials conducted by the ARC-Grain Crops in Potchefstroom, is included in totality and as received, in this report. The national grading regulations as published in Government Notice NO. R. 370 of 21 April 2017 are also provided.

Production

Soybeans are the most important oilseed crop produced in South Africa, driven mainly by the demand for protein feed in the animal feed industry. Soybeans have benefits to producers in crop rotation programs, especially as part of conservation agriculture, but also due to lower input requirements compared to other commodities, for example wheat and maize.

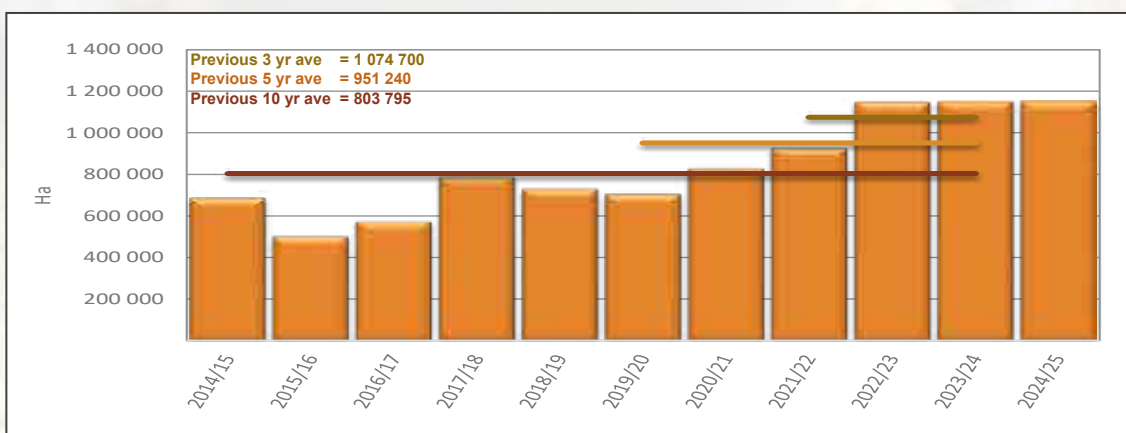
Province	Type of production	2024/25			2023/24		
		Hectares planted, ha	Production, tons	Yield, t/ha	Hectares planted, ha	Production, tons	Yield, t/ha
Western Cape	Dryland	-	-	-	-	-	-
	Irrigation	-	-	-	-	-	-
	Total	-	-	-	-	-	-
Northern Cape	Dryland	-	-	-	-	-	-
	Irrigation	2 000	7 500	3.75	1 200	4 380	3.65
	Total	2 000	7 500	3.75	1 200	4 380	3.65
Free State	Dryland	545 000	1 227 000	2.25	530 000	636 460	1.20
	Irrigation	20 000	73 000	3.65	15 000	52 500	3.50
	Total	565 000	1 300 000	2.30	545 000	688 960	1.26
Eastern Cape	Dryland	5 100	14 825	2.91	4 900	12 910	2.63
	Irrigation	400	1 400	3.50	400	1 400	3.50
	Total	5 500	16 225	2.95	5 300	14 310	2.70
KwaZulu-Natal	Dryland	33 500	135 000	4.03	36 500	128 000	3.51
	Irrigation	13 500	55 350	4.10	10 500	45 900	4.37
	Total	47 000	190 350	4.05	47 000	173 900	3.70
Mpumalanga	Dryland	305 500	735 650	2.41	314 500	604 750	1.92
	Irrigation	9 500	36 100	3.80	5 500	19 250	3.50
	Total	315 000	771 750	2.45	320 000	624 000	1.95
Limpopo	Dryland	4 000	10 075	2.52	4 000	7 850	1.96
	Irrigation	12 500	41 900	3.35	17 000	64 600	3.80
	Total	16 500	51 975	3.15	21 000	72 450	3.45
Gauteng	Dryland	50 000	107 400	2.15	54 500	78 525	1.44
	Irrigation	2 000	7 000	3.50	1 500	5 475	3.65
	Total	52 000	114 400	2.20	56 000	84 000	1.50
North West	Dryland	136 000	307 000	2.26	139 000	138 000	0.99
	Irrigation	12 000	40 800	3.40	16 000	48 000	3.00
	Total	148 000	347 800	2.35	155 000	186 000	1.20
RSA	Dryland	1 079 100	2 536 950	2.35	1 083 400	1 606 495	1.48
	Irrigation	71 900	263 050	3.66	67 100	241 505	3.60
	Total	1 151 000	2 800 000	2.43	1 150 500	1 848 000	1.61

Figures provided by the CEC.

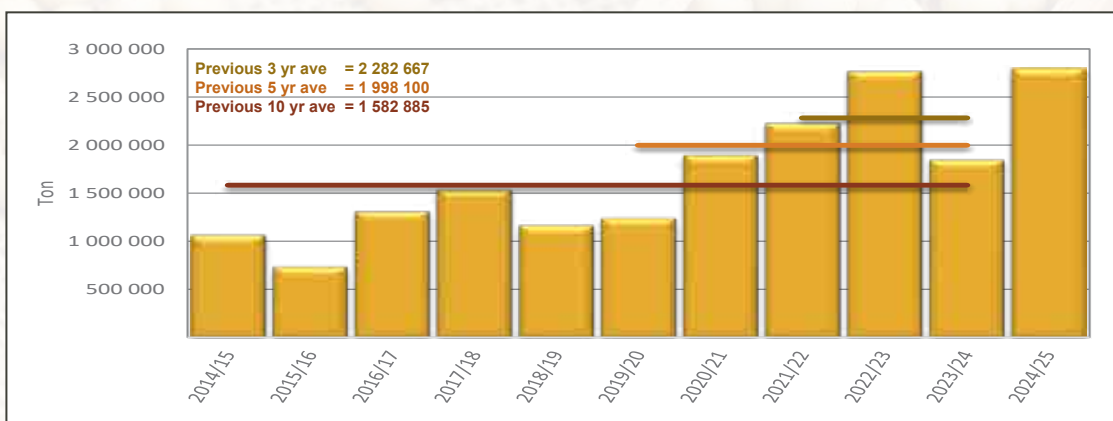
The 2.8 million tons of soybeans produced this season is a 22.7% increase compared to the previous three-year average, a 40.1% increase compared to the previous five-year average and a 76.9% increase compared to the previous ten-year average.

The 1 151 000 hectares area utilised for commercial soybean crop production showed a slight increase of just 500 hectares compared to the 2023/24 production season. This area planted is the highest figure on record for the fifth consecutive year. The average national yield of 2.43 t/ha increased by 50% compared to the 1.61 of the previous season but equals the 2.41 t/ha of the 2022/23 season.

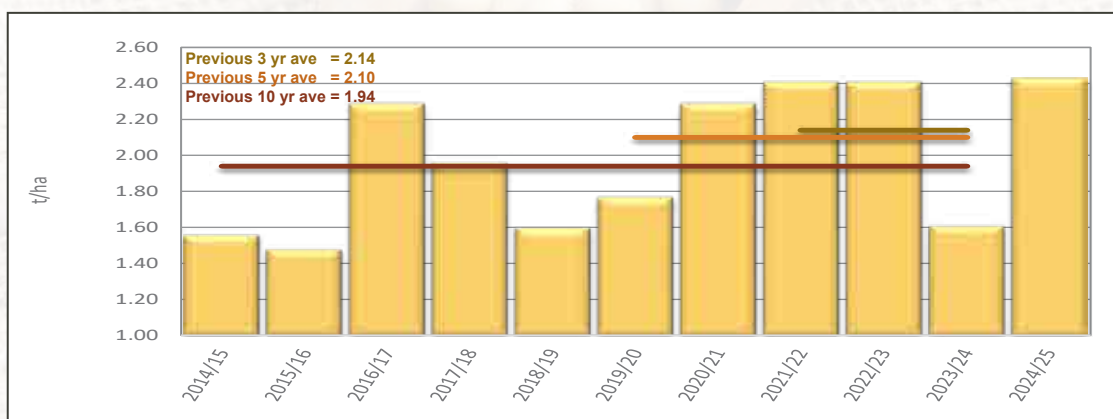
Soybeans account for more than half of the world's oilseed production. According to the *World Agricultural Supply and Demand Estimates Report (WASDE – 669)* an estimated 427.19 million metric tons of soybeans were produced during the 2024/25 season. Brazil (40%) and the United States (28%) are by far the largest contributors to this total. The world soybean production for the 2025/26 season is projected to be 427.18 million metric tons.



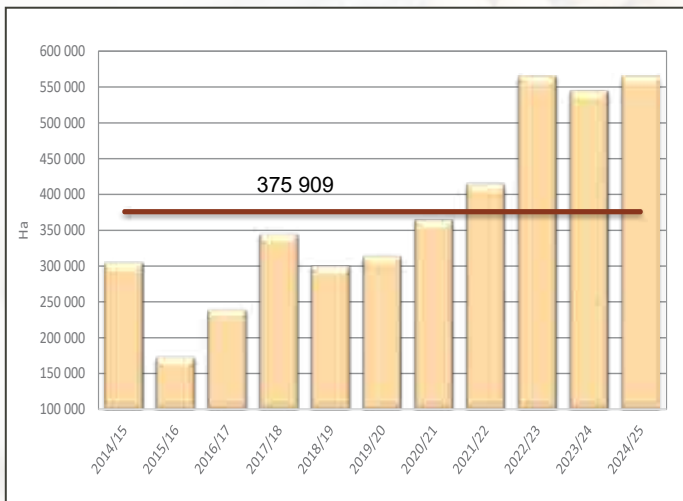
Graph 2: Total RSA area utilised for soybean production from 2014/15 to 2024/25



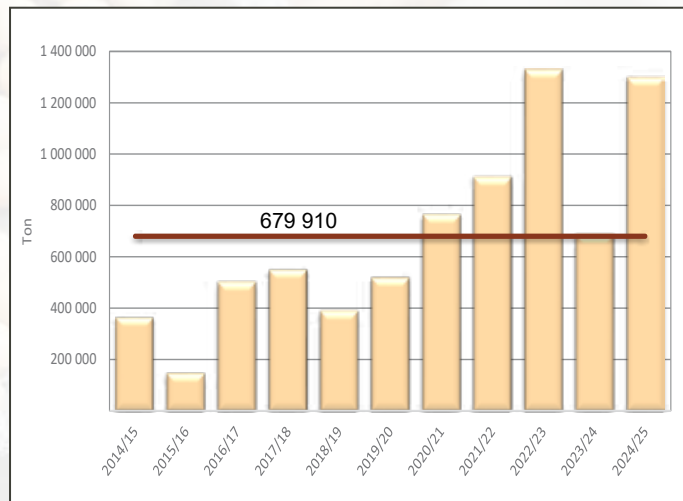
Graph 3: Soybean production in RSA from 2014/15 to 2024/25



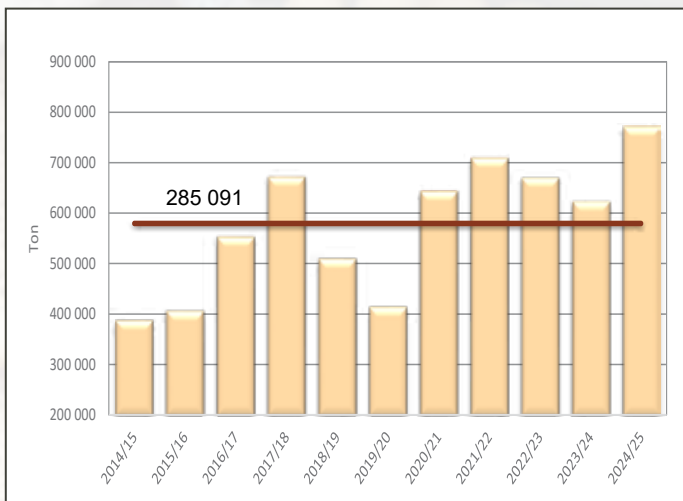
Graph 4: RSA soybean yield from 2014/15 to 2024/25



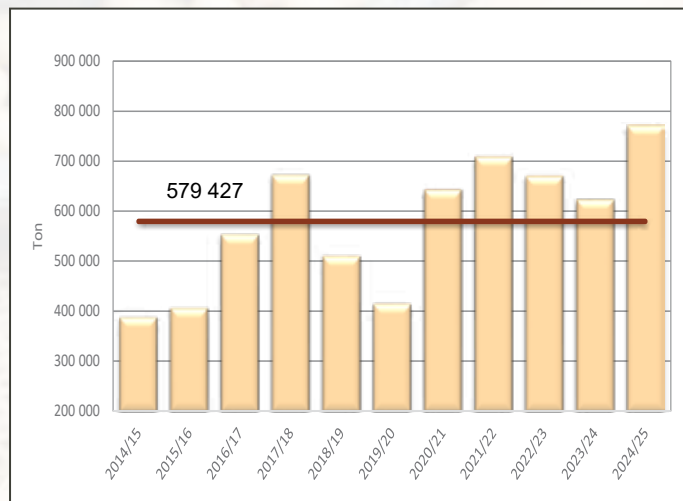
Graph 5: Area utilised for soybean production in the Free State since 2014/15



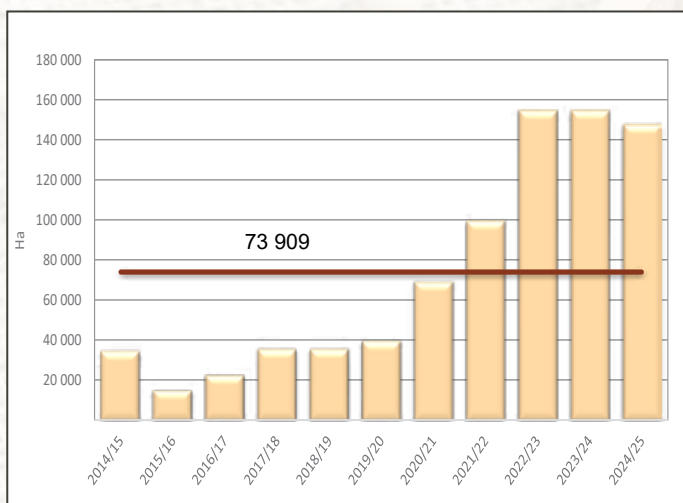
Graph 6: Soybean production in the Free State since 2014/15



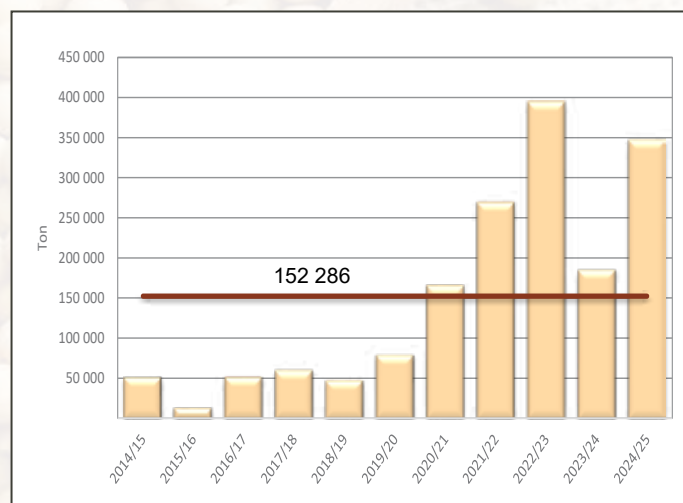
Graph 7: Area utilised for soybean production in Mpumalanga since 2014/15



Graph 8: Soybean production in Mpumalanga since 2014/15



Graph 9: Area utilised for soybean production in North West since 2014/15



Graph 10: Soybean production in North West since 2014/15

Figures provided by the CEC.

— Eleven season average

Supply and Demand

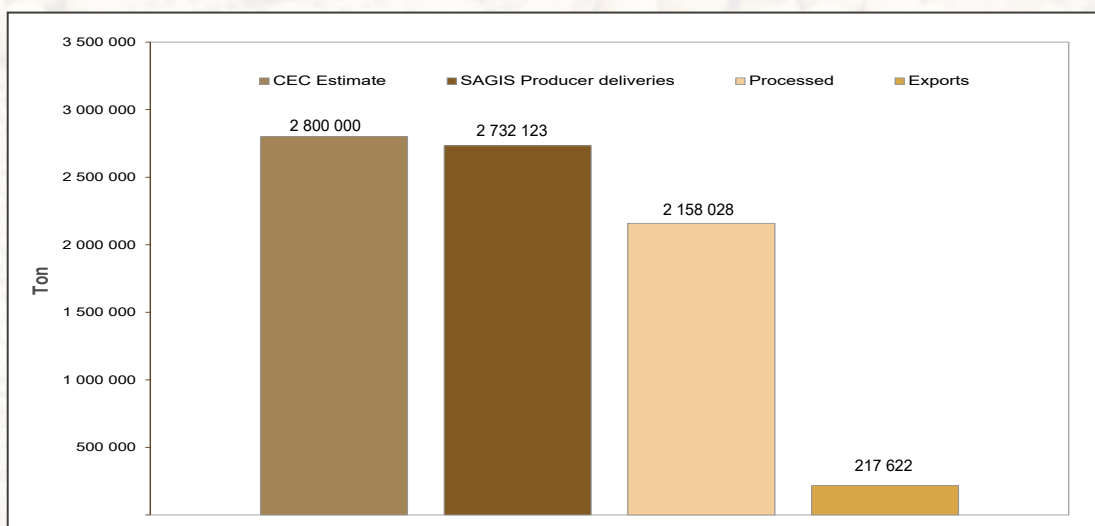
The soybean marketing season dates from March to end of February. According to SAGIS' supply and demand figures for the 2025/26 marketing season (March to January), opening stock decreased by 56% compared to the previous season and is also 26.6% lower than the ten-year average of 191 583 tons.

Up to January 2026, 12 235 tons of soybeans have been imported compared to the 154 288 tons of the 2024/25 marketing season. The current season's imports align with the 2021/22 season imports and is slightly higher than the 2022/23 and 2023/24 import figures. The ten-year import average is 73 110 tons. Worldwide, China remains the largest importer of soybeans by far, with an estimated 108.00 million metric tons imported during the 2024/25 season.

Please see the quality analysis results of soybeans imported by South Africa during the 2025/26 marketing season (March 2025 to February 2026) on page 10.

Oilseeds such as soybeans and sunflowers are crushed, producing both vegetable oil for human consumption and oilcake as well as protein meal for inclusion in animal feed rations. Soybeans yield more protein meal, widely used in the animal feed industry. Of the almost 2.2 million tons of soybeans processed locally during 2025/26, 0.9% was used for human consumption, 5.6% for animal feed as full fat soya and the bulk crushed to produce oil and oilcake. Worldwide, 83.04 million tons of soybean meal was exported during 2024/25, mainly by Argentina, Brazil and the USA. The quantity of soybeans crushed locally during 2025/26, is 20.8% more than during the previous season, 55% more than the ten-year average and also the highest quantity crushed to date.

Soybean and soybean product exports decreased by 35% (117 737 tons) compared to the previous season. 217 622 tons of soybeans/products have been exported this season, the ten-year average is 130 325 tons. Whole soybeans were exported to Zimbabwe mainly (83.5%) and Eswatini (16.5%). Globally, soybean exports during the 2024/25 season amounted to an estimated 184.22 million metric tons, with Brazil exporting 56% and the United States 28% of this total. The projected world soybean exports for the 2025/26 season currently stand at 187.17 million metric tons, with a projected 83.99 million tons of soybean meal and a projected 13.90 million tons of soybean oil to be exported (WASDE - 669).



Graph 11: Soybean supply and demand overview for the current marketing season (Mar 2025 - Jan 2026)

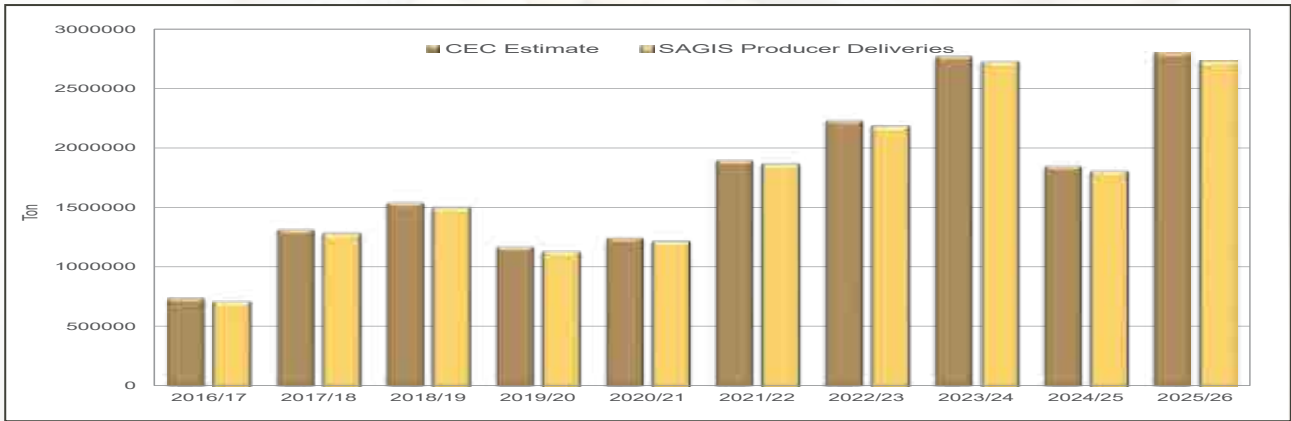
Information provided by SAGIS.

Table: S1

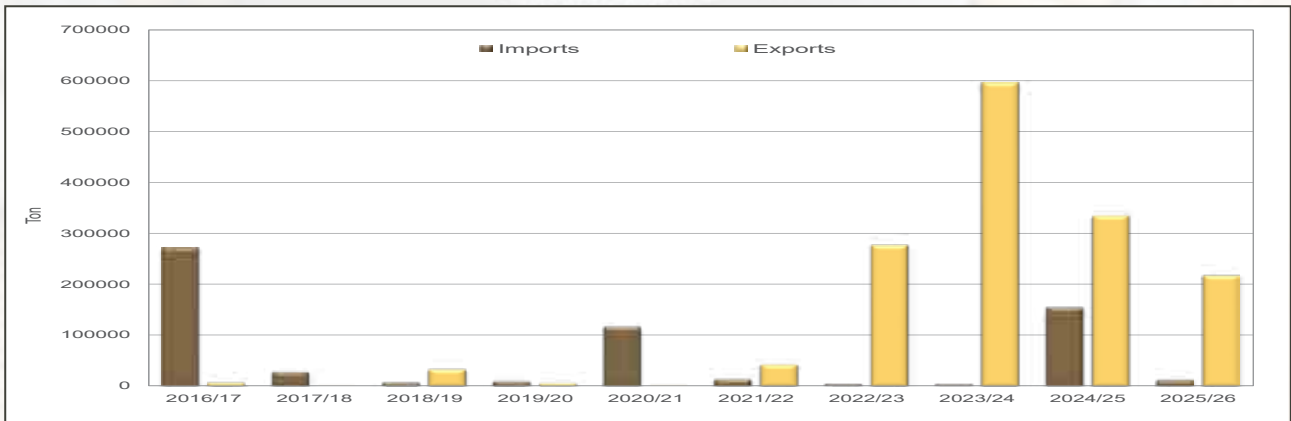


SOYBEANS: SUPPLY AND DEMAND TABLE BASED ON SAGIS' INFO (TON)																	Publication date: 2026/02/25	
	Season (Mar - Feb)															Current Season Mar - Jan	10 Year average	
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24			2024/25
CEC (Crop Estimate)	516 000	566 000	710 000	650 000	784 500	948 000	1 070 000	742 000	1 316 000	1 540 000	1 170 345	1 245 500	1 897 000	2 230 000	2 770 000	1 848 000	2 800 000	1 582 885
SUPPLY																		
Opening stock (1 Mar)	48 700	56 000	46 200	225 800	68 639	61 806	63 704	89 128	84 792	330 535	502 241	138 455	46 053	168 387	171 897	320 637	140 704	191 583
Producer deliveries	508 200	531 500	690 300	621 892	759 146	919 723	1 042 129	713 660	1 290 218	1 502 976	1 135 145	1 219 044	1 868 772	2 186 711	2 726 389	1 808 548	2 732 123	1 549 359
Imports	3 100	600	300	300	3 256	102 977	124 981	271 098	27 508	6 945	9 098	116 103	13 448	4 154	3 480	154 288	12 235	73 110
Surplus	700	1 500	1 800	1 698	2 572	0	10 526	1 122	2 519	4 497	0	1 988	4 289	7 570	10 742	6 471	0	4 970
Total Supply	560 700	589 600	738 600	849 690	833 613	1 084 506	1 241 340	1 075 008	1 405 037	1 844 953	1 646 484	1 475 570	1 932 562	2 366 822	2 912 508	2 289 944	2 885 062	1 819 023
DEMAND																		
Processed for local market	337 400	406 900	451 300	615 272	742 104	1 005 548	1 134 110	974 901	1 063 783	1 298 544	1 484 692	1 417 165	1 710 221	1 907 982	1 984 433	1 802 968	2 158 028	1 477 880
<i>Human</i>	28 800	31 000	31 000	25 913	24 860	25 319	24 323	23 875	25 056	25 005	23 759	23 234	22 279	21 739	21 549	22 424	19 241	23 324
<i>Animal</i>	181 800	191 800	150 200	137 407	155 654	118 598	121 763	98 718	147 302	218 973	191 323	144 985	167 480	189 605	158 855	109 652	119 846	154 866
<i>Crushed oil & cake</i>	128 800	184 100	270 100	451 952	561 590	861 631	988 024	852 308	891 425	1 054 566	1 269 610	1 248 946	1 520 462	1 696 638	1 804 029	1 670 892	2 018 941	1 299 690
Withdrawn by producers	4 800	4 300	4 100	4 463	3 877	1 975	2 393	367	1 331	567	676	496	196	0	139	582	85	675
Released to end-consumers	900	3 700	3 400	2 757	2 825	2 886	2 650	1 098	608	431	367	673	123	130	69	304	112	645
Seed for planting purposes	5 300	4 900	5 200	5 700	5 295	5 111	7 577	5 678	8 795	10 599	7 640	9 961	11 079	8 971	10 603	7 453	9 134	8 836
Net dispatches(+)/receipts(-)	3 200	1 900	1 600	0	2 316	1 924	805	1 427	-429	-239	1 107	162	261	338	-418	2 574	1 664	559
Deficit	0	0	0	0	0	2 782	0	0	0	0	8 097	0	0	0	0	0	329	810
Exports	153 100	121 700	47 200	152 616	15 390	576	4 677	6 745	414	32 810	5 336	1 060	42 295	277 504	597 045	335 359	217 622	130 325
Total Demand	504 700	543 400	512 800	780 808	771 807	1 020 802	1 152 212	990 216	1 074 502	1 342 712	1 507 915	1 429 517	1 764 175	2 194 925	2 591 871	2 149 240	2 386 974	1 619 729
Unutilized Closing Stock (28 Feb)	56 000	46 200	225 800	68 882	61 806	63 704	89 128	84 792	330 535	502 241	138 569	46 053	168 387	171 897	320 637	140 704	498 088	199 294
Processed p/month	28 100	33 900	37 600	51 300	61 842	83 796	94 509	81 242	88 649	108 212	123 724	118 097	142 518	158 999	165 369	150 247	196 184	123 157
Months' stock	2.0	1.4	6.0	1.3	1.0	0.8	0.9	1.0	3.7	4.6	1.1	0.4	1.2	1.1	1.9	0.9	2.5	1.7

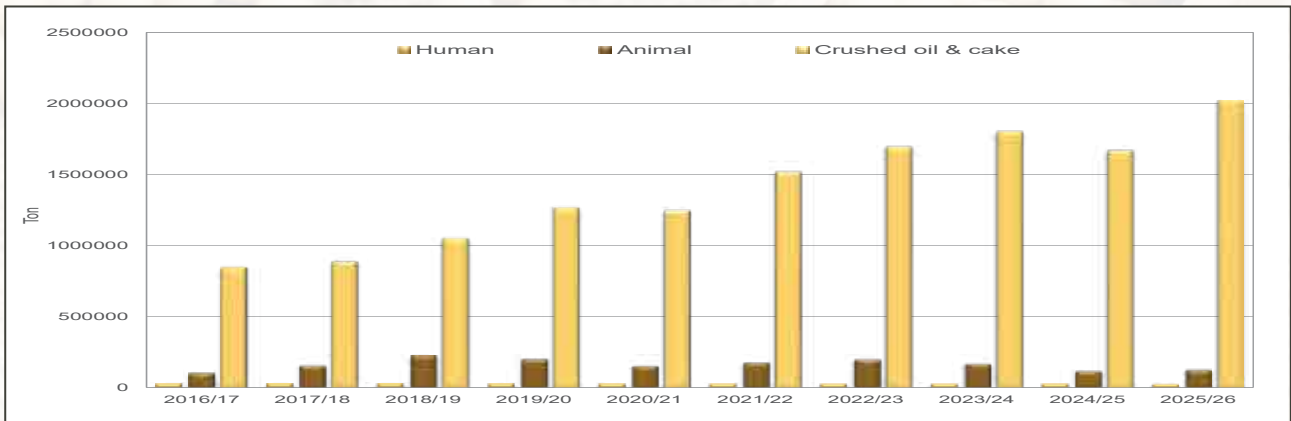
Note: *** Figures for current season up to date



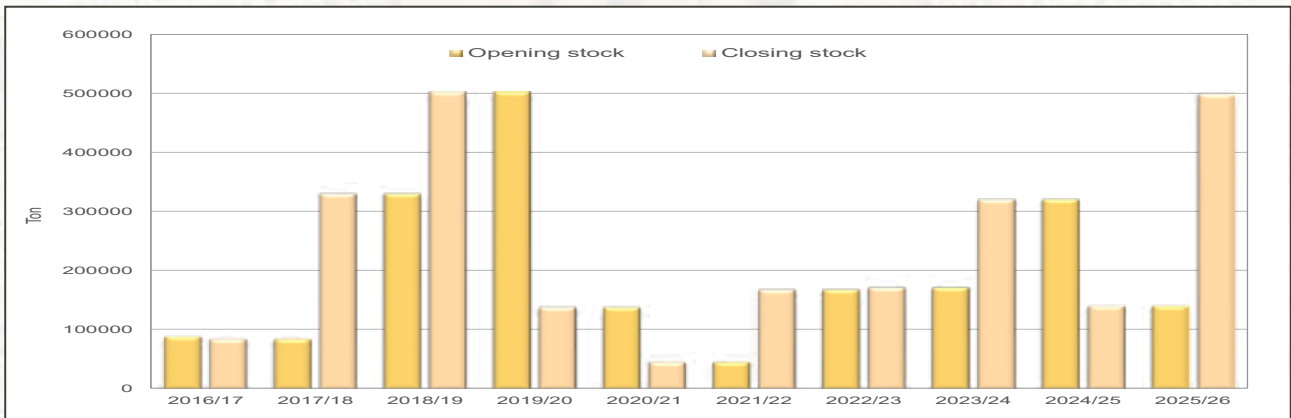
Graph 12: Soybeans: CEC Estimate vs SAGIS deliveries over 10 marketing seasons



Graph 13: Soybeans: Imports and Exports over 10 marketing seasons



Graph 14: Soybeans: Consumption and Processed over 10 marketing seasons



Graph 15: Soybeans: Opening and closing stock over 10 marketing seasons

Information provided by SAGIS.

Table: S2

Marketing Season (Mar - Feb)	SOYBEANS: IMPORTS FOR RSA PER COUNTRY (Tons)														Total
	Australia	Botswana	Brazil	Eswatini	Ethiopia	Malawi	Mozambique	Nigeria	Paraguay	Ukraine	USA	Zambia	Zimbabwe	Zimbabwe	
2016/17	0	0	0	0	3 314	0	0	204	263 576	0	0	4 004	0	271 098	
2017/18	0	0	0	0	371	3 153	0	0	0	0	0	22 912	1 072	27 508	
2018/19	0	0	0	0	160	1 953	343	0	0	645	0	3 844	0	6 945	
2019/20	343	0	0	0	0	2 492	2 151	0	0	0	0	4 112	0	9 098	
2020/21	0	0	55 000	0	0	2 037	1 623	0	0	0	52 534	4 909	0	116 103	
2021/22	0	0	0	0	0	3 197	30	0	0	0	0	8 374	1 847	13 448	
2022/23	0	0	0	0	0	0	0	0	0	0	0	4 154	0	4 154	
2023/24	0	293	0	0	0	0	0	0	0	0	0	3 187	0	3 480	
2024/25	0	0	0	335	0	0	0	0	0	1 956	151 590	407	0	154 288	
2025/26*	0	0	0	0	0	0	0	0	0	1 532	9 965	738	0	12 235	

*Progressive March 2025 - January 2026

Table: S3

Marketing Season (Mar - Feb)	SOYBEANS: RSA EXPORTS PER COUNTRY (Tons)																	Total
	Bangladesh	Botswana	China	Indonesia	Japan	Lesotho	Namibia	Malawi	Malaysia	Mozambique	Portugal	Thailand	Turkey	Eswatini	Vietnam	Zimbabwe	Zimbabwe	
2016/17	0	0	0	0	0	0	0	0	0	2 614	0	0	0	0	0	4 131	0	6 745
2017/18	0	4	0	0	0	0	0	0	0	410	0	0	0	0	0	0	0	414
2018/19	0	17	0	0	0	0	0	0	0	160	0	0	27 660	0	0	4 973	0	32 810
2019/20	0	189	0	0	0	0	0	0	0	291	0	0	0	0	0	4 856	0	5 336
2020/21	0	744	0	0	0	9	0	0	0	298	0	0	0	7	0	2	0	1 060
2021/22	0	1 020	0	0	0	0	0	764	986	8 094	0	0	0	0	0	31 431	0	42 295
2022/23	28 978	0	0	0	0	0	71	0	144 473	4 635	0	52 393	0	0	27 531	19 423	0	277 504
2023/24	54 755	0	147 497	501	0	0	0	0	269 972	3 586	29 807	33 000	0	2	56 380	1 545	0	597 045
2024/25	0	1 514	0	0	19	0	0	0	0	1 232	0	0	0	13 865	27 658	105 950	0	150 238
2025/26*	0	0	0	102	0	0	0	0	0	0	0	0	0	35 811	100	181 609	0	217 622

*Progressive March 2025 - January 2026

Table: S4

Marketing Season (Mar - Feb)	SOYBEANS IMPORTS PER HARBOUR (Tons)					
	Harbours					
	East London	Durban	Cape Town	Port Elizabeth	Richards Bay	Total
2011/12	0	163	0	0	0	163
2012/13	0	344	0	0	0	344
2013/14	0	2 661	0	98	0	2 759
2014/15	0	61 705	0	0	0	61 705
2015/16	0	121 343	0	0	0	121 343
2016/17	0	267 094	0	0	0	267 094
2017/18	0	371	0	0	0	371
2018/19	0	805	0	0	0	805
2019/20	0	343	0	0	0	343
2020/21	0	107 534	0	0	0	107 534
2021/22	0	674	0	0	0	674
2022/23	0	0	0	0	0	0
2023/24	0	0	0	0	0	0
2024/25	0	157 261	0	0	0	157 261
2025/26*	0	11 497	0	0	0	11 497

*Progressive March 2025 - January 2026
 Note: Includes Imports for RSA and Other Countries

Table: S5

Marketing Season (Mar - Feb)	SOYBEANS IMPORTS PER HARBOUR (Tons)					
	Harbours					
	East London	Durban	Cape	Port Elizabeth	Richards Bay	Total
2011/12	0	40 633	0	0	0	40 633
2012/13	0	152 318	0	0	0	152 318
2013/14	0	15 044	0	0	0	15 044
2014/15	0	0	0	0	0	0
2015/16	0	0	0	0	0	0
2016/17	0	0	0	0	0	0
2017/18	0	0	0	0	0	0
2018/19	0	27 660	0	0	0	27 660
2019/20	0	0	0	0	0	0
2020/21	0	0	0	0	0	0
2021/22	0	986	0	0	0	986
2022/23	0	197 902	0	0	0	197 902
2023/24	91 915	413 824	0	0	0	505 739
2024/25	0	27 677	0	0	0	27 677
2025/26*	0	202	0	0	0	202

*Progressive March 2025 - January 2026

Imports

Quality of soybeans imported for the period March 2025 - February 2026

Country origin Sampling date	Ukraine 2025/05/19 Composite hold sample	Ukraine 2025/09/17 Composite hold sample	USA 2025/04/05 Hold sample
Grading:			
(A) Wet pods, %	0.00	0.00	0.00
(B) Foreign matter (incl. stones, other grains, sunflower seeds), %	0.05	1.51	1.83
(C) Other grain, %	0.00	0.00	0.27
(D) Sunflower seed, %	0.00	0.00	0.00
(E) Stones, %	0.00	0.00	0.00
(F) Sclerotia, %	0.00	0.00	0.00
(G) Soya beans and parts of Soya beans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	0.43	3.37	2.19
(H) Defective Soya beans on the 4.75 mm round hole sieve, %	4.36	11.36	19.27
(I) Soiled Soya beans, %	18.92	3.53	3.61
(J) Deviations in (B) and (F) collectively, %	0.05	1.51	1.83
<i>Poisonous seeds (Crotalaria sp., Datura sp., Ricinis communis)</i>	0	0	0
<i>Poisonous Seeds (Argemone Mexicana L., Convolvulus sp., Ipomoea purpurea Roth., Lolium temulentum, Xanthium sp.)</i>	3	0	4
<i>Undesirable odour</i>	No	No	Yes
<i>Live insects</i>	No	No	No
<i>Class and grade</i>	Class Other Soybeans	Class Other Soybeans	Class Other Soybeans
<i>Test weight (Kern 222), kg/hl</i>	69.1	69.4	68.9
<u>Nutritional Analysis (reported on a dry/moisture free basis)</u>			
Moisture, % (17 hr, 103 °C)	10.2	11.1	8.7
Crude protein, % (db)	41.00	42.79	38.92
Crude fat, % (db)	21.4	21.2	22.0
Crude fibre, % (db)	6.9	5.5	4.91
Ash, % (db)	4.93	4.60	8.1
<u>Nutritional Analysis (reported on an "as is" basis)</u>			
Moisture, % (17 hr, 103 °C) (as is)	10.2	11.1	8.7
Crude protein, % (as is)	36.84	38.06	35.52
Crude fat, % (as is)	19.2	18.8	20.1
Crude fibre, % (as is)	6.2	4.9	4.48
Ash, % (as is)	4.43	4.09	7.4

Table: S6

	OIL SEEDS PRODUCTS MANUFACTURED (PER MONTH)												Date published: 2026-03-06	
	Marketing year Mar 2023 - Feb 2024 Progressive: 12 Months	Marketing year Mar 2024 - Feb 2025 Progressive: 12 Months	Mar 2025 Tons	Apr 2025 Tons	May 2025 Tons	June 2025 Tons	July 2025 Tons	Aug 2025 Tons	Sep 2025 Tons	Oct 2025 Tons	Nov 2025 Tons	Dec 2025 Tons	Jan 2026 Tons	Marketing Year Mar 2025 - Feb 2026 Progressive: 11 Months (Mar - Jan)
Palm Oil and Derivatives	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soybean Oil	311 007	331 740	20 333	26 406	34 019	36 584	36 438	35 457	36 409	36 169	35 206	34 327	33 362	364 710
Sunflower Oil	253 507	264 878	15 370	20 816	29 618	31 471	32 752	26 577	25 839	23 017	23 282	15 420	15 503	259 665
Coconut Oil/ Groundnut Oil / Canola Oil / Corn (Maize) Oil / Blends or mixes of Oils which includes one of the above Oils / Biodiesel / Cottonseed Oil	80 812	92 330	10 502	8 053	8 763	3 265	7 278	9 372	8 740	10 654	12 065	7 885	8 197	94 774
Sunflower Oilcake	269 302	288 265	17 609	24 890	33 945	36 765	39 013	30 872	32 728	28 747	28 696	19 009	16 525	307 799
Coconut Oilcake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Palmnut Oilcake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soybean Oilcake / Canola Oilcake / Cottonseed Oilcake	1 476 779	1 536 896	96 302	120 438	157 588	158 698	164 496	159 123	166 129	164 230	164 068	147 187	151 686	1 648 945
Soybean Flours and Meals / Textured Vegetable Protein	50 478	47 272	3 987	3 876	4 478	4 006	4 278	3 770	3 188	4 622	3 244	2 604	3 064	41 117
Soybean Fullfat	153 025	110 063	6 887	8 132	11 095	9 923	11 272	10 990	10 136	10 820	9 033	8 920	8 437	105 645
Peanut Butter and Paste	30 744	29 763	3 118	2 218	1 893	3 027	2 446	2 914	2 536	2 400	3 336	2 863	1 856	28 607
Total	2 625 654	2 701 207	173 108	214 829	281 399	282 739	297 973	279 075	285 705	280 659	278 930	238 215	238 630	2 851 262

Table: S7

	OIL SEEDS PRODUCTS IMPORTED (PER MONTH)												Date published: 2026-03-06	
	Marketing year Mar 2023 - Feb 2024 Progressive: 12 Months	Marketing year Mar 2024 - Feb 2025 Progressive: 12 Months	Mar 2025 Tons	Apr 2025 Tons	May 2025 Tons	June 2025 Tons	July 2025 Tons	Aug 2025 Tons	Sep 2025 Tons	Oct 2025 Tons	Nov 2025 Tons	Dec 2025 Tons	Jan 2026 Tons	Marketing Year Mar 2025 - Feb 2026 Progressive: 11 Months (Mar - Jan)
Palm Oil and Derivatives	515 904	616 201	49 591	78 521	33 248	64 706	40 174	46 893	52 601	46 567	68 035	24 710	40 598	545 644
Soybean Oil	41 801	37 550	7 933	1 617	1 405	1 983	2 594	2 702	2 284	8 534	11 955	1 016	6 603	48 626
Sunflower Oil	173 954	132 196	1 038	1 086	1 668	2 153	24 996	20 295	14 107	9 768	25 847	30 421	470	131 849
Coconut Oil/ Groundnut Oil / Canola Oil / Corn (Maize) Oil / Blends or mixes of Oils which includes one of the above Oils / Biodiesel / Cottonseed Oil	3 606	4 508	80	163	246	222	332	188	481	471	389	227	192	2 991
Sunflower Oilcake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coconut Oilcake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Palmnut Oilcake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soybean Oilcake / Canola Oilcake / Cottonseed Oilcake	70 714	239 648	23 970	18 088	29 681	1 525	1 071	828	1 178	1 380	1 384	1 183	2 037	82 325
Soybean Flours and Meals / Textured Vegetable Protein	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soybean Fullfat	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peanut Butter and Paste	3 566	1 838	138	49	0	195	3	0	1	17	1	1	13	418
Total	809 545	1 031 941	82 750	99 524	66 248	70 784	69 170	70 906	70 652	66 737	107 611	57 558	49 913	811 853

Table: S8

	OIL SEEDS PRODUCTS EXPORTED (PER MONTH)												Date published: 2026-03-06	
	Marketing year Mar 2023 - Feb 2024 ogressive: 12 Months	Marketing year Mar 2024 - Feb 2025 Progressive: 12 Months	Mar 2025 Tons	Apr 2025 Tons	May 2025 Tons	June 2025 Tons	July 2025 Tons	Aug 2025 Tons	Sep 2025 Tons	Oct 2025 Tons	Nov 2025 Tons	Dec 2025 Tons	Jan 2026 Tons	Marketing Year Mar 2025 - Feb 2026 Progressive: 11 Months (Mar - Jan)
Palm Oil and Derivatives	12 734	10 010	868	763	1 570	1 760	1 953	1 478	879	1 786	1 575	680	608	13 940
Soybean Oil	75 654	79 638	8 492	7 439	7 284	9 765	5 845	5 373	5 594	8 093	6 105	6 720	3 558	74 268
Sunflower Oil	6 768	5 159	64	261	26	90	165	104	215	564	218	70	356	2 133
Coconut Oil/ Groundnut Oil / Canola Oil / Corn (Maize) Oil / Blends or mixes of Oils which includes one of the above Oils / Biodiesel / Cottonseed Oil	13 657	7 183	787	1 553	1 494	533	882	611	1 610	1 269	1 074	1 019	530	11 362
Sunflower Oilcake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coconut Oilcake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Palmnut Oilcake	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soybean Oilcake / Canola Oilcake / Cottonseed Oilcake	10 687	75 177	11 482	10 439	11 485	11 198	13 229	10 171	7 688	8 322	6 879	14 565	10 112	115 570
Soybean Flours and Meals / Textured Vegetable Protein	16 959	33 741	0	0	0	0	0	0	0	0	0	0	0	0
Soybean Fullfat	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peanut Butter and Paste	211	165	19	152	2	0	0	0	0	0	0	0	0	173
Total	136 670	210 973	21 712	20 627	21 861	23 346	22 074	17 737	15 986	20 034	15 851	23 054	15 164	217 446

RSA Production Regions

Figure 1: RSA Provinces



Provincial map with gratitude to SIQ.

The RSA is divided into 9 provinces as illustrated in Figure 1. The 9 provinces are divided into 36 grain production regions.

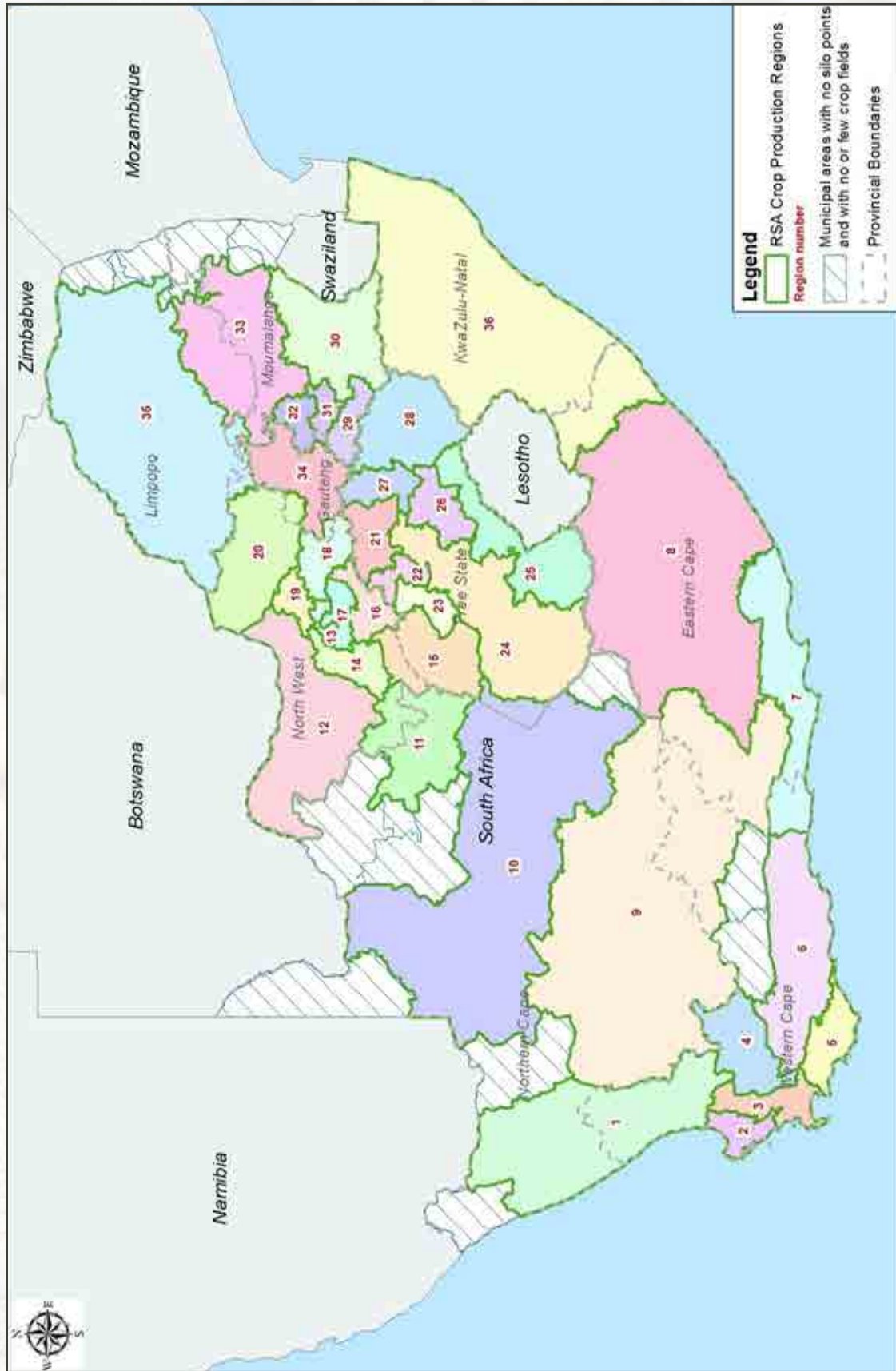
The regions are distributed as follows:

- Region 1: Namakwaland
- Regions 2 to 4: Swartland
- Regions 5 and 6: Rûens
- Regions 7 and 8: Eastern Cape
- Region 9: Karoo
- Region 10: Griqualand West
- Region 11: Vaalharts
- Regions 12 to 20: North West
- Regions 21 to 28: Free State
- Regions 29 to 33: Mpumalanga
- Region 34: Gauteng
- Region 35: Limpopo
- Region 36: KwaZulu-Natal

Please see the Crop Production Regions map on the next page.

The production regions from which soybeans have been received for the crop quality survey of the 2024/25 production season, are named and described on pages 22 to 24. All the silo/intake stands as well as the type of storage structure, situated in a particular region, are provided.

Figure 2: RSA Crop Production Regions



Regional map with gratitude to Agbiz Grain and SiQ.

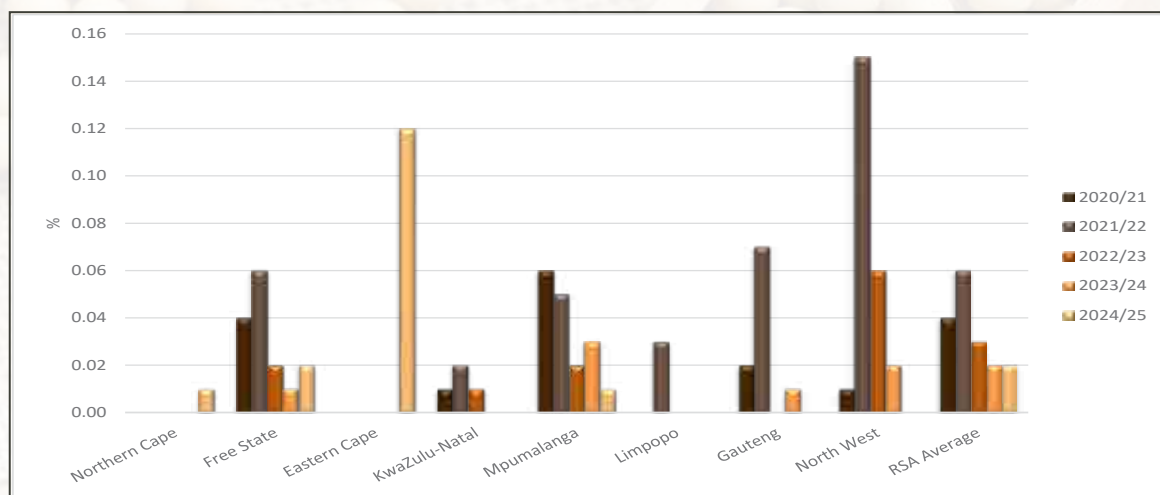
Soybean Crop Quality 2024/25 – Summary of results

Eighty-four percent (211) of the 250 samples analysed for the purpose of this survey were graded as Grade SB1, while 39 (16%) of the samples were downgraded to COSB (Class Other Soya Beans). During the previous two seasons, 18% (2023/24) and 17% (2022/23) of the samples were downgraded to COSB.

- Six of the 39 samples were downgraded as a result of the percentage other grain exceeding the maximum permissible deviation of 0.5%.
- Seven samples exceeded the maximum permissible deviation of 0.1% sunflower seed.
- Five samples exceeded the maximum permissible deviation of 10% defective soybeans on the 4.75 mm round hole screen.
- Nine samples exceeded the maximum permissible deviation of 10% soiled soybeans.
- Seven samples exceeded the maximum permissible number (1/1000 g) of *Crotalaria* sp. or *Datura* sp. poisonous seeds.
- Three samples were downgraded to Class Other due to a combination of two or more of the percentages foreign matter, other grain, sunflower seed and stones, as well as the number of poisonous seeds, exceeding the maximum permissible deviation.
- One sample was downgraded to Class Other as a result of the presence of live insects.

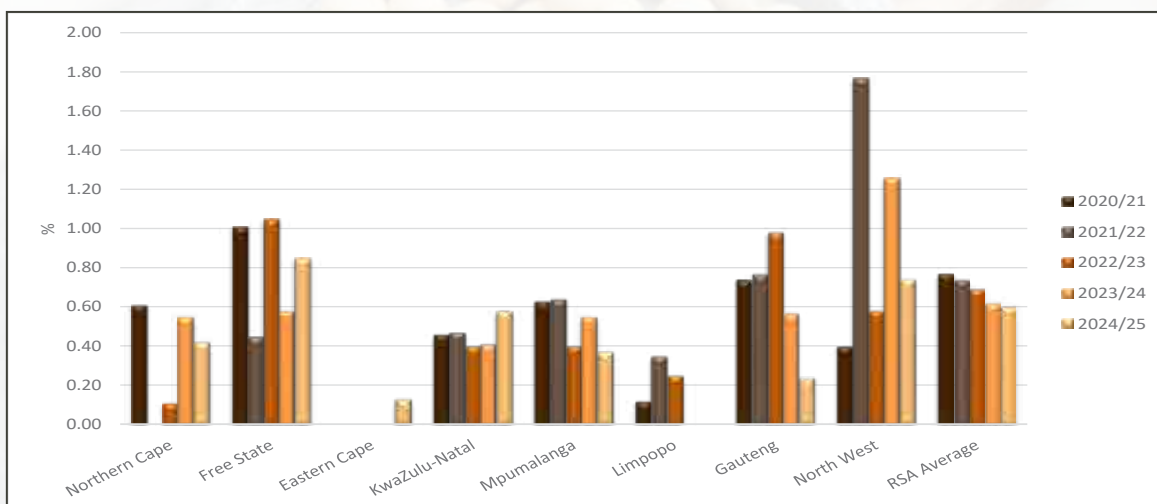
Twenty percent of the samples contained sclerotia from the fungus *Sclerotinia sclerotiorum*, compared to the 26% of the previous two seasons. 51% of the samples that contained sclerotia this season originated in Mpumalanga, 39% in the Free State, with single samples from the Eastern Cape, Northern Cape, North West and Gauteng.

As in previous years, sclerotia was present at very low levels in the samples received, ranging between 0.01% and 0.29%. The national weighted average percentage this season was 0.02%, equal to the previous season. The maximum permissible level of sclerotia is 4%. See Graph 16.



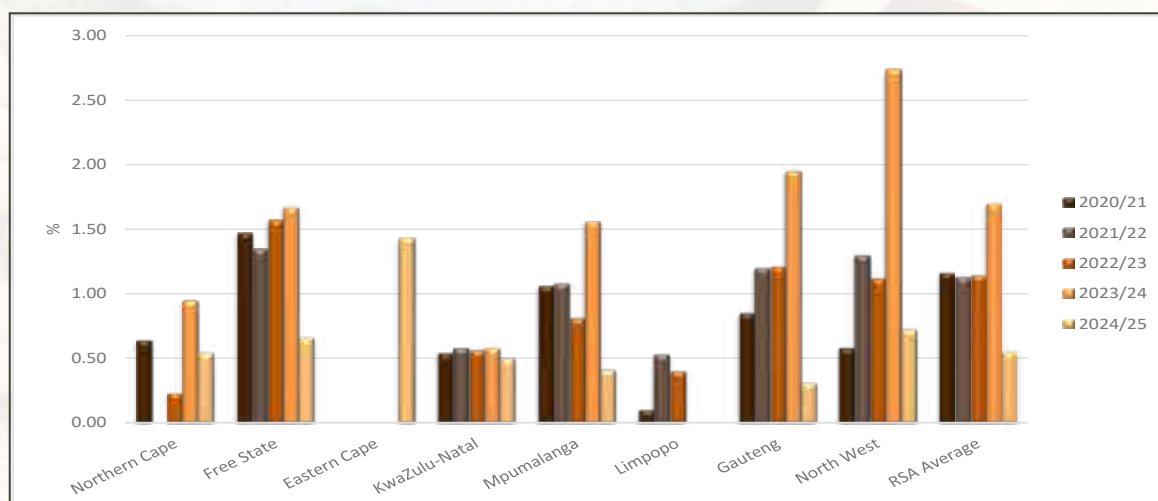
Graph 16: Average percentage sclerotia per province over five seasons

The 98 samples received from the Free State province had the highest weighted average percentage foreign matter (0.85%) and the sample from the Eastern Cape the lowest with 0.13%. North West (27 samples) averaged 0.74%. The weighted averages for Gauteng (11 samples), Mpumalanga (101 samples), the Northern Cape (5 samples) and KwaZulu-Natal (7 samples) ranged between 0.24 % to 0.58%. The national weighted average of 0.60% was the lowest since the 2012/13 season. Please refer to Graph 17.



Graph 17: Average percentage foreign matter per province over five seasons

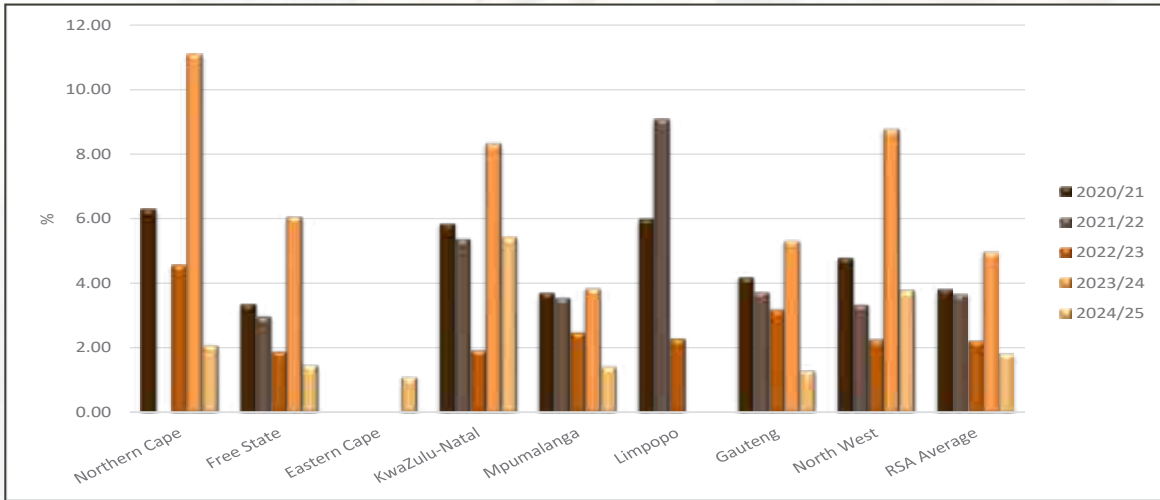
The sample from the Eastern Cape reported the highest weighted average percentage soybeans and parts of soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, namely 1.43%, followed by 0.72% from North West and 0.66% from the Free State. The lowest weighted average value reported was 0.31% on the samples from Gauteng. The national weighted average percentage of 0.55% was the lowest since the start of this survey in the 2012/13 season. Please see Graph 18.



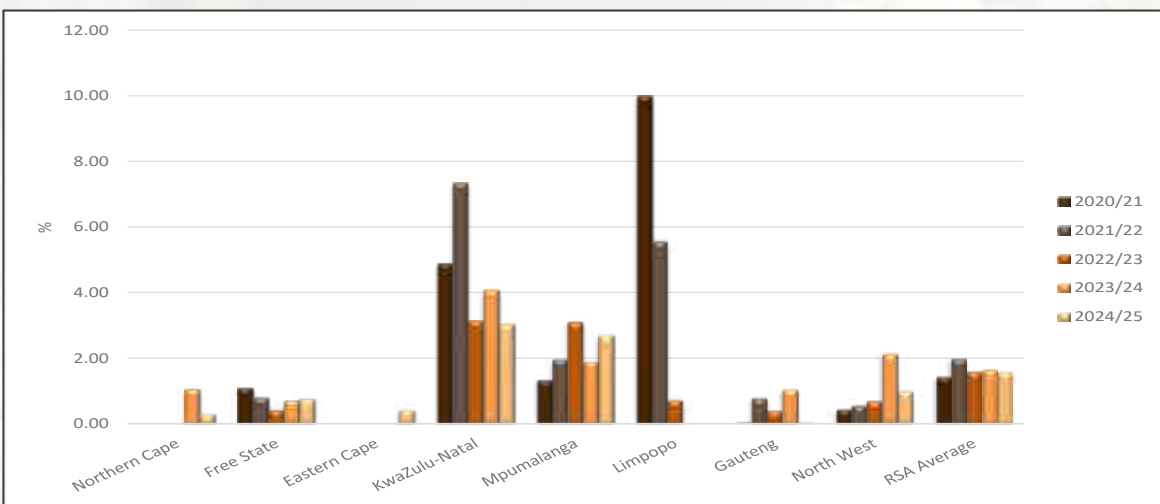
Graph 18: Average percentage soybeans and parts of soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve per province over five seasons

The highest weighted average percentages defective soybeans on the 4.75 mm sieve, was reported on the samples from KwaZulu-Natal (5.45%) followed by North West (3.80%) and the Northern Cape (2.09%). The lowest percentage, namely 1.11% was observed on the single sample from the Eastern Cape. The averages in the other provinces ranged from 1.31% to 1.47%. The national weighted average decreased from 4.98% last season to 1.83% this season. This is the lowest average reported since the 2013/14 season. Please see Graph 19.

The national weighted average percentage soiled soybeans was 1.58%. The previous two seasons averaged 1.64% and 1.58% respectively. The highest weighted average percentages were observed in KwaZulu-Natal (3.05%) and Mpumalanga (2.69%). Gauteng averaged the lowest with 0.03%. The remaining weighted averages ranged between 0.30% and 1.00%. Please see Graph 20. Forty-eight percent (121) of samples graded contained soiled soybeans, the percentage last season was 64. Nine samples exceeded the maximum permissible deviation of 10% according to the grading regulations, compared to 5 samples the previous two seasons. The majority of these samples originated in Mpumalanga. The highest percentage soiled soybeans (32.24%) reported, also originated in Mpumalanga. The other samples originated in North West and the Free State.



Graph 19: Average percentage defective soybeans on the 4.75 mm round hole sieve per province over five seasons



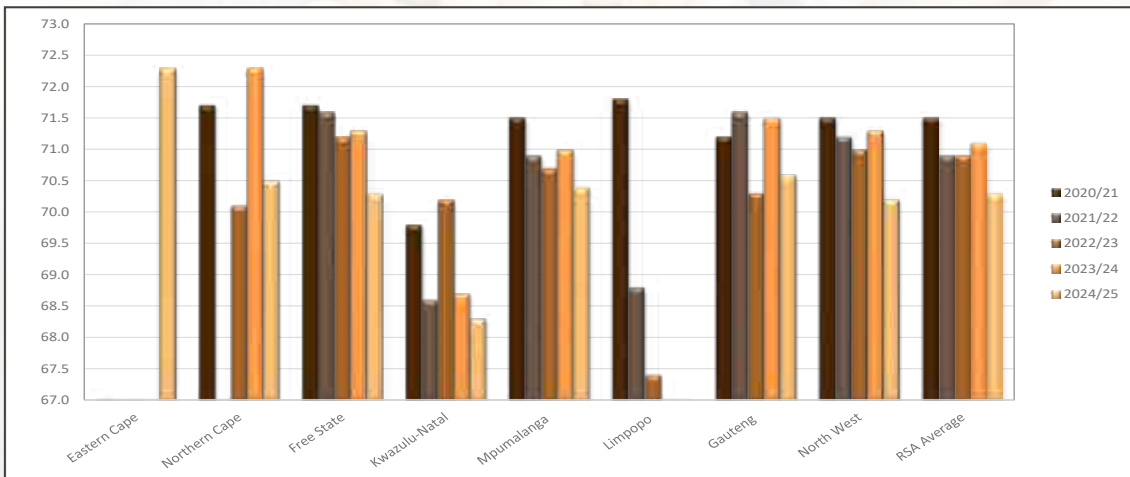
Graph 20: Average percentage soiled soybeans per province over five seasons

Test weight does not form part of the grading regulations for soybeans in South Africa. An approximation of the test weight of South African soybeans is provided in Table 2 for information purposes. The standard working procedure of the Kern 222 instrument, as described in ISO 7971-3:2019, was followed. The g/1 L filling mass of the soybean samples was determined and divided by two. The test weight was then extrapolated by means of the following formulas obtained from the Test Weight Conversion Chart for Soybean of the Canadian Grain Commission: $y = 0.1898x + 2.2988$ (291 to 350 g/0.5 L) and $y = 0.1895x + 2.3964$ (351 to 410 g/0.5 L). Please see Graph 21 for a comparison of the test weight per province over the last five seasons.

Province	Test weight, kg/hl								
	2024/25 Season			2023/24 Season			2022/23 Season		
	Weighted average	Range	No. of samples	Weighted average	Range	No. of samples	Weighted average	Range	No. of samples
Eastern Cape (Regions 7 - 8)	72.3	-	1						
Northern Cape (Regions 10 - 11)	70.5	69.1 - 71.7	5	72.3	-	1	70.1	70.0 - 70.2	2
Free State (Regions 21 - 28)	70.3	65.2 - 72.8	*97	71.3	68.4 - 74.2	44	71.2	64.3 - 73.2	*65
KwaZulu-Natal (Region 36)	68.3	67.3 - 70.0	7	68.7	68.2 - 69.4	3	70.2	69.0 - 72.1	9
Mpumalanga (Regions 29 - 33)	70.4	65.9 - 72.2	*100	71.0	68.3 - 73.0	**121	70.7	68.3 - 73.4	64
Limpopo (Region 35)	-	-	-	-	-	-	67.4	-	1
Gauteng (Region 34)	70.6	68.3 - 72.0	11	71.5	70.4 - 73.0	10	70.3	68.7 - 71.3	3
North West (Region 12 - 20)	70.2	64.6 - 72.1	27	71.3	66.5 - 73.1	19	71.0	68.6 - 72.8	29
RSA	70.3	64.6 - 72.8	248	71.1	66.5 - 74.2	198	70.9	64.3 - 73.4	173

* One sample with an outlier value was not taken into account for calculation purposes.

**Two samples with outlier values were not taken into account for calculation purposes.



Graph 21: Comparison of the test weight per province over five seasons

The nutritional component analyses, namely crude protein, - fat, - fibre and ash are reported on a dry/moisture-free basis (db) for the current as well as the previous surveys. For comparison purposes the national average 'as is' or wet basis results for the last five seasons are provided in Table 3. These 'as is' average values were calculated by converting each individual value from dry basis to 'as is'.

	2024/25		2023/24		2022/23		2021/22		2020/21	
	7.6		7.6		8.2		8.2		7.5	
Moisture basis	Dry basis	As is	Dry basis	As is	Dry basis	As is	Dry basis	As is	Dry basis	As is
Crude protein, %	39.89	36.86	40.26	37.21	40.19	36.90	39.54	36.31	39.96	36.95
Crude fat, %	20.0	18.4	20.5	19.0	19.9	18.3	19.6	18.0	19.5	18.0
Crude fibre, %	7.4	6.9	6.6	6.1	7.1	6.5	7.2	6.6	6.8	6.3
Ash, %	4.68	4.32	4.61	4.26	4.54	4.17	4.63	4.25	4.55	4.21
No. of samples	250		200		174		150		150	

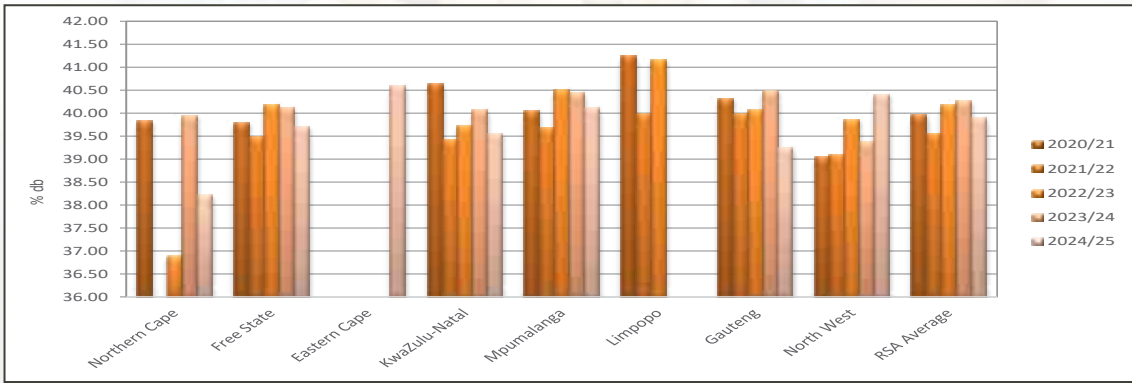
The weighted average crude protein content this season was 39.89%, similar to the 40.26% of the previous season. The averages between provinces ranged from 38.21% in the Northern Cape to 40.59% in the Eastern Cape. The weighted average crude fat percentage of 20.0% was the second highest since the 2011/12 season when this survey commenced. The highest average (20.5%) was reported last season. The samples from KwaZulu-Natal and the Northern Cape had the highest combined average crude fat content, namely 21.10%. The lowest fat average was observed in Gauteng province with 19.50% and North West with 19.56%.

The weighted average percentage crude fibre varied from 6.5% in KwaZulu-Natal to 8.5% in the Northern Cape. The RSA weighted average was 7.4% compared to the 6.6% and 7.1% of the previous two seasons. This season, the weighted average ash content was 4.68%, last season's average was 4.61%. Averages ranged from 4.65% in Mpumalanga and North West to 4.97% in the Northern Cape.

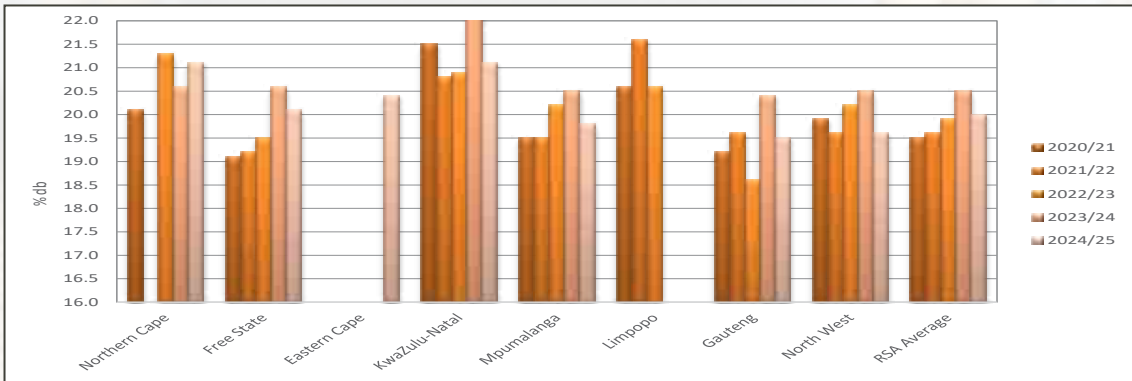
Graphs 22 to 25 on page 20 provide comparisons between provinces over seasons for the nutritional components mentioned above.

A summary of the RSA Soybean Crop Quality averages of the 2024/25 season compared to those of the 2023/24 season, is provided in Table 4 on page 21.

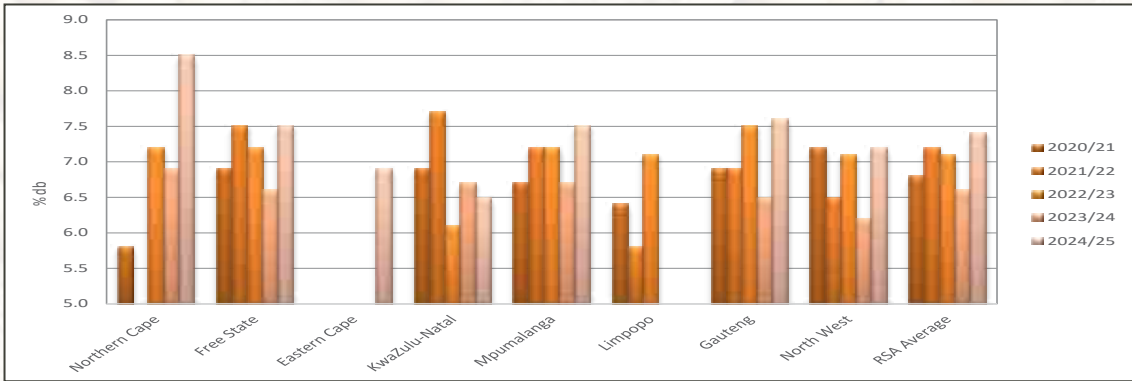
Please see pages 25 to 31 for the average soybean quality per region.



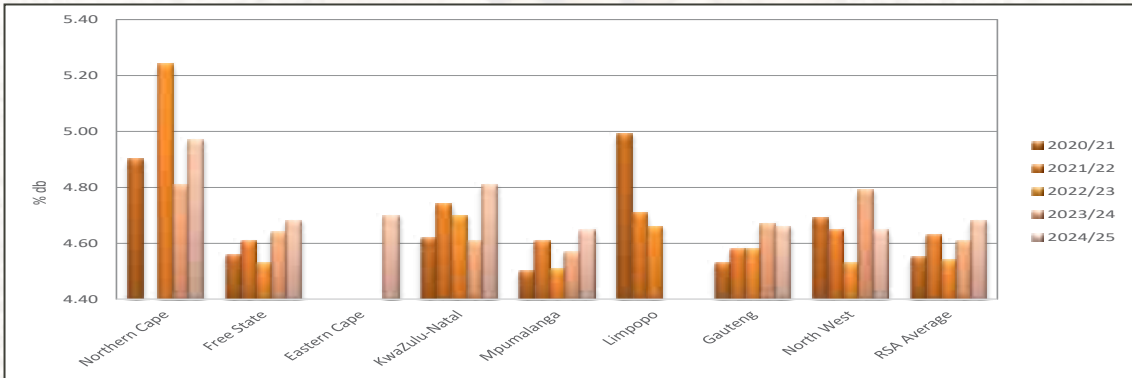
Graph 22: Average crude protein content per province over five seasons



Graph 23: Average crude fat content per province over five seasons



Graph 24: Average crude fibre content per province over five seasons



Graph 25: Average ash content per province over five seasons

Table 4: South African Soybean Crop Quality Averages 2024/25 vs 2023/24

Class and Grade Soya	2024/25			2023/24		
	SB1	COSB	Average	SB1	COSB	Average
<u>Grading:</u>						
(A) Wet pods, %	0.00	0.00	0.00	0.00	0.00	0.00
(B) Foreign matter, including stones, other grains and sunflower seeds: Provided that such deviations are individually within the limits specified in items (c), (d), and (e), %	0.45	1.41	0.60	0.47	1.31	0.62
(C) Other grain, %	0.04	0.34	0.09	0.02	0.11	0.04
(D) Sunflower seed, %	0.00	0.14	0.02	0.00	0.01	0.00
(E) Stones, %	0.01	0.04	0.02	0.01	0.00	0.00
(F) Sclerotia, %	0.02	0.01	0.02	0.03	0.01	0.02
(G) Soybeans and parts of soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	0.49	0.88	0.55	1.48	2.69	1.70
(H) Defective soybeans on the 4.75 mm round hole sieve, %	1.55	3.30	1.83	3.80	10.36	4.98
(I) Soiled soybeans, %	0.89	5.35	1.58	1.39	2.77	1.64
(J) Deviations in (b) and (f) collectively: Provided that such deviations are individually within the limits of said items, %	0.46	1.43	0.61	0.50	1.32	0.65
Poisonous seeds (<i>Crotalaria sp.</i> , <i>Datura sp.</i> , <i>Ricinis communis</i>)	0	2	0	0	4	1
Poisonous seeds (<i>Argemone mexicana L.</i> , <i>Convolvulus sp.</i> , <i>Ipomoea purpurea Roth.</i> , <i>Lolium temulentum</i> , <i>Xanthium sp.</i>)	0	0	0	0	2	0
Undesirable odour	No	No	No	No	No	No
Live insects	No	No	No	No	No	No
Number of samples	211	39	250	164	36	200
<u>Test weight:</u>						
Test weight (Kern 222), kg/hl	70.4	69.3	70.3	71.1	70.9	71.1
Number of samples	211	39	250	164	36	200
<u>Nutritional analysis:</u>						
Moisture, % (17 hr, 103 °C)	7.5	8.1	7.6	7.7	7.3	7.6
Crude Protein, % (db)	39.91	39.82	39.89	40.24	40.37	40.26
Crude Fat, % (db)	19.9	20.4	20.0	20.4	21.0	20.5
Crude Fibre, % (db)	7.5	7.2	7.4	6.7	6.3	6.6
Ash, % (db)	4.66	4.76	4.68	4.59	4.72	4.61
Number of samples	211	39	250	164	36	200

Grain Production Regions

Silo/Intake stands per region indicating type of storage structure

Region 8: Eastern Cape Northern Region

OVK	Cradock (Bins/Bunkers)	OVK	Elliot (Bins)
OVK	Cloete Silo (Bins/Bunkers)	OVK	Mortimer (Bins/Bunkers)

Region 11: Vaalharts Region

GWK	Barkly West (Bins)	Senwes	Jan Kempdorp (Bins)
GWK	Jan Kempdorp (Bags/Bunkers)	Senwes	Magogong (Bins)
Senwes	Hartswater (Bins)	Senwes	Tadcaster (Bins)

Region 14: North-West Southern Region

NWK	Barberspan (Bins)	NWK	Nooitgedacht (Bins)
NWK	Delareyville (Bins)	NWK	Taaiboschpan (Bins)
NWK	Excelsior (Bins)	Senwes	Amalia (Bins)
NWK	Geysdrop (Bins)	Senwes	Hallatshope (Bins)
NWK	Katboschfontein (Bunker)	Senwes	Migdol (Bins)
NWK	Madibogo (Bins)	Senwes	Schweizer-Reneke (Bins)
NWK	Migdol (Bins)		

Region 15: North-West Southern-Eastern Region

GWK	Christiana (Bins)	Senwes	Hoopstad (Bins)
Senwes	Bloemhof (Bins)	Senwes	Kingswood (Bins)
Senwes	Christiana (Bins)	Senwes	Kruising (Bunkers)
Senwes	Helpman Depot (Bags)	Senwes	Poppieland (Bunkers)
Senwes	Hertzogville (Bins)		

Region 16: North-West Central Eastern Region

Senwes	Bamboesspruit (Bins)	Senwes	Regina (Bins)
Senwes	Klerksdorp (Bins)	Senwes	Strydpoort (Bins)
Senwes	Leeudoringstad (Bins)	Senwes	Wolmaranstad (Bins)
Senwes	Makwassie (Bins)		

Region 18: North-West Central Region (Ventersdorp)

NWK	Bodenstein (Bins)	Senwes	Makokskraal (Bins)
NWK	Coligny (Bins)	Senwes	Potchefstroom (Bins)
Senwes	Buckingham (Bins)	Senwes	Ventersdorp Silo A (Bins)
Senwes	Enselspruit (Bins)	Senwes	Ventersdorp Silo B (Bins)

Region 21: Free State North-Western Region (Viljoenskroon)

Afgri	Kommandonek (Bunkers)	Senwes	Rooiwal (Bins)
Senwes	Attie (Bins)	Senwes	Vierfontein (Bins)
Senwes	Groenebloem (Bins)	Senwes	Viljoenskroon (Bins) G232
Senwes	Heuningspruit (Bins)	Senwes	Viljoenskroon (Bins) G266
Senwes	Koppies (Bins)	Senwes	Vredefort (Bins)
Senwes	Rooiwal (Bins)	Senwes	Weiveld (Bins)

Region 22: Free State North-Western Region (Bothaville)

Senwes	Allanridge (Bins)	Senwes	Misgunst (Bunkers)
Senwes	Bothaville Silo A (Bins)	Senwes	Odendaalsrus (Bins)
Senwes	Bothaville Silo B (Bins)	Senwes	Schoonspruit (Bins)
Senwes	Mirage (Bins)	Senwes	Schuttesdaai (Bins)

Grain Production Regions

Silo/Intake stands per region indicating type of storage structure

Region 23: Free State North-Western Region (Bultfontein)

Senwes	Bultfontein (Bins)	Senwes	Tierfontein (Bins)
Senwes	Kaalplaas (Bins)	Senwes	Wesselsbron (Bins/Bunkers)
Senwes	Losdoorns (Bins)	Senwes	Willemsrus (Bins)
Senwes	Protespan (Bins)		

Region 24: Free State Central Region

Senwes	Bainsvlei (Bins)	Senwes	Kroonstad (Bins)
Senwes	Bloemfontein (Bins)	Senwes	Pietersburg (Bins)
Senwes	Brandfort (Bins)	Senwes	Theunissen (Bins)
Senwes	De Burg (Bins)	Senwes	Van Tonder (Bins)
Senwes	Geneva (Bins)	Senwes	Welgeleë (Bins)
Senwes	Hennenman (Bins)	Senwes	Winburg (Bins)

Region 25: Free State South-Western Region

Afgri	Bethlehem Silo (Bins)	OVK	Marseilles (Bins)
Afgri	Slabberts Silo (Bins)	OVKi	Modderpoort (Bins)
OVK	Clocolan (Bins)	OVK	Tweespruit (Bins)
OVK	Ficksburg (Bins)	OVK	Westminster (Bins)
OVK	Fouriesburg (Bins)	Senwes	Dewetsdorp (Bins)

Region 26: Free State South-Eastern Region

Afgri	Kaallaagte (Bins)	Afgri	Monte Video (Bins)
Afgri	Libertas (Bins)	Afgri	Senekal (Bins)
Afgri	Marquard (Bins)	Senwes	Arlington (Bins)
Afgri	Meets (Bins)	Senwes	Steynsrus (Bins)

Region 27: Free State Northern Region

Senwes	Gottenburg (Bins)	Senwes	Mooigeleë (Bins)
Senwes	Heilbron (Bins)	Senwes	Wolwehoek (Bins)
Senwes	Hoogte Grainlink (Bins)	VKB	Petrus Steyn (Bins)

Region 28: Free State Eastern Region

Afgri	Afrikaskop (Bins/Bunkers)	VKB	Jim Fouché (Bins)
Afgri	Eeram (Bins)	VKB	Memel (Bins)
Afgri	Harrismith (Bins)	VKB	Reitz (Bins)
Afgri	Kransfontein (Bins/Bunkers)	VKB	Tweeling (Bins)
VKB	Ascent (Bins)	VKB	Villiers (Bins/Bulk)
VKB	Cornelia (Bins)	VKB	Vrede (Bins)
VKB	Daniëlsrus (Bins)	VKB	Warden (Bins)
VKB	Frankfort (Bins)	VKB	Windfield (Bins)

Region 29: Mpumalanga Southern Region

Afgri	Balfour (Bins)	Afgri	Leeuspruit (Bins)
Afgri	Greylingstad (Bins)	Afgri	Platrand (Bins)
Afgri	Grootvlei (Bins)	Afgri	Standerton (Bins)
Afgri	Harvard (Bins)	Afgri	Vaaldrift (Bunkers)
Afgri	Holmdene (Bins)	Afgri	Val (Bins)

Grain Production Regions

Silo/Intake stands per region indicating type of storage structure

Region 30: Mpumalanga Eastern Region

Afgri	Amersfoort (Bins)	Afgri	Morgenzon (Bins)
Afgri	Carolina (Bins)	Afgri	Overvaal (Bins)
Afgri	Davel (Bins)	Afgri	Sandspruit (Bunkers)
Afgri	Eerstelingsfontein (Bunker)	Afgri	Hendriksvallei (Bunkers)
Afgri	Ermelo (Bins)	BKB	Waterval (Bunkers)
Afgri	Estancia (Bins)	TWK	Mkondo (Bins)
Afgri	Lothair (Bins)	TWK	Panbult (Panbult)
Afgri	Maizefield (Bins)		

Region 31: Mpumalanga Central Region

Afgri	Bakenlaagte (Bunkers)	Afgri	Kortlaagte (Bunkers)
Afgri	Bethal (Bins)	Afgri	Leslie (Bins)
Afgri	Brakfontein (Bunkers)	Afgri	Palmietfontein (Bunkers)
Afgri	Devon (Bins)	Afgri	Trichardt (Bins)
Afgri	Kinross (Bins/Bunkers)	Afgri	Vaalkrantz (Bunkers)

Region 32: Mpumalanga Western Region

Afgri	Argent (Bins/Bunkers)	Afgri	Hawerklip (Bins)
Afgri	Delmas (Bunkers)	Afgri	Kendal (Bins)
Afgri	Dryden (Bins)	Afgri	Ogies (Bins)
Afgri	Eloff (Bins)	Afgri	Vlakfontein (Bunkers)
Afgri	Endicott (Bins)		

Region 33: Mpumalanga Northern Region

Afgri	Arnot (Bins)	Afgri	Middelburg (Bins)
Afgri	Driefontein (Bins)	Afgri	Pan (Bins)
Afgri	Lydenburg (Bins)	Afgri	Stoffberg (Bins)
Afgri	Marble Hall (Bins)	BKB	Wonderfontein (Bins)

Region 34: Gauteng Region

Afgri	Bloekomspruit (Bins)	Afgri	Nigel (Bins)
Afgri	Bronkhorstspuit (Bins)	Afgri	Pretoria Wes (Bins)
Afgri	Glenroy (Bins)	Afgri	Vogelvallei (Bunkers)
Afgri	Goeie Hoek (Bins)	Senwes	Middelvlei (Bins)
Afgri	Kaalfontein (Bins)	Senwes	Oberholzer (Bins)
Afgri	Kliprivier (Bunkers)	Senwes	Raathsvlei (Bins)
Afgri	Meyerton (Bunkers)		

Region 36: KwaZulu-Natal Region

Afgri	Bergville (Bins/Bunkers)	Afgri	Mizpah (Bins)
Afgri	Bloedrivier (Bins)	Afgri	Paulpietersburg (Bins)
Afgri	Chelmsford Dam (Bunkers)	Afgri	Pietermaritzburg (Bins)
Afgri	Dannhauser (Bins)	Afgri	Vryheid (Bins)
Afgri	Dundee (Bins)	Afgri	Winterton (Bins/Bunkers)

South African

Regional Soybean Quality

PRODUCTION REGION	(8) Eastern Cape Northern Region				(11) Vaalharts Region				(14) North-West Southern Region			
	ave	min	max	stdev	ave	min	max	stdev	ave	min	max	stdev
Grading:												
(a) Wet pods, %	0.00	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(b) Foreign matter, including stones, other grains and sunflower seeds: Provided that such deviations are individually within the limits specified in items (c), (d), and (e), %	0.13	-	-	-	0.42	0.01	1.01	0.41	0.56	0.07	2.37	0.78
(c) Other grain, %	0.00	-	-	-	0.12	0.00	0.20	0.09	0.00	0.00	0.00	0.00
(d) Sunflower seed, %	0.00	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(e) Stones, %	0.00	-	-	-	0.00	0.00	0.02	0.01	0.01	0.00	0.10	0.04
(f) Sclerotia, %	0.12	-	-	-	0.01	0.00	0.03	0.01	0.00	0.00	0.03	0.01
(g) Soybeans and parts of Soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	1.43	-	-	-	0.54	0.21	1.12	0.36	0.57	0.08	1.81	0.61
(h) Defective Soybeans on the 4.75 mm round hole sieve, %	1.11	-	-	-	2.09	0.57	4.69	1.65	4.20	1.37	7.73	2.66
(i) Soiled Soybeans, %	0.42	-	-	-	0.30	0.00	0.92	0.42	0.00	0.00	0.00	0.00
(j) Deviations in (b) and (f) collectively: Provided that such deviations are individually within the limits of said items, %	0.25	-	-	-	0.43	0.01	1.04	0.42	0.56	0.07	2.40	0.79
Poisonous seeds (<i>Crotalaria sp.</i> , <i>Datura sp.</i> , <i>Ricinis communis</i>)	0	-	-	-	0	0	1	0.45	0	0	1	0.35
Poisonous seeds (<i>Argemone mexicana L.</i> , <i>Convolvulus sp.</i> , <i>Ipomoea purpurea Roth.</i> , <i>Lolium temulentum</i> , <i>Xanthium sp.</i>)	0	-	-	-	0	0	0	0.00	0	0	0	0.00
Number of samples	1				5				8			
Nutritional analysis:												
Moisture, % (17 hr, 103 °C)	7.2	-	-	-	6.6	6.5	6.7	0.09	6.8	6.5	7.0	0.16
Crude protein, % (db)	40.59	-	-	-	38.21	35.55	39.15	1.50	40.04	39.33	40.91	0.51
Crude fat, % (db)	20.4	-	-	-	21.1	19.6	23.3	1.48	19.5	18.7	20.2	0.53
Crude Fibre, % (db)	6.9	-	-	-	8.5	8.0	8.7	0.30	6.9	6.4	7.6	0.39
Ash, % (db)	4.70	-	-	-	4.97	4.79	5.21	0.17	4.71	4.28	4.95	0.20
Number of samples	1				5				8			

South African

Regional Soybean Quality

PRODUCTION REGION	(15) North-West Southern-Eastern Region				(16) North-West Central Eastern Region				(18) North-West Central Region (Ventersdorp)			
	ave	min	max	stdev	ave	min	max	stdev	ave	min	max	stdev
Grading:												
(a) Wet pods, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(b) Foreign matter, including stones, other grains and sunflower seeds: Provided that such deviations are individually within the limits specified in items (c), (d), and (e), %	0.76	0.30	2.91	0.95	0.76	0.17	3.03	0.95	1.02	0.54	2.37	0.90
(c) Other grain, %	0.25	0.00	1.54	0.57	0.28	0.00	2.01	0.70	0.00	0.00	0.00	0.00
(d) Sunflower seed, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.02
(e) Stones, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(f) Sclerotia, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(g) Soybeans and parts of Soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	0.51	0.31	0.77	0.20	0.84	0.36	2.22	0.64	1.15	0.35	2.45	0.90
(h) Defective Soybeans on the 4.75 mm round hole sieve, %	2.23	1.33	3.19	0.74	5.75	0.66	16.94	6.27	1.85	1.29	2.55	0.52
(i) Soiled Soybeans, %	3.76	0.00	21.86	8.15	0.08	0.00	0.60	0.21	0.04	0.00	0.15	0.08
(j) Deviations in (b) and (f) collectively: Provided that such deviations are individually within the limits of said items, %	0.76	0.30	2.91	0.95	0.76	0.17	3.03	0.95	1.02	0.54	2.37	0.90
Poisonous seeds (<i>Crotalaria sp.</i> , <i>Datura sp.</i> , <i>Ricinis communis</i>)	0	0	0	0.00	2	0	12	4.24	0	0	0	0.00
Poisonous seeds (<i>Argemone mexicana L.</i> , <i>Convolvulus sp.</i> , <i>Ipomoea purpurea Roth.</i> , <i>Lolium temulentum</i> , <i>Xanthium sp.</i>)	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00
Number of samples	7				8				4			
Nutritional analysis:												
Moisture, % (17 hr, 103 °C)	6.8	6.5	7.1	0.23	6.9	6.5	7.2	0.22	6.8	6.4	7.2	0.34
Crude protein, % (db)	39.75	38.82	40.41	0.64	41.33	39.71	44.26	1.45	40.37	38.57	41.21	1.21
Crude fat, % (db)	20.0	19.7	20.6	0.29	19.5	18.4	21.5	1.19	19.0	18.4	19.4	0.46
Crude Fibre, % (db)	7.6	6.9	8.0	0.40	7.3	6.2	8.3	0.73	7.2	6.5	8.0	0.63
Ash, % (db)	4.71	4.57	5.21	0.23	4.55	4.40	4.73	0.11	4.63	4.34	4.75	0.19
Number of samples	7				8				4			

South African

Regional Soybean Quality

PRODUCTION REGION	(21) Free State North-Western Region (Viljoenskroon)				(22) Free State North-Western Region (Bothaville)				(23) Free State North-Western Region (Bultfontein)			
	ave	min	max	stdev	ave	min	max	stdev	ave	min	max	stdev
Grading:												
(a) Wet pods, %	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00	0.00
(b) Foreign matter, including stones, other grains and sunflower seeds: Provided that such deviations are individually within the limits specified in items (c), (d), and (e), %	1.02	0.10	3.39	1.25	2.21	-	-	-	1.23	0.15	3.30	1.32
(c) Other grain, %	0.05	0.00	0.27	0.11	0.20	-	-	-	0.03	0.00	0.12	0.05
(d) Sunflower seed, %	0.17	0.00	0.99	0.40	0.22	-	-	-	0.00	0.00	0.02	0.01
(e) Stones, %	0.04	0.00	0.22	0.09	0.00	-	-	-	0.03	0.00	0.16	0.07
(f) Sclerotia, %	0.00	0.00	0.00	0.00	0.00	-	-	-	0.04	0.00	0.22	0.09
(g) Soybeans and parts of Soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	0.78	0.15	2.86	1.03	0.58	-	-	-	0.90	0.13	2.19	0.76
(h) Defective Soybeans on the 4.75 mm round hole sieve, %	2.06	0.31	4.20	1.57	1.28	-	-	-	1.31	0.96	1.93	0.40
(i) Soiled Soybeans, %	0.00	0.00	0.00	0.00	0.00	-	-	-	0.85	0.00	3.81	1.47
(j) Deviations in (b) and (f) collectively: Provided that such deviations are individually within the limits of said items, %	1.02	0.10	3.39	1.25	2.21	-	-	-	1.26	0.15	3.30	1.29
Poisonous seeds (<i>Crotalaria sp.</i> , <i>Datura sp.</i> , <i>Ricinis communis</i>)	0	0	0	0.00	0	-	-	-	0	0	0	0.00
Poisonous seeds (<i>Argemone mexicana L.</i> , <i>Convolvulus sp.</i> , <i>Ipomoea purpurea Roth.</i> , <i>Lolium temulentum</i> , <i>Xanthium sp.</i>)	0	0	0	0.00	0	-	-	-	0	0	0	0.00
Number of samples	6				1				6			
Nutritional analysis:												
Moisture, % (17 hr, 103 °C)	7.1	6.7	7.5	0.26	6.5	-	-	-	7.5	6.6	11.0	1.73
Crude protein, % (db)	41.29	37.29	42.53	1.97	40.99	-	-	-	39.47	38.02	40.95	1.34
Crude fat, % (db)	19.9	18.4	21.3	1.21	20.8	-	-	-	21.3	19.8	23.1	1.22
Crude Fibre, % (db)	6.1	5.6	7.9	0.90	7.3	-	-	-	7.8	5.6	8.8	1.27
Ash, % (db)	4.78	4.53	5.10	0.18	4.92	-	-	-	4.86	4.62	5.04	0.15
Number of samples	6				1				6			

South African

Regional Soybean Quality

PRODUCTION REGION	(24) Free State Central Region				(25) Free State South-Western Region				(26) Free State South-Eastern Region			
	ave	min	max	stdev	ave	min	max	stdev	ave	min	max	stdev
<u>Grading:</u>												
(a) Wet pods, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(b) Foreign matter, including stones, other grains and sunflower seeds: Provided that such deviations are individually within the limits specified in items (c), (d), and (e), %	0.77	0.23	2.06	0.58	1.57	0.04	15.71	2.97	0.39	0.06	1.61	0.51
(c) Other grain, %	0.09	0.00	0.39	0.17	0.30	0.00	3.62	0.71	0.05	0.00	0.34	0.11
(d) Sunflower seed, %	0.02	0.00	0.11	0.04	0.13	0.00	1.40	0.33	0.03	0.00	0.10	0.04
(e) Stones, %	0.01	0.00	0.04	0.01	0.08	0.00	1.44	0.27	0.00	0.00	0.00	0.00
(f) Sclerotia, %	0.00	0.00	0.00	0.00	0.02	0.00	0.29	0.06	0.02	0.00	0.18	0.06
(g) Soybeans and parts of Soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	0.71	0.00	1.31	0.48	1.06	0.12	10.03	1.87	0.34	0.00	0.78	0.29
(h) Defective Soybeans on the 4.75 mm round hole sieve, %	3.95	0.92	14.94	4.70	1.10	0.22	3.05	0.67	1.16	0.41	2.59	0.63
(i) Soiled Soybeans, %	0.11	0.00	0.85	0.30	0.20	0.00	1.29	0.35	0.14	0.00	0.72	0.28
(j) Deviations in (b) and (f) collectively: Provided that such deviations are individually within the limits of said items, %	0.77	0.23	2.06	0.58	1.60	0.04	15.71	2.97	0.41	0.06	1.61	0.53
Poisonous seeds (<i>Crotalaria sp.</i> , <i>Datura sp.</i> , <i>Ricinis communis</i>)	5	0	41	14.50	1	0	9	2.10	0	0	0	0.00
Poisonous seeds (<i>Argemone mexicana L.</i> , <i>Convolvulus sp.</i> , <i>Ipomoea purpurea Roth.</i> , <i>Lolium temulentum</i> , <i>Xanthium sp.</i>)	0	0	0	0.00	0	0	1	0.19	0	0	0	0.00
Number of samples	8				29				9			
<u>Nutritional analysis:</u>												
Moisture, % (17 hr, 103 °C)	6.9	6.5	7.2	0.23	8.8	6.2	11.1	1.49	7.1	6.7	8.6	0.58
Crude protein, % (db)	39.24	38.22	42.72	1.54	39.25	35.03	46.63	1.85	38.80	36.78	40.70	1.49
Crude fat, % (db)	20.8	17.1	22.6	1.67	20.6	19.1	22.3	0.83	20.1	16.8	22.2	1.85
Crude Fibre, % (db)	7.9	6.3	8.8	0.77	7.4	6.1	9.0	0.64	7.1	6.1	7.9	0.63
Ash, % (db)	4.93	4.76	5.05	0.11	4.59	3.03	4.94	0.34	4.81	4.59	5.06	0.17
Number of samples	8				29				9			

South African

Regional Soybean Quality

PRODUCTION REGION	(27) Free State Northern Region				(28) Free State Eastern Region				(29) Mpumalanga Southern Region			
	ave	min	max	stdev	ave	min	max	stdev	ave	min	max	stdev
<u>Grading:</u>												
(a) Wet pods, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(b) Foreign matter, including stones, other grains and sunflower seeds: Provided that such deviations are individually within the limits specified in items (c), (d), and (e), %	0.50	0.02	1.83	0.89	0.30	0.03	1.77	0.37	0.26	0.00	0.99	0.24
(c) Other grain, %	0.00	0.00	0.00	0.00	0.07	0.00	0.88	0.20	0.00	0.00	0.05	0.01
(d) Sunflower seed, %	0.09	0.00	0.34	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(e) Stones, %	0.00	0.00	0.00	0.00	0.01	0.00	0.12	0.03	0.01	0.00	0.19	0.04
(f) Sclerotia, %	0.00	0.00	0.01	0.01	0.04	0.00	0.28	0.08	0.01	0.00	0.08	0.02
(g) Soybeans and parts of Soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	0.46	0.00	1.51	0.70	0.37	0.00	1.45	0.40	0.43	0.00	1.41	0.33
(h) Defective Soybeans on the 4.75 mm round hole sieve, %	1.06	0.24	2.68	1.10	1.27	0.10	2.73	0.74	0.82	0.23	1.51	0.36
(i) Soiled Soybeans, %	0.09	0.00	0.34	0.17	1.71	0.00	26.05	4.81	0.73	0.00	5.53	1.26
(j) Deviations in (b) and (f) collectively: Provided that such deviations are individually within the limits of said items, %	0.51	0.02	1.83	0.88	0.34	0.03	1.91	0.38	0.28	0.00	0.99	0.24
Poisonous seeds (<i>Crotalaria sp.</i> , <i>Datura sp.</i> , <i>Ricinis communis</i>)	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00
Poisonous seeds (<i>Argemone mexicana L.</i> , <i>Convolvulus sp.</i> , <i>Ipomoea purpurea Roth.</i> , <i>Lolium temulentum</i> , <i>Xanthium sp.</i>)	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00
Number of samples	4				35				26			
<u>Nutritional analysis:</u>												
Moisture, % (17 hr, 103 °C)	7.3	6.7	8.2	0.65	7.8	6.5	11.3	1.06	8.0	6.4	8.8	0.55
Crude protein, % (db)	40.48	39.87	40.96	0.46	40.05	37.58	42.82	1.09	40.22	37.53	44.16	1.32
Crude fat, % (db)	18.9	17.7	20.0	0.95	19.5	17.6	22.6	1.05	19.6	17.4	20.9	0.99
Crude Fibre, % (db)	7.6	6.7	9.4	1.24	7.7	5.0	9.3	0.88	7.2	5.6	8.3	0.53
Ash, % (db)	4.60	4.38	4.91	0.23	4.63	4.33	5.06	0.16	4.65	4.43	4.79	0.08
Number of samples	4				35				26			

South African

Regional Soybean Quality

PRODUCTION REGION	(30) Mpumalanga Eastern Region				(31) Mpumalanga Central Region				(32) Mpumalanga Western Region			
	ave	min	max	stdev	ave	min	max	stdev	ave	min	max	stdev
<u>Grading:</u>												
(a) Wet pods, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(b) Foreign matter, including stones, other grains and sunflower seeds: Provided that such deviations are individually within the limits specified in items (c), (d), and (e), %	0.31	0.00	1.26	0.34	0.42	0.10	0.72	0.17	0.66	0.02	2.66	0.69
(c) Other grain, %	0.01	0.00	0.09	0.03	0.01	0.00	0.10	0.03	0.06	0.00	0.44	0.14
(d) Sunflower seed, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(e) Stones, %	0.00	0.00	0.05	0.01	0.01	0.00	0.06	0.02	0.01	0.00	0.11	0.03
(f) Sclerotia, %	0.02	0.00	0.24	0.05	0.01	0.00	0.04	0.01	0.00	0.00	0.02	0.01
(g) Soybeans and parts of Soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	0.42	0.00	1.03	0.28	0.45	0.01	0.92	0.31	0.45	0.00	1.18	0.31
(h) Defective Soybeans on the 4.75 mm round hole sieve, %	2.11	0.14	14.73	2.81	1.00	0.38	3.32	0.78	1.41	0.14	2.96	0.73
(i) Soiled Soybeans, %	3.38	0.00	24.88	5.15	2.59	0.00	10.64	3.71	2.39	0.00	16.96	4.04
(j) Deviations in (b) and (f) collectively: Provided that such deviations are individually within the limits of said items, %	0.33	0.00	1.37	0.36	0.46	0.10	0.73	0.18	0.66	0.02	2.66	0.69
Poisonous seeds (<i>Crotalaria sp.</i> , <i>Datura sp.</i> , <i>Ricinis communis</i>)	0	0	3	0.56	0	0	0	0.00	0	0	1	0.25
Poisonous seeds (<i>Argemone mexicana L.</i> , <i>Convolvulus sp.</i> , <i>Ipomoea purpurea Roth.</i> , <i>Lolium temulentum</i> , <i>Xanthium sp.</i>)	0	0	2	0.37	0	0	0	0.00	0	0	0	0.00
Number of samples	29				12				16			
<u>Nutritional analysis:</u>												
Moisture, % (17 hr, 103 °C)	7.7	6.6	8.7	0.67	7.0	6.2	8.4	0.61	7.2	6.5	8.8	0.79
Crude protein, % (db)	40.17	38.56	41.63	0.81	39.52	36.25	42.28	1.55	40.31	38.87	41.69	0.78
Crude fat, % (db)	20.1	17.8	22.2	1.13	19.0	18.2	19.8	0.48	19.9	18.8	21.8	0.85
Crude Fibre, % (db)	8.0	6.7	9.5	0.95	8.0	7.4	9.2	0.61	7.0	5.7	7.9	0.65
Ash, % (db)	4.58	4.23	4.78	0.13	4.69	4.58	4.91	0.10	4.69	4.52	5.05	0.13
Number of samples	29				12				16			

South African

Regional Soybean Quality

PRODUCTION REGION	(33) Mpumalanga Northern Region				(34) Gauteng Region				(36) KwaZulu-Natal Region			
	ave	min	max	stdev	ave	min	max	stdev	ave	min	max	stdev
<u>Grading:</u>												
(a) Wet pods, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(b) Foreign matter, including stones, other grains and sunflower seeds: Provided that such deviations are individually within the limits specified in items (c), (d), and (e), %	0.31	0.04	1.08	0.24	0.24	0.01	0.96	0.27	0.58	0.20	1.22	0.43
(c) Other grain, %	0.10	0.00	0.89	0.23	0.01	0.00	0.10	0.03	0.07	0.00	0.23	0.09
(d) Sunflower seed, %	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(e) Stones, %	0.02	0.00	0.18	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(f) Sclerotia, %	0.00	0.00	0.03	0.01	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00
(g) Soybeans and parts of Soybeans above the 1.8 mm slotted sieve which pass through the 4.75 mm round hole sieve, %	0.28	0.00	1.03	0.27	0.31	0.03	1.07	0.31	0.50	0.16	0.84	0.28
(h) Defective Soybeans on the 4.75 mm round hole sieve, %	1.58	0.11	3.71	1.09	1.31	0.35	2.16	0.60	5.45	1.19	10.92	3.10
(i) Soiled Soybeans, %	4.75	0.00	32.24	7.65	0.03	0.00	0.31	0.09	3.05	0.61	8.07	2.53
(j) Deviations in (b) and (f) collectively: Provided that such deviations are individually within the limits of said items, %	0.31	0.00	1.08	0.25	0.25	0.03	0.96	0.27	0.58	0.20	1.22	0.43
Poisonous seeds (<i>Crotalaria sp.</i> , <i>Datura sp.</i> , <i>Ricinis communis</i>)	1	0	10	2.36	0	0	0	0.15	0	0	0	0.00
Poisonous seeds (<i>Argemone mexicana L.</i> , <i>Convolvulus sp.</i> , <i>Ipomoea purpurea Roth.</i> , <i>Lolium temulentum</i> , <i>Xanthium sp.</i>)	0	0	0	0.00	0	0	0	0.00	0	0	2	0.76
Number of samples	18				11				7			
<u>Nutritional analysis:</u>												
Moisture, % (17 hr, 103 °C)	8.0	7.0	11.2	1.40	7.5	6.7	8.1	0.61	6.7	6.4	7.2	0.24
Crude protein, % (db)	40.13	35.78	41.81	1.62	39.25	38.21	40.53	0.81	39.55	38.74	40.13	0.45
Crude fat, % (db)	20.3	18.7	23.1	1.42	19.5	17.8	21.2	1.09	21.1	20.1	21.6	0.52
Crude Fibre, % (db)	7.0	5.6	9.4	1.09	7.6	6.7	9.2	0.84	6.5	5.6	7.1	0.54
Ash, % (db)	4.72	4.22	5.13	0.25	4.66	4.53	4.80	0.09	4.81	4.74	4.97	0.08
Number of samples	18				11				7			

Methods

Sampling Procedure:

A working group determined the procedure to be followed to ensure that the crop quality samples sent to the SAGL by the various grain silo owners, were representative of the total crop.

Each delivery was sampled as per the grading regulations for grading purposes.

After grading, the grading samples were placed in separate containers according to class and grade, per silo bin at each silo.

When the container was full or at the end of each week, the content of each container was divided with a multi slot divider in order to obtain a 3 kg sample.

If there was more than one container per class and grade per silo bin, the combined contents of the containers were mixed thoroughly before dividing it with a multi slot divider to obtain the required 3 kg sample.

The samples were marked clearly with the name of the depot, the bin/bag/bunker number(s) represented by each individual sample as well as the class and grade and were then forwarded to the SAGL.

Grading:

Full grading was done in accordance with the Regulations relating to the Grading, Packing and Marking of Soybeans intended for sale in the Republic of South Africa (Government Notice NO. R. 370 of 21 April 2017).

Please see pages 82 to 91 of this report.

Test Weight:

Test weight provides a measure of the bulk density of grain and oilseeds.

Test weight does not form part of the grading regulations for soybeans in South Africa. An approximation of the test weight of South African soybeans is provided in this report for information purposes. The standard working procedure of the Kern 222 instrument, as described in ISO 7971-3:2019, was followed. The g/1 L filling mass of the soybean samples was determined and divided by two. The test weight was then extrapolated by means of the following formulas obtained from the Test Weight Conversion Chart for Soybean of the Canadian Grain Commission: $y = 0.1898x + 2.2988$ (291 to 350 g/0.5 L) and $y = 0.1895x + 2.3964$ (351 to 410 g/0.5 L).

Nutritional Analysis:

MILLING

Prior to the nutritional analyses, the soybean samples were milled on a Retch ZM 200 mill fitted with a 1.0 mm screen.

MOISTURE

The method prescribed under the ISTA International Rules for Seed Testing, Section 9, latest edition was used to determine the moisture content of the soya samples. This method determines moisture content as a loss in weight of a sample when dried in an oven at 103 °C for 17 hours.

CRUDE PROTEIN

The Dumas combustion analysis technique was used to determine the crude protein content, according to AACCI method 46-30.01, latest edition.

This method prescribes a generic combustion method for the determination of crude protein. Combustion at high temperature in pure oxygen sets nitrogen free, which is measured by thermal conductivity detection. The total nitrogen content of the sample is determined and converted to equivalent protein by multiplication with a factor of 6.25 to obtain the crude protein content.

CRUDE FAT

In-House method 024 was used for the determination of the crude fat in the samples. After sample preparation the fat is extracted by petroleum ether with the aid of the Soxhlet extraction apparatus, followed by the removal of the solvent by evaporation and weighing the dried residue thus obtained. The residue is expressed as % crude fat.

CRUDE FIBRE

Crude fibre is the loss on ignition of the dried residue remaining after digestion of a sample with 1.25% Sulphuric acid (H₂SO₄) and 1.25% Sodium hydroxide (NaOH) solutions under specific conditions.

In-House method 031 was used for the determination of the crude fibre in the samples. This method is based on AACCI method 32-10.01 using the Velp FIWE Advance fibre AutoExtractor.

ASH

Ash is defined as the quantity of mineral matter which remains as incombustible residue of the tested substance, after application of the described working method. In-house method No. 011, based on AACCI method 08-02.01 Rapid (Magnesium Acetate) method, was used for the determination. The samples were incinerated at 700 ± 10 °C in a muffle furnace for 45 minutes.



CERTIFICATE OF ACCREDITATION

In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

SOUTHERN AFRICAN GRAIN LABORATORY NPC

Co. Reg. No.: 1997/018518/08

Southern African Grain Laboratories NPC

Facility Accreditation Number: T0116

is a South African National Accreditation System accredited facility provided that all conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation, Annexure "A", bearing the above accreditation number for

CHEMICAL AND PHYSICAL ANALYSIS

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2017

The accreditation demonstrates technical competency for a defined scope and the operation of a quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant accreditation symbol to issue facility reports and/or certificates

Mrs FS Radebe
Acting Chief Executive Officer

Effective Date: 01 November 2024
Certificate Expires: 31 October 2029



Facility Number: T0116

ANNEXURE A
SCHEDULE OF ACCREDITATION

Facility Number: **T0116**

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Nominated Representative:

Ms M Motlanthe

Issue No.: 38

Date of Issue: 11 March 2026

Expiry Date: 31 October 2029

Material or Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Techniques / Equipment Used
CHEMICAL		
Ground Barley	Moisture (Oven Method)	Analytical EBC Method 3.2, latest Edition (2 hour; 130°C)
Cereal and cereal products specifically-wheat, rice, (hulled paddy), barley, millet, rye, and oats as grain, semolina and flour	Moisture (Oven Method)	ICC Std No.110/1, Latest Edition (90 min; 130°C) (2 hour; 130°C)

Facility Number: T0116

Flour, semolina, bread, all kind of grains and cereal products and food products (except those that are sugar coated)	Moisture (Oven Method)	AACCI 44-15.02, Latest Edition (1 hour; 130°C) (72 hour; 103°C)
Animal feed, Plant tissue and Sunflower (Milled)	Moisture (Oven Method)	AgriLASA 2.1 Latest Edition (% hours, 105°C)
All flours, cereal grains, oilseeds and animal feeds	Nitrogen and protein (Combustion method - Dumas)	AACCI 46-30.01, Latest Edition
Cereal based food stuff	Dietary fibres (Total)	In-house method 012
Food stuff and feeds	Carbohydrates (by difference) (calculation) Energy value (calculation) Total digestible nutritional value (calculation)	SOP MC 23
Food Stuff and feeds	Determination of Ash	In-house method 011
Wheat Kernels	Moisture (Oven Method)	Government Gazette Wheat Regulation, Latest Edition (72 hour, 103°C)
Flours of grains e.g. barley, oats, triticale, maize, rye, sorghum and wheat; oilseeds like soybeans and sunflower, feeds and mixed feeds and foodstuffs	Crude fat (Ether extraction by Soxhlet)	In-house method 024
Meal and flour of wheat, rye, barley, other grains, starch containing and malted products	Falling number	ICC Std 107/1, Latest Edition
NUTRIENTS AND CONTAMINANTS		
Vitamin fortified food and feed products and fortification mixes grain based	Vitamin A as all trans Retinol (Saponification) (UPLC)	In-house method 001
	Thiamine Mononitrate (UPLC) Riboflavin (UPLC) Nicotinamide (UPLC) Pyridoxine Hydrochloride (UPLC)	In-house method 002
	Folic Acid (UPLC)	In-house method 003
	Total Sodium (Na) (AA) Total Iron (Fe) (AA) Total Zinc (Zn) (AA)	In-house method 010
Yeast and Bread	Vitamin D ₂ (UPLC)	In-House method 029

Facility Number: T0116

Food and feed	Multi-Mycotoxin: (LCMSMS) -Aflatoxin G ₁ , B ₁ , G ₂ , B ₂ and total -Deoxynivalenol (DON), 15-ADON -Fumonisin B ₁ , B ₂ , B ₃ -Ochratoxin A -T2, HT-2 -Zearalenone	In-house method 026
GRADING		
Maize	Defective kernels (White maize/ yellow maize)	Government Gazette Maize Regulation, Latest Edition
Cereal as grains (Wheat, barley, rye and oats)	Hectolitre mass (Kern222)	ISO 7971-3, Latest edition
Wheat	Screenings	Government Gazette Wheat Grading Regulation, Latest Edition
RHEOLOGICAL		
Wheat flour	Alveograph (Rheological properties)	ICC Std.121, Latest Edition
Flours	Farinograph (Rheological properties)	AACCI 54.02, Latest Edition (Rheological behaviour of flour Farinograph: Constant Flour Weight procedure)
Hard, soft and durum wheat (flour and whole wheat flour)	Mixograph (Rheological properties)	Industry accepted method 020 (Based on AACCI 54-40.02, Latest Edition Mixograph Method)

Original Date of Accreditation: 01 November 1999

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM



Accreditation Manager

Landbounavorsingsraad
Graangewasse
Potchefstroom

Agricultural Research Council
Grain Crops
Potchefstroom

Republiek van Suid Afrika
Republic of South Africa

**VERSLAG VAN DIE NASIONALE
SOJABOON KULTIVARPROEWE
2024/25**

**REPORT OF THE NATIONAL
SOYBEAN CULTIVAR TRIALS**

Verantwoordelike beampte:

Responsible officer:

AS de Beer

L Bronkhorst

N Cochrane

J Gcabashe

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INHOUD/INDEX

ONDERWERP SUBJECT		BLADSY PAGE
1	INLEIDING.....	1
	INTRODUCTION	1
1.1	DOEL.....	1
	AIM	1
2	MATERIAAL EN METODE	1
	MATERIALS AND METHODS	1
2.1	ALGEMEEN	1
	GENERAL	1
2.2	WAARNEMINGS	2
	OBSERVATIONS	2
2.2.1	Blomdatum	2
	Date of flowering.....	2
2.2.2	Fisiologies ryp	2
	Physiological maturity.....	2
2.2.3	Oesrypdatum.....	2
	Date of harvest maturity.....	2
2.2.4	Planthoogte	2
	Plant height	2
2.2.5	Peulhoogte	2
	Pod height	2
2.2.6	Omval.....	2
	Lodging.....	2
2.2.7	Groenstam.....	3
	Green Stem.....	3
2.2.8	Oopspring.....	3
	Shattering	3
2.2.9	Aantal plante (3 weke na opkoms)	3
	Number of plants (3 weeks after emergence).....	3
2.2.10	Massa per 100 sade	3
	100 Seed mass	3
2.2.11	Ongewenste sade	3
	Undesirable seed	3
2.2.12	Proteïen-en oliepersentasie	3
	Protein and oil percentage.....	3
2.2.13	Graanopbrengs	3
	Grain yield	3
2.3	DIE EVALUERING VAN PROEWE	3
	THE EVALUATION OF TRIALS	3
3	BESPREKING VAN RESULTATE	4
	DISCUSSION OF RESULTS.....	4

3.1	ALGEMEEN	4
	GENERAL	4
3.2	BESPREKING VAN TABELLE	5
	DISCUSSION OF TABLES	5
3.2.1	Dae tot blom, fisiologiesryp en lengte van die groeiperiode	5
	Days to flowering, physiological maturity and length of growing	
	season	4
3.2.2	Planthoogte	5
	Plant height	5
3.2.3	Peulhoogte	6
	Pod height	5
3.2.4	Omval.....	6
	Lodging.....	6
3.2.5	Groenstam.....	6
	Green stem	6
3.2.6	Oopspring.....	7
	Shattering	6
3.2.7	Planttelling	7
	Number of plants	6
3.2.8	Persentasie ongewenste sade.....	7
	Percentage undesirable seed	7
3.2.9	Saadgrootte.....	7
	Seed size	7
3.2.10	Oliepersentasie	7
	Oil percentage.....	7
3.2.11	Ru-proteïenpersentasie	7
	Crude Protein Percentage.....	7
3.2.12	Protolie	8
	Profat	7
3.2.13	Opbrengs.....	8
	Yield	8
4	INTERPRETASIE VAN OPBRENGSRESULTATE.....	8
	INTERPRETATION OF YIELD RESULTS	8
4.1	INLEIDING.....	8
	INTRODUCTION	8
4.2	OPBRENGSWAARSKYNNLIKHEID EN OPBRENGS.....	8-9
	YIELD PROBABILITY AND YIELD.....	8-9

**TABEL
TABLE**

**BLADSY
PAGE**

Lys van medewerkers10
List of co-operators10

**NASIONALE SOJABOONKULTIVARPROEWE
NATIONAL SOYBEAN CULTIVAR TRIALS**

1 Sojaboonsaad eienskappe en saadverskaffers11
Soybean seed characteristics and seed companies11

2 Grond en verbouingsinligting.....12
Soil and general information12

3 Reënvalgegewens.....13
Rainfall detail13

4 Dae tot blom14
Days to flowering14

5 Dae tot fisiologiesrypstadium.....15
Days to physiological maturity15

6 Lengte van groeiperiode16
Length of growing season16

7 Planthoogte (cm)17
Plant height (cm).....17

8 Peulhoogte (cm).....18
Pod height (cm).....18

9 Omval (1-5)19
Lodging (1-5)19

10 Groenstam (1-5)20
Green stem (1-5)20

11 Oopspring (1-5)21
Shattering (1-5)21

12 Planttelling (3 weke na plant).....22
Number of plants (3 weeks after emergence)22

13 Persentasie ongewenste sade23
Percentage undesirable seed23

14	Massa/100 sade (g)	24
	Mass/100 seeds (g)	24
18	Opbrengste per lokaliteit	25
	Actual yield for various localities	25
19	Opbrengswaarskynlikheid vir koeler produksiegebiede (3 jaar)	26
	Yield probability for cooler production areas (3 year).....	26
20	Opbrengste vir koeler produksiegebiede (2 jaar)	27
	Actual yield for cooler production areas (2 year)	27
21	Opbrengswaarskynlikheid vir matige produksiegebiede (3 jaar)	28
	Yield probability for moderate production areas (3 year)	28
22	Opbrengste vir matige produksiegebiede (2 jaar)	29
	Actual yield for moderate production areas (2 year)	29
23	Opbrengswaarskynlikheid vir warmer produksiegebiede (3 jaar).....	30
	Yield probability for warmer production areas (3 year).....	30
24	Opbrengste vir warmer produksiegebiede (2 jaar)	31
	Actual yield for warmer production areas (2 year)	31
25	Saamgevatte inligting vir koeler produksiegebiede	32
	Summerised information for cooler production areas	32
26	Saamgevatte inligting vir matige produksiegebiede	33
	Summerised information for moderate production areas	33
27	Saamgevatte inligting vir warmer produksiegebiede	34
	Summerised information for warmer production areas	34

1 INTRODUCTION

The National Soybean Cultivar Trials (project GCI012403000043 (P05000002) were planted for the 47th successive year this past growing season. A total of 36 trials (of the planned 37 trials) were planted at 33 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 32 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, 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 (UPL inoculant) 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 plot.
- 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 lodgings, will not hamper mechanical harvesting
 - 3 = Few lodgings, lodging less than what will hamper mechanical harvesting
 - 4 = Few lodgings, 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 = Many 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 Agricultural Research Council (ARC) using the Near-Infrared Red (NIR DA 7250 Perten) instrument. Samples are being verified 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 mean 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 DISCUSSIONS OF RESULTS

3.1 GENERAL

The rainfall and irrigation data are shown in Table 3.

Ten (10) of the 36 trials planted could not be included (27.8%) in the report compared to the seven (7) out of 33 trials (21.2%) in the 2023/24 season.

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

- 1 Alice (Univ. Stellenbosch) – high CV%.
- 2 Bapsfontein (Pannar) – Chemical contamination.
- 3 Bethlehem PD2 – poor stand.
- 4 Lichtenburg – poor stand.
- 5 Marquard – high CV%.
- 6 Potchefstroom (Pannar) – not planted.
- 7 Pyramid – hail damage.
- 8 Standerton (Agricol) – poor stand.
- 9 Vredefort (Agricol) – poor stand.
- 10 Zanyokwe (Univ. Stellenbosch) – high CV%

As in the previous seasons the evaluation of the trials was based on several 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 (44 days Schweizer-Reneke PD2 and the longest in the cooler areas (75 days at Belfast).

The number of days to physiological maturity is shown in Table 5. The longest average days to maturity was experienced at Kokstad (151 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 RA7024BR (MG 7.0) had a mean plant height of 118 cm (highest) in the moderate area compared to 56 cm (lowest) of the determinate cultivar Lake 5021 IPRO (MG 4.8) in the cool region.

The average plant height between localities varied from a mean of 61 cm at Schweizer-Reneke PD2 to 113 cm at Cedara.

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 cultivar Y651 IPRO (MG 6.5; indeterminate), had the highest mean pod height of 18, 23 and 26 cm, respectively for the cool-, moderate- and warm areas.

Other cultivars with above average pod heights for all the climate areas are RA6124BR (MG 6.1, indeterminate), LG60261IPR (MG 6.1; indeterminate), US63-16IPRO (MG 6.3; indeterminate), US6410IPRO (MG 6.4; indeterminate), DM 61I63RSF IPRO (MG 6.6; indeterminate), PAN 1644R (MG 6.7; indeterminate), RA6824BR (MG 6.8; indeterminate), and RA7024BR (MG 7.0; indeterminate).

Lake 5021 IPRO (MG 4.8) (determinate) had the lowest reading of 6 cm in the cool area. 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 Brits. The highest lodging figures was reported for US63-16IPRO at Delmas in the cool area and Cedara in the moderate area.

3.2.5 Green stem (Table 10)

A high percentage of green stem was recorded at Groblersdal (ARC) while the cultivars Lake 5021 IPRO, RA5022BR, Lake 5122 IPRO, DM 53I54RSF IPRO, LG60261IPR and US63-16IPRO 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)

No significant shattering occurred at any of the localities.

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 Schweizer-Reneke PD1 due to the extreme drought.

3.2.8 Percentage undesirable seed (Table 13)

The lowest mean of 0.12% undesirable seeds was recorded for the cool region. The range varied from 0.69% at Winterton to 0.03% at Bapsfontein (Agricol) as well as Kinross.

3.2.9 Mass (g 100⁻¹) seeds (Table 14)

The variation in seed mass among localities ranged between 13.92 g 100⁻¹ seeds at Umtata (Dimanda) to 22.93 g 100⁻¹ seeds at Umtata (Ross Mission). The highest average seed mass was recorded for RA565R in the warm region, while US6410IPRO, had the smallest average seed in the cool area.

3.2.10 Oil percentage (Table 15)

Lake 5021 IPRO, LG60353R and LG60356R had an above average (>23%) for the warm area and US56-26R for both the moderate and warm areas. The average oil percentages are 20.81% for the cool-, 21.57% moderate- and 21.81% for the warm areas.

3.2.11 Crude Protein percentage (Table 16)

PAN 1515R, LS6851R, PAN 1521R and PAN 1644R had an above average percentage of 41% for the warm area as well as LG60359R for both the moderate and warm areas. The overall averages are 38.88% for the cool-, 39.45% for the moderate- and 39.76% in the warm areas.

3.2.12 Profat (Table 17)

The inclusion of this table in the report was requested by Dr Erhard Bredendam 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 Lake 5021 IPRO and P51T42 R had the highest average profat value (>61%) for all the regions.

3.2.13 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 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 18, 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.

RA565R showed an above average yield probability for all the yield potentials in the cool, area (Tables 19). PAN 1521R, performed above average for both the cool and moderate areas (Tables 19 & 21). Y657 performed above average for the cool and warm area (Tables 19 & 23). PAN 1644R only performed above average for the cool area (Table 19) an RA5022R, and DM61163RSF IPRO only performed above average for the moderate area (Table 21), while DM 59I60RSF IPRO and LG60261IPR showed an above average yield probability in the warm area (Table 23).

Lokalliteite, medewerkers en proeflokalliteite van kultivarproewe soos beplan vir, 2024/25
Localities, co-operators and trial locality of the cultivar trials for 2024/25

Nr No	Lokalliteite Locality	Proeflokalliteite Trial locality	Verantwoordelike beampte Responsible officer
1	Alice	Fort Hare Stellenbosch	Prof P Swanepoel & C Mutengwa
2	Bapsfontein	Corteva Agriscience Research Centre	J Serfontein
3	Bapsfontein (Agricol)	-	C Pelster
4	Barberspan	J Basson	G de Beer & L Bronkhorst
5	Belfast	G Roos	L Bronkhorst
6-7	Bethlehem	Kleingraan Instituut ARC	L Bronkhorst
8	Brits	-	D van Staden
9	Bronkhorstpruit	-	D van Staden
10	Cedara	Department of Agriculture	T Zulu
11	Clarens	D Terblanche	L Bronkhorst
12	Delmas (Agri Seed)	-	D van Staden
13	Greylingstad (Agricol)	-	C Pelster
14	Greytown Kranskop	-	A Crocker
15	Groblersdal (ARC)	-	L Bronkhorst
16	Hendrina	-	K van Wyk
17	Hoopstad	R Taljaard	G de Beer & L Bronkhorst
18	Kinross	Vosstoffel Boerdery	L Bronkhorst
19	Kokstad	Research Stadion	MP Skhakhane
20	Kroonstad	Hoërskool Kroonstad	L Bronkhorst
21	Leeudoringstad	D Bergh	G de Beer & L Bronkhorst
22	Lichtenburg	F du Plessis	C Pelster
23	Marquard	-	K van Wyk
24	Petrus Steyn	-	K van Wyk
25	Potchefstroom	Limagrain Research Station	F Middleton
26	Potchefstroom	Pannar Research station	A Jarvie
27	Pyramid	-	A Venter
28-29	Schweizer-Reneke	J du Plessis	G de Beer & L Bronkhorst
30	Standerton (Agricol)	E Buurman	C Pelster
31	Standerton (Agri seeds)	-	D van Staden
32-33	Umtata	Dimanda High School? Ross Mission	ARC L Bronkhorst
34	Vredefort	-	C Pelster
35	Warrenton	-	F Middleton
36	Winterton	Terry Muirhead	F Middleton
37	Zanyokwe	-	Prof P Swanepoel/C Mutengwa

Table 1: Sojaboonsaad eienskappe en inligting oor verskaffers, 2024/25
Table 1: Soybean seed characteristics and information about agents, 2024/25

Kultivar Cultivar	Volwassenheids- groeperings Maturity Group	Groeiwyse Growth habit	Hilum kleur Hilum colour	Blomkleur Flower colour	Haarkleur Pubescence	Op varieteits lys On variety list	Verskaffer Agent	Telersregte Breeding rights
	*1	*2	*3	*4				
Lake 5021 IPRO	4.8	D	B	P	G	JAYES	Lake Agriculture	NEE/NO
US50-14R	4.9	I	IB	P	T	JAYES	Unitedseeds	NEE/NO
PAN 1515R	5.0	I	B	P	T	JAYES	Pannar	JAYES
RA5022BR	5.0	I	LB	W	G	JAYES	Agri Seed & Technology	JAYES
P51T42 R	5.1	I	G	P	T	JAYES	Pioneer	JAYES
Lake 5122 IPRO	5.1	I	B	P	G	JAYES	Lake Agriculture	NEE/NO
DM 53154RSF IPRO	5.1	I	BL	P	T	JAYES	GDM Seeds/Agricol	JAYES
P52T52 R	5.2	I	B	P	T	JAYES	Pioneer	JAYES
LG60353R	5.3	I	DB	P	G	JAYES	Limagrain	JAYES
Y540	5.4	I	B	W	T	JAYES	Southern Hemisphere Seeds	NEE/NO
RA565R	5.5	I	B	P	G	JAYES	Agri Seed & Technology	JAYES
US56-26R	5.6	I	B	P	G	JAYES	Unitedseeds	NEE/NO
LG60356R	5.6	I	IB	P	G	JAYES	Limagrain	JAYES
LS6851R	5.6	I	B	P	G	JAYES	Limagrain	JAYES
PAN 1521R	5.7	D	IB	P	G	JAYES	Pannar	JAYES
Lake 5920 IPRO	5.9	D	B	P	G	JAYES	Lake Agriculture	NEE/NO
P59T03 R	5.9	I	LB	W	T	JAYES	Pioneer	JAYES
RA5924BR	5.9	I	LB	W	W	JAYES	Agri Seed & Technology	JAYES
LG60359R	5.9	I	LB	W	G	JAYES	Limagrain	JAYES
LG60260IPR	6.0	I	IB	P	G	JAYES	Limagrain	JAYES
DM 59R03RSF	6.0	I	LB	W	G	JAYES	GDM Seeds/Agricol	JAYES
DM 59160RSF IPRO	6.0	I	IB	P	G	JAYES	GDM Seeds/Agricol	JAYES
RA6124BR	6.1	I	BL	P	W	JAYES	Agri Seed & Technology	JAYES
LG60261IPR	6.1	I	B	W	G	JAYES	Limagrain	JAYES
US63-16IPRO	6.3	I	LB	P	G	JAYES	Unitedseeds	NEE/NO
US6410IPRO	6.4	I	LB	P	G	JAYES	Unitedseeds	NEE/NO
Y 657	6.5	I	B	P	G	JAYES	Unitedseeds	NEE/NO
Y651 IPRO	6.5	I	IB	P	G	JAYES	Unitedseeds	NEE/NO
DM 61163RSF IPRO	6.6	I	LB	W	G	JAYES	Southern Hemisphere Seeds	NEE/NO
PAN 1644R	6.7	I	IB	P	G	JAYES	Southern Hemisphere Seeds	NEE/NO
RA6824BR	6.8	I	B	P	W	JAYES	Pannar	JAYES
RA7024BR	7.0	I	BL	P	W	JAYES	Agri Seeds & Technology	JAYES

*1 D - Bepaald/determinate; I - Onbepaald/indeterminate; SD - Semi-Bepaald/semi determinate

*2 BL - Swart/black; IB - Onvolledig 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/Tawn

Tabel 2: Algemene inligting aangaande grond en verbouingspraktieke by die onderskeie proeflokaltite van die kultivarproewe, 2024/25
Table 2: General information in connection with soil and cultivation practices at the different trial localities, 2024/25

Lokaliteit Locality	Plantdatum Date of planting	Spasiëring Spacing (cm)	Onkruid beheer Weed control
Alice/D	13/12/2024	76	-
Bapsfontein/B/I	13/12/2024	91	-
Bapsfontein Agricol/D (Delareville)	16/11/2024	91	-
Barberspan/D	14/11/2024	76	Round-up
Belfast/D	20/11/2024	76	-
Bethlehem PD1/D	06/11/2024	76	Strongarm, Alachlor
Bethlehem PD2/D	05/12/2024	76	Strongarm, Alachlor
Brits/B/I	26/11/2024	76	Metagan, Touchdown
Bronkhorstspuit	17/12/2024	76	Metagan, Touchdown
Cedara/D	21/11/2024	45	-
Clarens/D	19/11/2024	76	Strongarm, Alachlor
Delmas/D	11/11/2024	76	Metagan, Touchdown
Greylingstad/D (Viljoenskroon)	15/11/2024	91	-
Greytown Kranskop/D	11/11/2024	75	-
Groblersdal ARC/B/I	10/12/2024	76	Strongarm, Alachlor
Hendrina/D	08/11/2024	76	-
Hoopstad/D	13/11/2024	76	Round-up
Kinross/D	21/11/2024	76	Farmer spray paraquat
Kokstad/D	21/11/2024	45	-
Kroonstad/D	18/11/2024	76	Strongarm, Alachlor
Leeudoringstad/D	13/11/2024	76	Round-up
Lichtenburg/D	20/11/2024	91	-
Marquard/D	21/12/2024	91	-
Petrus Steyn/D	30/10/2024	91	-
Potchefstroom (Limagrain)/D	30/10/2024	91	Metagan, Strongarm
Potchefstroom (Pannar)/B/I	Nie geplant/Not planted	91	-
Pyramid/D	09/12/2024	76	-
Schweizer Reneke/ PD1/D	15/11/2024	110	Round-up
Schweizer Reneke/ PD2/D	08/01/2025	110	Round-up
Standerfontein (Agricol)/D	05/11/2024	91	-
Standerfontein (Agri Seeds)	21/11/2024	76	Metagan, Touchdown
Umtata (Dimanda School)/D	29/11/2024	76	-
Umtata (Ross Mission)/D	26/11/2024	76	-
Vredefontein/D	21/11/2024	91	-
Warrenton/B/I	18/12/2024	76	PowerMAX glyphosate
Winterton/D	11/12/2024	76	PowerMAX glyphosate
Zanyckwe/B/I	13/12/2024	76	-

Tabel 3: Reënval en besproeiing vir die verskillende lokaliteite (mm), 2024/25
 Table 3: Rainfall and irrigation at the different localities (mm), 2024/25

Lokaliteit/ Locality	Maandelikse reënval (mm)/ Monthly rainfall (mm)												Totaal/ Total	Besproeiing/ Irrigation	Totaal/ Total
	Okt	Nov	Des	Jan	Feb	Mrt	Apr	*	**						
Barberspan	0	27	49	50	244	136	116	622	0	622	0	622			
Bethlehem	72.39	56.39	61.47	166.88	173.99	127.25	192.79	851.16	0	851.16	0	851.16			
Clarens	65	64	111	105	115	86	219	765	0	765	0	765			
Groblersdal	41.66	129.29	148.08	136.9	165.61	72.89	74.68	769.11	0	769.11	0	769.11			
Hoopstad	15	103	59	11	76	108	257	629	0	629	0	629			
Kinross	37.85	28.45	136.15	131.31	191.26	281.69	123.19	929.9	0	929.9	0	929.9			
Kroonstad	33.8	109	35.6	36.8	169.6	87.6	191	663.4	0	663.4	0	663.4			
Leeudoringstad	0	117	56	50	188	132	206	749	0	749	0	749			
Schweizer-Reneke PD1	15	54	28	117	99	141	254	708	0	708	0	708			
Schweizer-Reneke PD2	15	54	28	117	99	141	254	708	0	708	0	708			

* 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, 2024/25
 Table 4: The number of days from planting to 50% flowering stage of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool						Matig/Moderate						Warm												
	Bapfontein Agricol	Belfast	Bethlehem PD1	Clarens	Greylingstad	Kinross	Kokstad	Gem/Mean	Cedara	Greytown	Kranskop	Kroonstad	Leedoringsstad	Potchefstroom	Limagrain	Winterton	Gem/Mean	Barberspan	Brits	Groblersdal ARC	Hopstad	Schweizer- Reneke PD1	Schweizer- Reneke PD2	Warrenton	Gem/Mean
Lake 5021 IPRO	39	59	64	64	48	54	61	56	37	45	46	45	49	43	44	44	52	28	37	44	41	32	35	37	
US50-14R	39	59	60	64	49	58	63	56	50	48	46	46	50	45	48	43	43	28	39	47	42	32	33	39	
PAN 1515R	42	60	76	63	48	67	68	61	50	48	46	46	57	46	49	50	50	28	37	45	43	36	39	38	
RA5022BR	41	59	62	63	51	58	63	57	50	48	46	45	50	44	48	44	44	28	43	45	42	36	30	40	
P51T42 R	39	75	76	70	49	77	75	66	61	47	63	57	66	50	59	56	56	40	43	57	45	37	45	46	
Lake 5122 IPRO	40	59	51	64	52	56	60	55	50	48	48	46	50	44	48	44	48	49	59	37	48	34	37	33	45
DM 53154RSF IPRO	41	59	64	57	50	54	63	55	50	48	49	45	48	45	48	45	48	45	28	39	44	44	37	30	39
P52T52 R	42	100	76	62	51	70	75	68	63	58	64	48	68	50	60	59	53	53	43	61	45	38	54	51	
LG60353R	42	64	64	67	53	60	68	60	50	64	55	47	59	47	55	52	52	45	37	51	45	38	44	45	
Y540	43	75	71	70	52	67	76	65	65	60	64	63	69	49	64	57	45	45	43	61	44	40	49	48	
RA5665R	42	75	68	70	54	64	75	64	61	61	64	45	70	40	60	64	50	64	50	46	62	48	40	52	52
US56-26R	44	75	68	70	56	64	70	64	60	61	52	61	66	49	60	62	45	45	45	54	46	40	47	48	
LG60356R	43	75	75	70	57	67	73	66	60	60	64	58	63	48	61	52	53	53	37	48	45	41	51	46	
LS6851R	45	77	75	70	56	60	69	65	59	60	64	63	60	47	61	50	45	45	39	45	48	39	49	44	
PAN 1521R	46	82	75	85	58	77	75	71	64	63	65	58	68	52	64	52	53	53	45	62	45	41	53	51	
Lake 5920 IPRO	48	77	75	70	59	73	76	68	60	64	65	66	69	48	65	62	50	43	66	66	51	40	54	53	
P59T03 R	47	75	75	57	59	64	78	65	61	63	64	63	70	51	64	62	45	43	64	64	47	41	53	50	
RA5924BR	48	77	75	75	61	73	75	67	65	63	65	66	72	54	66	62	45	48	61	54	42	42	55	52	
LG60359R	47	77	75	70	59	67	75	67	61	63	64	59	70	51	63	62	50	43	63	63	53	42	52	52	
LG60260IPR	49	82	76	83	59	73	82	72	67	63	65	63	71	54	66	67	53	53	43	66	55	48	53	54	
DM 59R03RSF	50	75	68	63	60	58	75	64	58	64	52	55	63	48	58	62	45	43	67	56	42	51	53		
DM 59I60RSF IPRO	49	46	64	63	62	73	77	62	65	64	64	63	70	51	65	62	45	46	63	56	42	42	55	53	
RA6124BR	51	82	75	70	64	73	80	70	69	65	64	66	74	55	68	60	53	43	70	59	43	43	58	56	
LG60261IPR	50	82	75	75	65	73	80	71	66	65	65	63	74	57	67	60	53	52	66	59	49	49	56	58	
US63-16IPRO	52	82	76	64	66	73	78	70	67	63	65	66	70	53	66	59	53	53	44	63	62	49	56	55	
US6410IPRO	53	90	76	54	68	70	77	70	72	66	66	69	74	57	69	57	53	53	46	69	61	50	57	57	
Y657	55	75	75	83	67	64	75	71	64	67	64	68	72	51	67	67	53	53	52	71	63	50	57	60	
Y651 IPRO	54	84	75	87	65	73	82	74	64	67	64	67	70	50	66	65	45	45	52	71	60	49	87	57	
DM 61163RSF IPRO	56	82	75	63	65	73	80	71	66	67	65	68	73	55	68	62	53	52	67	63	49	48	48	59	
PAN 1644R	55	75	75	83	64	67	75	71	65	68	65	67	71	55	67	67	53	55	68	66	50	56	61	62	
RA6824BR	58	90	84	87	67	77	81	78	71	69	71	70	74	55	71	71	55	55	70	66	66	53	59	62	
RA7024BR	61	90	78	63	69	77	81	74	71	71	66	71	74	58	71	70	57	52	71	68	53	59	62		
Gem/Mean	47	75	72	69	58	67	74	66	61	60	60	59	66	50	61	58	47	44	60	52	42	42	50	51	

Tabel 5: Die aantal dae vanaf plant tot fisiologiesryfstadium van die verskillende soja-oekultivars by die verskillende proef lokaliteite, 2024/25
 Table 5: The number of days from planting to physiological maturity of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool				Matig/Moderate				Warm									
	Belfast	Bethlehem PD1	Clarens	Kinross	Kokstad	Gem/Mean	Cedara	Kroonstad	Leendoringstad	Potchefstroom Limagrain	Winterton	Gem/Mean	Barberspan	Groblersdal ARC	Hoopstad	Schweizer- Reneke PD1	Schweizer- Reneke PD2	Gem/Mean
Lake 5021 IPRO	130	132	116	129	138	129	137	120	134	127	105	129	125	112	126	112	94	117
US50-14R	125	118	116	140	137	127	137	112	128	127	107	126	129	105	126	115	95	115
PAN 1515R	120	118	105	138	148	126	137	124	129	131	108	130	129	112	127	119	101	119
RA5022BR	130	118	111	129	137	125	137	120	127	125	106	127	118	112	371	118	101	200
P51T42 R	141	123	135	138	152	138	137	126	135	136	110	134	133	105	132	124	103	120
Lake 5122 IPRO	147	134	116	138	136	134	137	120	127	125	106	127	118	105	127	112	93	115
DM 53154RSF IPRO	120	129	121	129	138	127	137	130	130	131	108	132	124	112	127	118	93	119
P52T52 R	130	138	121	138	158	137	137	126	134	138	115	134	130	112	134	119	94	122
LG60353R	130	138	121	129	146	133	137	126	127	128	112	129	127	112	129	119	97	120
Y540	147	138	125	138	153	140	137	126	136	137	114	134	132	112	139	123	100	125
RA5655R	141	138	121	129	165	139	137	126	143	139	110	136	131	112	134	123	100	123
US56-26R	147	142	135	140	152	143	143	128	137	141	116	137	130	112	135	123	101	123
LG60356R	147	138	125	140	154	141	143	126	135	138	116	136	131	112	140	124	101	125
LS6851R	147	151	135	145	156	147	159	128	139	137	112	141	131	112	135	124	100	124
PAN 1521R	141	151	135	145	147	144	148	128	142	139	119	139	141	124	140	126	103	130
Lake 5920 IPRO	147	151	135	145	157	147	154	128	143	139	115	141	133	112	141	124	102	126
P59T03 R	147	151	137	147	115	139	162	128	136	143	122	142	129	124	135	127	102	129
RA5924BR	147	134	135	140	154	142	148	129	143	142	123	141	136	124	135	128	103	129
LG60359R	147	138	135	147	159	145	154	126	143	144	121	142	136	124	136	129	104	130
LG60260IPR	141	151	135	147	151	145	156	128	141	142	115	142	132	124	137	6	114	89
DM 59R03RSF	147	138	157	140	152	147	148	126	142	137	115	138	133	112	141	128	107	127
DM 59160RSF IPRO	147	138	127	145	156	143	154	129	135	144	121	141	134	112	136	123	105	124
RA6124BR	147	145	136	145	159	146	154	126	152	149	126	145	134	124	140	125	118	130
LG60261IPR	151	151	136	147	158	149	148	126	139	145	119	140	132	124	140	1	95	88
US63-16IPRO	153	140	135	150	159	147	151	126	154	146	125	144	137	131	140	125	104	132
US6410IPRO	147	151	127	147	160	146	151	136	150	146	123	146	136	124	142	126	107	131
Y657	147	151	136	147	149	146	154	136	142	146	120	144	134	131	141	126	107	133
Y651 IPRO	151	148	136	150	159	149	157	136	27	144	121	116	132	112	143	126	105	127
DM 61163RSF IPRO	147	151	127	147	160	146	148	136	144	148	123	144	135	112	140	129	105	127
PAN 1644R	147	155	141	147	153	149	148	136	152	144	121	145	136	112	141	129	105	127
RA6824BR	153	155	141	147	161	151	157	140	152	155	127	151	135	131	143	132	114	135
RA7024BR	173	152	140	150	168	157	159	140	152	158	132	152	139	131	145	132	118	136
Gem/Mean	143	141	130	142	151	141	147	128	136	140	117	138	132	117	144	116	103	125

Table 6: Die aantal dae vanaf plant tot oes stadium van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 6: The number of days from planting to maturity of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool				Matig/Moderate						Warm										
	Belfast	Bethlehem PD1	Clarens	Kinross	Gem/Mean	Cedara	Greytown	Kranskop	Kroonstad	Leudoringstad	Potchefstroom Limagrain	Winterton	Gem/Mean	Barberspan	Brits	Groblersdal ARC	Hoopstad	Schweizer- PD1	Schweizer- PD2	Warrenton	Gem/Mean
	Lake 5021 IPRO	147	153	139	147	147	140	151	143	160	135	141	146	166	136	125	140	132	116	140	133
US50-14R	147	153	149	147	149	140	137	143	140	135	141	139	152	136	130	140	132	116	140	135	
PAN 1515R	147	153	139	147	147	140	137	143	160	145	141	145	152	121	125	140	132	116	140	130	
RA5022BR	147	153	149	147	149	140	137	143	140	135	141	139	133	121	130	140	132	116	140	131	
P51T42 R	162	164	168	162	164	140	159	143	175	158	141	155	166	121	125	166	150	116	140	141	
Lake 5122 IPRO	147	153	139	147	147	140	129	143	140	146	141	140	133	121	125	140	132	116	140	130	
DM 53154RSF IPRO	147	153	139	147	147	140	164	143	160	135	141	148	152	136	125	140	150	116	140	138	
P52T52 R	162	158	158	162	160	140	159	143	160	158	141	152	166	121	125	166	150	116	140	141	
LG60353R	159	153	158	147	154	149	129	143	140	135	141	139	133	121	125	140	132	116	140	130	
Y540	162	173	168	162	166	198	164	155	160	158	141	167	152	121	130	166	150	116	140	142	
RA565R	162	169	168	162	165	140	164	155	160	165	141	157	152	121	130	166	150	116	140	142	
US56-26R	162	178	168	162	167	153	159	159	160	164	141	159	166	136	136	166	150	116	140	147	
LG60356R	169	169	168	162	167	147	159	155	160	165	141	157	121	121	130	166	150	116	140	142	
LS6851R	162	169	168	162	165	165	151	155	160	158	141	158	152	121	125	166	150	116	140	141	
PAN 1521R	162	169	168	162	165	162	151	155	160	165	141	159	166	136	136	166	150	116	140	147	
Lake 5920 IPRO	162	169	168	162	165	160	159	155	175	158	141	161	166	121	125	166	150	116	140	141	
P59T03 R	169	173	168	169	170	167	164	164	175	167	141	167	166	136	130	166	150	116	140	146	
RA5924BR	175	182	168	182	177	153	159	155	160	165	141	159	166	136	136	166	150	116	140	146	
LG60359R	182	182	168	175	177	160	151	155	160	170	141	159	166	136	130	166	150	124	140	146	
LG60260IPR	162	173	168	162	166	160	164	155	160	165	141	161	166	121	130	166	150	124	140	142	
DM 59R03RSF	169	173	178	162	171	153	164	155	160	167	141	160	166	136	130	166	150	124	140	146	
DM 59160RSF IPRO	162	169	164	162	164	160	169	155	160	165	141	162	152	136	130	166	150	124	140	146	
RA6124BR	182	182	168	182	179	160	178	164	175	172	141	170	166	136	141	166	150	124	140	148	
LG60261IPR	182	169	168	175	174	153	159	155	160	167	141	159	166	121	141	166	150	124	140	145	
US63-16IPRO	182	182	158	182	176	162	169	164	175	176	141	169	152	136	148	166	150	124	140	150	
US6410IPRO	182	182	168	182	179	162	183	168	162	172	141	169	166	136	141	166	150	124	140	148	
Y657	182	169	168	169	172	160	159	155	160	164	141	160	166	136	141	166	150	124	140	148	
Y651 IPRO	182	182	168	182	179	162	169	160	160	164	141	163	150	136	125	166	150	124	140	144	
DM 61163RSF IPRO	182	178	168	182	177	160	159	155	160	177	141	162	166	136	141	166	150	124	140	148	
PAN 1644R	169	178	168	169	171	153	159	155	160	165	141	159	166	136	141	166	150	124	140	148	
RA6824BR	182	162	168	182	174	152	183	168	175	181	141	172	166	136	161	166	150	124	140	153	
RA7024BR	176	182	168	182	177	165	178	168	175	181	141	173	166	136	161	166	150	124	140	153	
Gem/Mean	166	169	162	165	166	154	159	154	161	160	141	158	157	130	133	160	147	120	140	143	

Tabel 7: Die planthoogte van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 7: The plant height of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool						Matig/Moderate						Warm									
	Rapfontein Agricol	Belfast	Bethlehem PD1	Clarens	Greylingstad	Kinross	Kokstad	Gem/Mean	Cedara	Greytown Kranskop	Kroonstad	Leudoringstad	Potchefstroom Limagrain	Winterton	Gem/Mean	Barberspan	Groblersdal ARC	Hoopstad	Schweizer- PD1	Schweizer- PD2	Warrenton	Gem/Mean
Lake 5021 IPRO	50	48	78	60	57	53	45	56	89	87	67	69	77	67	78	60	58	90	58	51	73	69
US50-14R	48	53	78	73	54	40	58	58	93	73	80	80	83	80	82	70	62	90	60	48	75	71
PAN 1515R	51	68	97	85	52	63	84	71	117	111	92	90	87	103	99	75	80	80	80	49	87	76
RA5022BR	55	65	70	67	51	47	48	57	88	81	77	73	90	70	82	65	57	75	58	41	73	63
P51T42 R	57	78	100	83	69	82	81	79	114	102	92	87	93	90	97	75	53	109	70	50	85	77
Lake 5122 IPRO	52	57	80	62	57	45	49	57	90	81	77	64	80	70	78	62	57	65	62	43	72	61
DM 53154RSF IPRO	52	55	87	74	71	52	61	64	114	97	83	70	80	90	89	80	58	85	65	60	85	69
P52T52 R	56	60	92	78	64	73	66	70	110	90	80	80	100	87	92	79	60	90	54	65	80	68
LG60353R	57	67	77	82	59	67	58	67	90	74	70	60	83	67	75	75	40	82	65	50	77	62
Y540	38	75	98	102	73	77	81	78	119	105	97	72	90	107	97	81	65	100	80	60	80	82
RA565R	39	77	85	72	68	67	73	69	109	110	69	74	100	83	92	85	60	92	70	56	85	74
US56-26R	37	77	105	93	74	78	87	79	125	111	100	95	103	103	107	70	65	120	90	75	93	92
LG60356R	58	63	83	88	75	67	62	71	100	92	82	87	90	70	90	75	67	100	82	70	82	83
LS6851R	55	58	65	90	63	52	51	62	87	77	68	65	70	53	74	50	42	114	35	36	70	64
PAN 1521R	52	78	95	87	78	68	76	76	110	115	91	90	110	97	103	66	72	100	65	65	87	79
Lake 5920 IPRO	54	70	92	77	65	65	67	70	104	104	80	65	83	83	87	80	58	115	80	65	82	84
P59T03 R	57	78	102	92	80	87	80	82	130	105	93	85	100	100	103	88	60	120	79	61	88	86
RA5924BR	55	83	107	92	66	82	82	81	110	100	88	80	100	90	96	90	67	110	85	65	85	87
LG60359R	58	68	98	85	72	68	76	75	100	88	93	85	93	73	92	86	58	106	74	66	80	79
LG60260IPR	52	78	103	102	88	80	85	84	127	117	92	80	103	93	104	75	65	130	75	65	88	90
DM 59R03RSF	53	92	93	90	71	78	78	79	119	108	77	84	110	100	100	95	73	111	73	70	85	86
DM 59160RSF IPRO	52	80	95	79	74	70	74	75	114	111	85	85	103	93	100	90	68	110	85	65	83	88
RA6124BR	59	87	112	102	92	82	80	88	124	107	105	100	103	107	108	90	77	140	83	60	93	100
LG60261IPR	62	82	98	85	77	77	80	80	110	107	78	90	100	87	97	80	75	125	76	65	85	92
US63-16IPRO	54	95	112	103	83	90	88	89	121	103	100	120	113	113	111	86	83	130	90	66	88	101
US6410IPRO	51	98	117	108	104	97	91	95	140	132	112	84	107	103	115	105	85	145	79	80	100	103
Y657	53	70	88	90	91	70	81	78	114	110	92	79	110	87	101	90	75	109	75	65	82	86
Y651 IPRO	71	97	122	107	82	93	89	94	142	129	107	100	107	103	117	95	79	145	116	70	93	113
DM 61163RSF IPRO	68	72	105	100	93	92	81	87	124	120	93	90	107	100	107	85	82	130	94	65	92	102
PAN 1644R	73	78	103	92	76	82	83	84	111	103	81	90	110	83	99	83	77	120	80	70	92	92
RA6824BR	67	85	115	100	84	85	79	88	124	105	103	110	120	97	113	104	88	117	99	70	98	102
RA7024BR	82	95	120	103	96	97	96	98	136	115	110	110	117	110	118	105	95	145	96	75	100	112
Gem/Mean	76	75	96	88	74	73	74	76	113	102	88	84	98	89	97	81	67	109	76	61	85	84

Tabel 8: Die peulhoogte van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 8: The pod height of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool				Maitig/Moderate				Warm											
	Bapfontein Agricol	Belfast	Bethlehem PD1	Clarens	Greylingstad	Kinross	Kokstad	Gem/Mean	Cedara	Greytown Kranskop	Kroonstad	Leudoringstad	Gem/Mean	Barberspan	Groblersdal ARC	Hoopstad	Schweizer- Reneke PD1	Schweizer- Reneke PD2	Warrenton	Gem/Mean
Lake 5021 IPRO	3	1	10	8	6	7	8	6	15	15	4	9	11	7	7	16	4	5	4	9
US50-14R	10	1	10	11	8	7	8	8	17	10	7	13	12	10	8	19	7	4	6	11
PAN 1515R	11	6	11	10	5	8	10	9	21	15	9	15	15	10	10	18	13	5	6	14
RA5022BR	6	4	9	8	7	7	6	7	15	13	8	14	12	9	7	18	7	4	4	11
P51T42 R	11	8	13	8	7	8	15	10	23	19	10	12	16	8	6	19	10	6	8	12
Lake 5122 IPRO	6	2	8	8	11	4	8	7	14	13	4	9	10	7	8	8	8	4	3	8
DM 53154RSF IPRO	5	2	9	9	8	8	8	7	16	15	8	10	12	12	7	15	10	5	3	11
P52T52 R	10	6	13	9	8	9	9	9	22	19	7	12	15	8	7	20	7	10	8	11
LG60353R	8	4	7	11	8	6	7	7	15	10	4	7	9	10	5	12	6	5	5	8
Y540	12	7	12	13	15	8	12	11	24	16	11	12	16	12	6	22	11	5	9	13
RA565R	9	9	11	9	8	7	11	9	24	18	6	14	16	17	6	13	9	5	8	9
US56-26R	13	8	13	14	13	9	13	12	24	20	9	18	18	8	6	25	22	10	10	18
LG60356R	7	4	9	9	12	7	9	8	17	13	8	12	12	10	7	20	8	9	6	12
LS6851R	14	6	9	10	8	9	8	9	17	12	7	8	11	5	6	30	4	3	4	13
PAN 1621R	9	9	16	9	12	8	13	11	25	19	8	12	16	8	10	20	18	5	9	16
Lake 5920 IPRO	6	6	9	10	10	7	9	8	24	14	9	10	14	12	6	29	18	6	6	18
P59T03 R	17	7	16	12	12	11	14	13	28	15	5	12	15	13	7	28	20	6	11	18
RA5924BR	11	9	13	10	12	9	12	11	23	14	11	11	15	15	7	15	20	6	9	14
LG60359R	9	7	13	8	11	8	12	10	23	16	8	11	15	13	7	25	9	6	9	14
LG60260IPR	9	10	13	10	13	8	14	11	26	15	9	8	15	11	9	25	18	5	11	17
DM 59R03RSF	8	9	12	10	10	7	12	10	23	17	13	13	16	15	7	24	20	7	8	17
DM 59160RSF IPRO	14	7	14	7	10	8	10	10	25	14	9	16	16	12	7	26	16	5	8	16
RA6124BR	15	9	10	11	10	9	12	11	28	15	12	20	19	15	9	38	19	6	13	22
LG60261IPR	14	8	17	11	9	12	16	12	25	21	9	15	18	15	11	34	16	10	13	20
US63-16IPRO	16	13	19	14	12	10	14	14	30	14	13	27	21	13	13	35	20	7	8	23
US6410IPRO	21	13	14	14	17	12	16	15	34	14	15	15	19	25	11	37	17	12	17	22
Y657	13	6	10	9	8	7	13	9	25	17	9	15	17	13	9	20	15	6	9	15
Y651 IPRO	25	14	23	19	14	14	17	18	34	23	13	20	23	19	13	40	26	12	19	26
DM 61163RSF IPRO	11	7	18	14	17	10	14	13	26	22	9	20	20	18	10	30	18	7	14	19
PAN 1644R	9	6	14	12	14	10	12	11	23	19	10	15	17	12	8	26	20	10	9	18
RA6824BR	13	9	18	12	14	9	12	13	31	18	10	22	20	21	13	20	21	10	15	18
RA7024BR	13	13	19	12	13	10	15	13	33	17	12	21	21	25	14	40	20	12	16	25
Gem/Mean	11	7	13	11	11	9	12	10	23	16	9	14	16	13	8	24	14	7	9	16

Tabel 9: Omvalwaarnemings (1-5) van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 9: Lodging data (1-5) of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool				Matig/Moderate						Warm													
	Belfast	Bethlehem PD1	Clarens	Delmas	Kinross	Standerton (Agri Seeds)	Gem/Mean	Cedara	Greytown	Kroonstad	Leudoringstad	Potchefstroom	Limagrain	Winterton	Gem/Mean	Barberspan	Brits	Groblersdal	Hoopstad	Schweizer- Reneke PD1	Schweizer- Reneke PD2	Warrenton	Gem/Mean	
Lake 5021 IPRO	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	1.00	1.00	1.00
US50-14R	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	3.67	1.00	1.00	1.00	1.00	1.00	1.00	1.67
PAN 1515R	1.00	2.00	1.00	1.00	1.00	1.00	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	5.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00
RA5022BR	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	1.00	1.00	1.00
P51T42 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	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.08
Lake 5122 IPRO	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	1.00	1.00	1.00
DM 53154RSF IPRO	1.00	1.00	1.00	1.00	1.00	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.67	1.00	1.00	1.00	1.00	1.00	1.00	1.92
P62T52 R	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.33	1.00	1.33	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25
LG60353R	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	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.17
Y540	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	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.08
RA565R	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	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.08
US56-26R	1.00	1.00	1.00	1.00	1.00	2.33	1.00	1.00	1.00	1.00	1.33	1.00	1.33	1.00	1.00	1.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00
LG60356R	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	1.00	1.00	1.00
LS6851R	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	1.00	1.00	1.00	1.25
PAN 1521R	1.00	1.00	1.00	2.00	1.00	2.33	1.20	2.00	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.27	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.50
Lake 5920 IPRO	1.00	1.00	1.00	3.00	1.00	1.67	1.40	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.40	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25
P59T03 R	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	1.13	1.00	2.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.42
RA5924BR	1.00	1.33	1.00	2.00	1.00	1.33	1.27	2.00	1.00	1.00	1.00	2.00	1.00	1.40	1.00	2.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33
LG60359R	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.00	1.07	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LG60260IPR	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	1.13	1.00	2.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.42
DM 59R03RSF	1.00	1.67	1.00	4.00	1.00	1.33	1.73	4.00	1.67	1.00	1.00	1.67	1.00	1.87	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25
DM 59160RSF IPRO	1.00	1.00	1.00	2.00	1.00	1.67	1.20	2.00	1.33	1.00	1.00	1.33	1.00	1.33	1.00	2.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33
RA6124BR	1.00	1.33	1.00	1.00	1.00	2.00	1.07	1.00	1.00	1.00	0.67	1.00	1.00	0.93	1.00	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.08
LG60261IPR	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	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.17
US63-16IPRO	1.67	2.00	2.33	5.00	1.00	4.00	2.40	5.00	1.00	1.00	1.00	1.33	1.00	1.87	1.00	2.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33
US6410IPRO	2.67	1.33	1.00	4.00	1.00	3.67	2.00	4.00	1.33	1.33	1.00	1.67	1.00	1.87	1.00	4.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.75
Y657	1.00	1.00	1.00	1.00	1.00	1.33	1.00	1.00	1.33	1.00	1.00	1.00	1.00	1.07	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25
Y651 IPRO	1.67	2.67	1.00	4.00	1.00	3.67	2.07	4.00	1.00	1.00	1.00	1.00	1.00	1.60	1.00	4.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.83
DM 61163RSF IPRO	1.00	1.00	1.00	4.00	1.00	2.33	1.60	4.00	1.00	1.00	1.00	1.00	1.00	1.60	1.00	3.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.58
PAN 1644R	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	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.17
RA6824BR	1.00	2.33	1.00	2.00	1.00	2.67	1.47	2.00	2.00	1.00	1.67	1.00	1.67	1.53	1.00	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.17
RA7024BR	1.00	1.67	1.00	1.00	1.00	2.67	1.13	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33
Gem/Mean	1.09	1.23	1.04	1.69	1.00	1.66	1.21	1.69	1.19	1.01	0.99	1.15	1.00	1.20	1.00	2.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33

Tabel 10: Groenstam (1-5) van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 10: Greenstem (1-5) of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool					Matig/Moderate					Warm													
	Belfast	Bethlehem PD1	Clarens	Greylingstad	Kinross	Kokstad	Gem/Mean	Cedara	Greytown	Kranskop	Kroonstad	Leedorlingstad	Potchestroom	Limagrain	Winterton	Gem/Mean	Barberspan	Groblersdal	Hoopstad	Schweizer- Reneke PD1	Schweizer- Reneke PD2	Warrenton	Gem/Mean	
Lake 5021 IPRO	5.00	5.00	1.33	1.00	5.00	1.00	3.06	3.67	2.67	4.67	5.00	2.00	2.00	1.00	1.00	3.60	5.00	2.67	4.00	4.00	1.00	1.00	1.00	3.56
US50-14R	4.33	1.67	1.00	1.00	3.33	1.00	2.06	1.33	2.00	2.33	4.00	1.00	1.00	1.00	1.00	2.13	2.00	4.00	2.00	1.00	1.00	1.00	1.00	2.33
PAN 1515R	1.00	1.00	1.00	1.00	2.00	1.00	1.17	1.33	2.00	4.33	3.00	1.00	1.00	1.00	1.00	2.33	2.00	4.33	3.00	1.00	1.00	1.00	1.00	2.78
RA5022BR	3.67	2.33	1.00	1.00	3.33	1.00	2.06	1.33	2.00	1.67	5.00	1.00	1.00	1.00	2.20	2.00	5.00	2.00	2.00	2.00	1.00	1.00	3.00	
P51T42 R	1.33	1.00	1.00	1.00	1.00	1.00	1.06	1.33	1.33	2.00	5.00	1.00	1.00	1.00	2.13	1.00	3.33	2.00	2.00	2.00	1.00	1.00	2.44	
Lake 5122 IPRO	3.33	2.33	1.00	1.00	3.67	1.00	2.06	1.33	4.67	4.00	5.00	1.33	1.00	1.00	3.27	1.00	4.00	5.00	2.00	2.00	1.00	1.00	3.67	
DM 53154RSF IPRO	3.00	1.67	1.00	1.00	4.33	1.00	2.00	3.33	1.67	3.00	4.00	1.00	1.00	1.00	2.60	3.00	3.33	3.00	3.00	3.00	1.00	1.00	3.11	
P52T52 R	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	2.00	1.33	1.00	1.00	1.00	1.00	1.40	3.00	4.33	2.00	1.00	1.00	1.00	1.00	2.44	
LG60353R	1.67	1.00	1.00	1.00	1.67	1.00	1.22	1.33	2.33	3.67	2.00	1.00	1.00	1.00	2.07	2.00	3.00	3.00	3.00	2.00	1.00	1.00	2.67	
Y5440	1.67	1.00	1.00	1.00	1.67	1.00	1.22	1.33	2.33	1.00	1.00	1.00	1.00	1.00	1.33	1.00	4.00	3.00	3.00	1.00	1.00	1.00	2.67	
RA5655R	1.00	1.00	1.00	1.00	1.33	1.00	1.06	1.33	3.00	1.00	2.00	1.00	1.00	1.00	1.67	1.00	4.33	5.00	2.00	1.00	1.00	1.00	3.78	
US56-26R	1.00	1.00	1.00	1.00	1.33	1.00	1.06	1.00	1.00	2.00	3.00	1.00	1.00	1.00	1.33	1.60	4.00	4.67	2.00	1.00	1.00	1.00	2.56	
LG60356R	1.67	1.00	1.00	1.00	1.67	1.00	1.22	1.00	1.00	1.00	2.00	1.00	1.00	1.20	1.00	1.20	1.00	4.33	2.00	1.00	1.00	1.00	2.44	
LS6851R	1.00	1.00	1.00	1.00	1.33	1.00	1.06	1.67	1.67	1.00	5.00	1.00	1.00	1.00	2.07	4.00	1.67	2.00	4.00	1.00	1.00	1.33	2.56	
PAN 1521R	1.67	1.00	1.00	1.00	1.00	1.00	1.11	1.33	3.00	1.00	3.00	1.00	1.00	1.00	1.87	1.00	5.00	2.00	1.00	1.00	1.00	1.00	2.67	
Lake 5920 IPRO	1.00	1.00	1.00	1.00	2.00	1.00	1.17	1.00	2.67	1.00	2.67	1.00	1.00	1.00	1.67	1.00	4.00	3.33	2.00	3.00	1.00	1.00	2.78	
P59T03 R	1.00	1.33	1.00	1.00	2.67	1.00	1.33	2.00	2.67	1.00	5.00	1.67	1.33	2.47	2.00	5.00	4.33	5.00	4.00	3.00	1.00	1.00	4.44	
RA5924BR	2.00	1.33	1.00	1.00	1.00	1.00	1.22	1.33	2.33	1.00	4.00	1.00	1.33	1.93	3.00	5.00	4.67	2.00	3.00	1.00	1.00	1.00	3.22	
LG60359R	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.33	1.00	1.73	1.00	4.00	4.33	2.00	2.00	2.00	1.00	1.00	2.78	
LG60260IPR	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	2.67	1.00	3.00	1.00	1.00	1.87	1.00	4.00	3.67	2.00	4.00	2.00	1.00	1.00	3.22	
DM 59R03RSF	1.00	1.00	1.00	1.00	2.33	1.00	1.22	1.33	4.33	1.00	2.00	1.00	1.00	1.93	1.00	4.00	4.00	2.00	4.00	2.00	1.00	1.00	3.33	
DM 59160RSF IPRO	1.00	1.00	1.00	1.00	1.33	1.00	1.06	1.33	2.33	1.00	1.00	1.00	1.00	1.33	1.33	1.00	4.00	1.00	1.00	2.00	1.00	1.00	2.33	
RA6124BR	1.00	1.67	1.00	1.00	1.00	1.00	1.11	2.00	3.67	1.00	5.00	1.33	1.67	2.60	2.00	3.00	4.33	1.00	5.00	2.00	1.00	1.00	3.44	
LG60261IPR	3.33	1.33	1.00	1.00	1.67	1.00	1.56	1.33	3.33	1.00	3.00	1.33	1.00	2.00	2.00	5.00	5.00	3.00	3.00	5.00	1.00	1.00	4.33	
US63-16IPRO	1.33	2.67	1.00	1.00	1.33	1.00	1.39	1.67	3.33	1.33	3.00	1.00	1.67	2.07	3.00	5.00	5.00	3.00	4.00	4.00	1.00	1.00	4.00	
US6410IPRO	1.67	1.00	1.67	1.00	1.00	1.00	1.22	1.67	2.67	1.00	2.00	1.00	1.67	1.67	1.67	5.00	5.00	2.00	2.00	2.00	1.00	1.00	3.00	
Y657	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.67	2.00	1.00	1.00	1.00	1.00	1.53	2.00	4.33	1.00	1.00	1.00	1.00	1.00	2.11	
Y651 IPRO	1.00	1.67	1.00	1.00	1.00	1.00	1.11	1.67	3.67	1.00	1.00	1.00	1.00	1.67	1.00	4.33	1.00	1.00	1.00	1.00	1.00	1.00	2.11	
DM 61163RSF IPRO	1.00	1.67	1.00	1.00	1.00	1.00	1.11	1.00	2.67	1.67	2.00	1.00	1.33	1.67	1.67	3.00	5.00	2.00	3.00	1.00	1.00	1.00	3.33	
PAN 1644R	1.00	1.00	1.00	1.00	2.00	1.00	1.17	1.67	3.00	1.33	3.00	1.00	1.33	2.00	2.00	2.00	4.67	2.00	2.00	2.00	1.00	1.00	2.89	
RA6824BR	1.00	1.67	1.33	1.00	1.00	1.00	1.17	2.00	3.33	1.00	1.00	1.33	1.67	1.73	1.00	5.00	1.00	1.00	1.00	2.00	1.00	1.00	2.33	
RA7024BR	2.00	4.00	3.67	1.00	1.67	1.00	2.22	3.00	2.33	1.00	2.00	1.67	2.00	2.00	2.00	5.00	4.67	3.00	1.00	3.00	1.00	1.00	2.89	
Gem/Mean	1.71	1.51	1.13	1.00	1.80	1.00	1.36	1.59	2.58	1.67	2.93	1.13	1.19	1.98	2.81	4.18	2.41	2.34	1.28	1.02	1.02	1.02	2.98	

Tabel 11: Opspring (1-5) van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 11: Shattering (1-5) of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool				Matig/Moderate				Warm									
	Belfast	Bethlehem PD1	Clarens	Greylingstad	Kinross	Gem/Mean	Kroonstad	Leudoringstad	Potchefstroom Limagrain	Winterton	Gem/Mean	Barberspan	Groblersdal ARC	Hoopstad	Schweizer- Reneke PD1	Schweizer- Reneke PD2	Warrenton	Gem/Mean
Lake 5021 IPRO	1.00	1.00	1.00	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	1.00	1.00
US50-14R	1.00	1.00	1.00	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
PAN 1515R	1.00	1.00	1.00	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
RA5022BR	1.00	1.00	1.00	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
P51T42 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
Lake 5122 IPRO	1.00	1.00	1.00	1.00	1.00	1.00	2.67	1.00	1.00	1.00	1.42	1.00	1.00	1.00	1.00	1.00	1.00	1.00
DM 53154RSF IPRO	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.00	1.00	1.00	1.17	1.00	1.00	1.00	1.00	2.00	1.00	1.00
P52T52 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
LG60353R	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
Y540	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
RA565R	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.00	1.00	1.00	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00
US56-26R	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
LG60356R	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
LS6851R	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 1521R	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
Lake 5920 IPRO	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
P59T03 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
RA5924BR	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
LG60359R	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
LG60260IPR	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.00	1.00	1.00	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00
DM 59R03RSF	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 59160RSF IPRO	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
RA6124BR	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.00	1.00	1.00	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LG60261IPR	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
US63-16IPRO	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
US6410IPRO	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
Y657	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
Y651 IPRO	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.00	1.00	1.00	1.08	1.00	1.00	1.00	1.00	1.00	1.00	1.00
DM 61163RSF IPRO	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 1644R	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
RA6824BR	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
RA7024BR	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	1.00	1.00	1.00	1.00	1.00	1.00	1.06	1.11	1.00	1.00	1.04	1.00	1.00	1.00	1.00	1.06	1.00	1.00

Tabel 12 Die planttelling drie weke na opkoms (x 1000) van die verskillende sojafoonkultivars by die verskillende proeflokaltiteite, 2024/25
 Table 12 The number of plants three weeks after germinations (x 1000) of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool					Matig/Moderate					Warm											
	Bapfontein Agricol	Belfast	Bethlehem PD1	Clarens	Greylingstad	Kinross	Kokstad	Gem/Mean	Cedara	Kranskop	Kroonstad	Leondoringstad	Potchetstroom Limagrain	Winterton	Gem/Mean	Barberspan	Groblersdal ARC	Hoopstad	Schweizer- Reneke PD1	Schweizer- Reneke PD2	Warrenton	Gem/Mean
Lake 5021 IPRO	227	252	272	258	276	238	125	236	296	293	268	207	294	280	272	201	319	322	116	167	263	252
US50-14R	244	193	276	299	279	224	225	249	321	307	268	224	396	280	303	155	307	286	147	197	296	247
PAN 1515R	225	272	275	284	190	253	227	246	359	304	263	345	383	369	331	250	308	365	263	237	330	312
RA5022BR	219	259	292	283	256	265	238	259	352	291	281	326	413	327	332	224	326	286	171	178	329	261
P51142 R	212	181	268	256	286	243	259	244	409	365	277	266	384	297	340	266	293	322	173	226	330	263
Lake 5122 IPRO	211	198	276	302	265	205	144	229	263	288	263	240	286	265	268	211	303	178	140	149	238	207
DM 53154 RSF IPRO	232	214	266	260	283	229	196	240	319	356	263	191	304	300	286	283	309	266	221	189	269	266
P52152 R	229	259	236	238	262	252	138	230	249	262	246	197	273	305	246	188	238	247	136	237	218	207
LG60353R	215	185	236	186	288	240	152	215	280	247	263	171	125	213	217	125	299	191	103	162	223	198
Y540	213	171	253	268	266	234	215	231	316	356	280	299	300	321	310	164	288	332	219	230	305	280
RA565 R	212	245	285	269	285	254	219	253	368	367	275	365	404	291	356	266	319	336	265	294	310	307
US56-26R	242	247	259	259	278	267	244	257	334	357	260	211	366	281	306	237	303	339	200	230	302	281
LG60356R	227	202	253	275	299	235	199	242	294	286	265	227	311	229	276	234	304	260	167	270	311	243
LS6851R	236	235	268	263	287	250	209	250	339	304	259	296	384	272	316	211	315	428	265	243	306	336
PAN 1521R	220	264	268	273	312	243	219	257	316	352	269	207	332	305	295	270	320	303	270	281	305	297
Lake 5920 IPRO	207	238	282	263	309	253	203	251	381	346	259	171	382	291	308	296	308	326	285	268	344	306
P59103R	259	256	264	250	309	217	184	248	312	307	280	250	299	261	290	234	311	243	164	173	285	240
RA5924BR	232	234	291	286	296	251	238	261	378	358	262	164	408	361	314	273	293	359	193	270	336	282
LG60359R	212	198	248	264	297	248	183	236	326	356	261	204	341	275	298	224	284	319	160	202	256	254
LG60260IPR	216	263	277	274	299	222	175	247	345	327	249	224	366	346	302	349	284	276	127	156	332	229
DM 59R03 RSF	217	265	299	283	298	198	186	250	359	300	270	329	347	280	321	220	293	293	235	175	296	273
DM 59160 RSF IPRO	237	154	247	188	282	223	101	204	216	290	277	214	185	237	236	145	247	224	72	149	201	181
RA6124BR	215	209	268	234	274	263	237	243	343	352	278	220	310	287	300	243	307	306	215	228	284	276
LG60261IPR	214	179	239	258	265	181	175	216	311	254	252	207	171	255	239	135	294	299	217	186	251	270
US63-16IPRO	229	258	309	303	274	249	299	274	388	342	295	227	411	302	333	178	322	378	224	250	328	308
US6410IPRO	210	274	316	301	294	245	259	271	402	362	268	240	424	332	343	266	288	395	219	243	356	301
Y657	222	240	252	261	283	149	100	215	196	276	266	296	204	206	248	138	249	148	77	110	162	158
Y651 IPRO	204	257	281	297	277	245	231	256	320	364	269	263	373	315	318	289	326	309	232	254	328	289
DM 61163 RSF IPRO	244	194	295	263	272	251	224	249	315	336	274	247	318	321	298	309	310	322	228	241	279	287
PAN 1644R	195	264	302	266	290	255	231	258	305	363	272	253	363	315	311	151	280	197	184	241	295	221
RA6824BR	185	214	305	270	289	249	155	238	349	357	273	197	397	253	315	194	284	349	211	270	345	281
RA7024BR	212	235	260	260	303	229	223	246	335	372	272	339	383	237	340	266	314	359	215	239	317	296
Gem/Mean	221	228	272	265	282	236	200	244	325	326	268	244	332	288	299	225	298	299	191	217	292	263

Tabel 13: Persentasie ongewenste sade van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 13: Percentage undesirable seed of the different soybean cultivars at the different trial localities, 2024/25

Kultivar	Koel/Cool										Matig/Moderate										Warm											
	Bapsfontein Agricol	Belfast	Bethlehem PD1	Clarens	Delmas	Greylingstad	Hendrina	Kinross	Kokstad	Petrus Steyn	Standerton (Agri seeds)	Gem/Mean	Bronkhorstspuit	Cedara	Greytown	Kranskop	Kroonstad	Leudoringstad	Potchefstroom	Umtata (Dimanda School)	Umtata (Ross Mission)	Winterton	Gem/Mean	Barberspan	Brits	Groblersdal ARC	Hoopstad	Schweizer- PD1	Schweizer- PD2	Warrenton	Gem/Mean	
Lake 5021 IPRO	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.51	0.00	0.00	0.15	0.00	0.05	0.00	0.00	0.00	0.48	0.00	0.09	0.21	0.02	0.10	0.00	0.00	0.08	0.00	0.60	0.39	0.00	0.17	
US50-14R	0.00	0.19	0.00	0.20	0.00	0.00	0.00	0.05	0.66	0.00	0.00	0.11	0.09	0.03	0.00	0.08	0.13	0.45	0.27	0.00	0.53	0.13	0.13	0.51	0.16	0.00	0.25	0.68	0.40	0.42	0.27	
PAN 1515R	0.00	0.00	0.17	0.00	0.02	0.07	0.26	0.13	0.50	0.00	0.01	0.12	0.00	0.09	0.00	0.00	0.24	0.91	0.00	0.08	0.69	0.17	0.25	0.00	0.53	0.20	0.23	0.52	0.00	0.24	0.24	
RA5022BR	0.00	0.00	0.20	0.50	0.04	0.44	0.00	0.00	0.27	0.00	0.00	0.15	0.00	0.63	0.00	0.00	0.28	0.30	0.00	0.08	0.69	0.19	0.57	0.29	0.11	0.65	0.63	0.31	0.27	0.42	0.42	
P51142 R	0.00	0.17	0.00	0.18	0.39	0.00	0.00	0.00	0.34	0.00	0.54	0.11	0.00	0.35	0.76	0.00	0.00	0.63	0.79	0.00	1.16	0.32	0.44	0.00	0.50	0.00	0.63	1.08	0.46	0.28	0.28	
Lake 5122 IPRO	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.11	0.31	0.00	0.35	0.10	0.00	0.14	0.00	0.00	0.31	0.00	0.00	1.02	0.06	0.20	1.03	0.14	0.16	0.32	0.12	0.00	0.00	0.41	0.41	
DM 53154RSF IPRO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.27	0.05	0.09	0.00	1.16	0.00	0.64	0.36	0.11	0.49	0.64	0.36	0.49	0.58	0.23	0.32	1.38	0.57	0.28	0.63	0.63	
P52752 R	0.00	0.11	0.04	0.04	0.00	0.00	0.00	0.00	0.09	0.37	0.33	0.07	0.15	0.00	1.04	0.00	0.22	0.23	0.23	0.54	2.65	0.34	0.03	0.26	0.66	0.12	0.06	0.55	0.50	0.30	0.28	0.28
LG60353R	0.16	0.08	0.00	0.40	0.00	0.39	0.12	0.13	0.22	0.00	0.09	0.15	0.20	0.00	0.00	0.00	0.06	0.00	0.23	0.00	0.21	0.04	0.21	0.61	0.18	0.63	0.00	0.28	0.29	0.36	0.36	
Y540	0.00	0.57	0.00	0.04	0.00	0.00	0.00	0.03	0.19	0.00	0.47	0.08	0.20	0.00	0.98	0.00	0.63	0.06	0.41	1.24	0.29	0.26	0.83	0.40	0.44	0.47	0.34	0.23	0.54	0.54	0.54	
RA565R	0.00	0.12	0.18	0.16	0.00	0.08	0.00	0.00	0.21	0.00	0.00	0.08	0.00	0.00	0.64	0.36	0.29	0.67	0.25	0.56	0.56	0.35	0.00	0.41	0.15	0.54	0.00	0.11	0.93	0.28	0.28	
US56-26R	0.00	0.21	0.00	0.16	0.20	0.23	0.07	0.00	0.00	0.00	0.36	0.09	0.00	0.48	0.51	0.00	0.04	0.56	0.28	0.31	0.74	0.27	0.65	1.16	0.71	0.41	0.67	0.63	0.06	0.74	0.74	0.74
LG60356R	0.00	0.40	0.00	0.18	0.02	0.00	0.00	0.00	0.74	0.00	0.00	0.13	0.27	0.83	0.75	0.00	0.25	0.48	0.26	0.23	0.64	0.38	0.27	0.44	0.21	0.00	0.40	0.40	0.41	0.26	0.26	0.26
LS9851R	0.02	0.37	0.26	0.40	0.79	0.25	0.00	0.00	0.55	0.34	0.30	0.30	0.00	0.00	0.39	0.00	0.27	0.62	0.95	0.44	0.28	0.73	0.59	0.30	0.05	0.68	0.51	0.00	0.41	0.41	0.41	
PAN 1521R	0.00	0.17	0.00	0.29	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.13	0.00	0.49	0.70	0.00	0.64	0.29	0.80	0.83	1.68	0.47	0.47	0.91	0.66	0.00	0.75	0.56	0.27	0.58	0.58	0.58
Lake 5920 IPRO	0.00	0.11	0.00	0.03	0.33	0.00	0.00	0.00	0.00	0.00	0.24	0.05	0.48	0.63	0.86	0.00	0.05	0.58	0.39	0.00	0.29	0.37	0.31	0.56	0.23	0.11	0.00	0.13	0.33	0.23	0.23	0.23
P59T03 R	0.03	0.24	0.00	0.35	0.45	0.22	0.00	0.00	0.39	0.00	0.00	0.17	0.00	2.72	0.47	0.00	0.00	0.65	0.00	0.31	0.83	0.52	0.00	0.45	0.23	0.47	0.35	0.88	0.07	0.38	0.38	0.38
RA5924BR	0.00	0.08	0.70	0.44	0.00	0.00	0.00	0.00	0.40	0.28	0.18	0.19	0.62	0.34	0.64	0.13	0.16	0.15	0.36	0.25	0.47	0.33	0.27	0.48	0.30	0.47	0.16	0.05	0.00	0.35	0.35	0.35
LG60359R	0.00	0.00	0.00	0.37	0.00	0.00	0.25	0.00	0.35	0.00	0.00	0.10	0.00	0.15	0.20	0.00	0.00	0.33	0.00	0.37	0.27	0.13	0.00	0.67	0.22	0.00	0.00	0.30	0.03	0.22	0.22	0.22
LG60260IPR	0.00	0.17	0.96	0.36	0.46	0.00	0.16	0.00	0.10	0.59	0.00	0.28	0.48	0.69	0.43	0.05	0.05	0.68	0.20	0.39	0.91	0.37	0.00	0.39	0.16	0.43	0.32	0.18	0.07	0.33	0.33	0.33
DM 59R03RSF	0.00	0.00	0.17	0.28	0.11	0.00	0.12	0.12	0.00	0.00	0.00	0.08	0.58	0.35	0.45	0.26	0.00	0.18	0.00	0.90	0.52	0.34	0.89	0.34	0.39	0.57	0.59	0.11	0.00	0.47	0.47	0.47
DM 59160RSF IPRO	0.29	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.49	0.00	0.55	0.12	0.13	0.50	0.46	0.00	0.00	0.00	0.64	0.34	0.72	0.26	0.12	0.26	0.58	0.22	0.79	0.49	0.97	0.46	0.46	0.46
RA6124BR	0.00	0.00	0.08	0.13	0.00	0.36	0.23	0.00	0.22	0.00	0.57	0.10	0.16	0.27	0.64	0.00	0.00	0.00	0.44	0.41	0.50	0.24	0.00	0.38	1.71	0.00	1.03	0.33	0.00	0.78	0.78	0.78
LG60261IPR	0.00	0.23	0.00	0.73	0.10	0.22	0.04	0.00	0.20	0.09	0.18	0.16	0.85	0.42	0.41	0.00	0.25	0.49	0.37	0.31	0.35	0.00	0.00	0.00	0.00	0.00	1.05	0.26	0.00	0.26	0.26	0.26
US63-16IPRO	0.00	0.00	0.00	0.31	0.00	0.43	0.00	0.00	0.00	0.00	0.75	0.07	0.45	0.21	0.08	0.00	0.00	0.32	0.33	0.61	0.87	0.25	0.02	0.50	0.00	0.47	0.15	0.00	0.11	0.28	0.28	0.28
US6410IPRO	0.24	0.62	0.19	0.09	0.00	0.00	0.00	0.15	0.12	0.29	0.41	0.17	0.26	0.04	0.55	0.09	0.08	0.00	0.75	0.37	0.61	0.27	0.47	0.56	0.38	0.00	0.48	0.00	0.37	0.36	0.36	0.36
Y657	0.04	0.02	0.10	0.78	0.00	0.00	0.00	0.00	0.11	0.00	0.30	0.11	0.12	0.08	0.36	0.00	0.38	0.21	0.79	0.00	0.69	0.24	0.37	0.00	0.42	0.08	0.30	0.07	0.10	0.20	0.20	0.20
Y651 IPRO	0.00	0.18	0.12	0.41	0.48	0.38	0.07	0.12	0.04	0.00	0.56	0.18	0.76	0.32	0.56	0.00	0.06	0.27	0.51	0.26	0.05	0.34	0.00	0.00	0.65	0.00	0.02	0.53	0.65	0.17	0.17	0.17
DM 61163RSF IPRO	0.00	0.12	0.00	0.06	0.22	0.37	0.00	0.05	0.49	0.00	0.21	0.13	0.19	0.40	0.35	0.00	0.00	0.00	0.33	0.44	0.73	0.21	0.69	0.32	0.00	0.00	0.11	0.20	0.39	0.11	0.11	0.11
PAN 1644R	0.00	0.00	0.13	0.04	0.02	0.37	0.00	0.00	0.05	0.40	0.00	0.10	0.29	0.19	0.65	0.00	0.34	0.00	0.21	0.37	0.48	0.26	0.00	0.00	0.80	0.40	1.00	0.83	0.30	0.30	0.30	0.30
RA6824BR	0.10	0.00	0.44	0.07	0.19	0.00	0.00	0.00	0.10	0.00	0.37	0.09	0.17	0.00	0.90	0.00	0.24	0.52	0.13	0.47	0.34	0.30	0.23	0.65	0.07	0.04	0.00	0.00	0.10	0.10	0.10	0.10
RA7024BR	0.00	0.04	0.00	0.30	0.04	0.00	0.00	0.00	0.00	0.00	0.68	0.13	0.16	0.42	1.57	0.00	0.00	0.68	0.36	0.25	0.63	0.43	0.70	0.39	0.33	0.18	0.00	1.83	0.08	0.23	0.23	0.23
Gem/Mean	0.03	0.13	0.12	0.24	0.15	0.14	0.04	0.03	0.28	0.10	0.22	0.12	0.20	0.34	0.52	0.03	0.15	0.33	0.32	0.34	0.69	0.28	0.29	0.41	0.35	0.23	0.40	0.41	0.25	0.35	0.35	0.35

Tabel 14: Massa van 100 sade (g) van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 14: Mass 100 seeds (g) of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool										Matig/Moderate										Warm									
	Bapfontein Agricol	Belfast	Bethlehem PD1	Clarens	Delmas	Greylingstad	Hendrina	Kinross	Kokstad	Petrus Steyn	Standerton (Agri seeds)	Gem/Mean	Bronkhorstspuit	Cedara	Greytown Kranskop	Kroonstad	Leedoringsstad	Potchefstroom	Umtata (Dimanda School)	Umtata (Ross Mission)	Winterton	Gem/Mean	Barberspan	Brits	Grobledal ARC	Hoopstad	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Warrenton	Gem/Mean
Lake 5021 IPRO	19.75	19.11	17.74	17.14	20.57	21.26	17.92	20.22	17.40	19.29	17.28	19.04	18.45	20.09	-	19.20	19.93	17.44	15.49	23.65	16.90	19.18	15.47	19.83	19.17	19.20	19.67	18.13	17.49	19.47
US50-14R	19.00	19.90	19.05	17.27	15.53	21.82	19.85	21.31	17.43	18.09	17.65	18.93	17.97	18.79	-	18.87	21.40	16.67	18.19	22.66	18.37	19.22	15.87	19.09	19.23	20.20	18.60	16.47	17.68	19.28
PAN 1515R	19.90	17.46	19.41	15.15	17.31	19.92	18.53	19.71	17.72	17.41	16.20	18.25	18.20	21.83	-	20.62	19.60	15.99	17.36	25.85	19.00	19.92	16.07	-	18.46	23.20	20.13	17.00	15.51	20.60
RA5022BR	18.18	18.08	17.01	15.36	16.33	19.90	18.07	19.07	17.62	18.68	18.74	17.83	17.63	19.47	-	17.04	20.47	17.59	16.83	23.33	17.22	18.91	16.20	19.30	18.99	21.73	20.87	16.33	17.82	20.22
P51142 R	18.64	14.65	15.76	14.92	14.95	20.53	16.20	16.93	15.52	17.60	15.55	16.57	15.15	18.12	18.09	17.03	19.27	15.02	12.54	21.23	16.13	17.06	15.07	16.37	15.77	19.53	18.80	17.73	16.88	17.62
Lake 5122 IPRO	17.64	17.76	16.55	16.38	19.42	20.10	19.10	19.19	18.13	18.13	18.32	18.24	19.82	19.18	-	17.24	20.33	16.88	17.19	25.13	17.63	19.40	14.27	19.06	19.12	20.73	20.80	18.87	17.12	19.93
DM 53154RSF IPRO	19.01	19.83	19.43	17.52	16.40	22.94	19.91	20.68	19.28	19.68	18.06	19.47	20.87	21.87	21.86	19.97	19.20	17.57	18.62	26.34	20.16	20.79	15.60	21.17	19.64	19.47	19.60	18.20	18.87	19.97
P52152 R	18.15	15.97	22.07	13.91	15.05	19.16	16.62	17.10	15.75	17.28	16.88	17.11	14.60	17.78	17.80	18.35	20.73	15.52	12.83	20.80	17.85	17.30	17.13	16.98	16.67	20.33	18.07	16.87	15.87	18.01
LG60353R	17.03	15.70	17.66	13.26	18.41	21.70	18.64	18.05	17.27	18.38	16.72	17.61	17.37	18.60	-	20.66	20.80	15.59	16.00	27.70	17.63	19.53	18.20	19.53	19.40	20.20	19.73	17.00	17.53	19.72
Y540	18.43	15.34	17.06	13.77	16.43	19.04	17.49	17.25	16.16	18.97	16.56	16.99	16.04	17.35	20.02	18.83	19.47	16.57	14.74	22.46	18.43	18.18	15.20	20.82	17.83	19.00	20.93	16.27	16.87	19.60
RA565R	19.15	15.86	18.78	14.56	18.54	21.40	17.26	18.75	16.96	19.14	15.59	18.04	17.40	18.74	20.62	18.91	20.07	18.55	14.88	23.07	17.08	19.03	16.80	20.04	19.76	22.53	21.27	19.27	17.93	20.90
US56-26R	19.10	15.71	18.52	14.56	16.60	23.23	17.48	19.33	16.17	18.82	17.70	17.95	17.01	18.09	19.59	20.31	18.20	17.51	14.88	18.89	19.90	18.06	17.20	20.56	19.78	19.27	19.47	15.67	17.26	19.77
LG60356R	19.47	17.23	18.42	13.38	17.64	22.42	17.47	18.06	16.69	19.70	17.72	18.15	14.48	17.60	18.67	19.25	21.00	16.95	14.50	21.70	17.09	18.02	15.20	19.93	24.13	20.07	18.13	15.73	17.36	20.57
LS6851R	15.32	15.27	14.60	13.17	14.27	19.98	17.03	16.77	17.15	17.33	15.40	16.09	14.98	19.77	18.01	15.78	21.90	12.79	11.99	16.88	15.02	16.51	18.00	17.35	15.27	20.47	21.73	16.73	19.86	18.71
PAN 1521R	20.05	16.12	19.32	16.08	18.71	23.23	16.99	18.80	17.05	19.39	19.62	18.57	17.23	18.33	21.04	20.32	22.33	18.44	14.32	25.64	20.84	19.71	18.00	20.48	21.06	20.13	19.13	18.07	18.11	20.20
Lake 5920 IPRO	17.17	14.91	16.46	12.82	16.10	19.25	16.68	18.05	16.64	17.22	16.88	16.53	16.18	17.08	19.16	16.86	21.80	15.57	10.65	20.70	16.48	17.25	14.87	17.39	17.87	20.00	18.93	15.27	16.23	18.55
P59103 R	19.88	15.66	18.07	14.07	18.84	21.50	17.69	18.73	16.51	19.03	18.68	18.00	18.15	20.08	20.72	20.53	19.73	18.11	14.21	23.47	20.68	19.38	15.80	20.40	20.27	19.07	20.67	16.20	17.73	20.10
RA5924BR	16.93	15.32	16.98	14.05	17.10	20.18	17.60	16.89	14.92	18.54	17.68	16.85	16.23	18.22	18.64	16.83	21.20	16.33	13.31	20.88	19.03	17.71	16.27	19.79	18.78	21.13	21.07	15.87	15.25	20.19
LG60359R	18.52	15.20	17.00	14.24	17.44	19.65	17.30	17.81	15.29	18.95	15.95	17.14	15.34	16.62	19.90	18.42	19.73	18.29	14.83	21.61	18.87	18.09	17.27	19.18	18.62	21.27	18.47	18.80	16.60	19.38
LG60260IPR	17.65	14.19	17.08	13.86	16.50	18.88	16.12	16.57	14.95	18.20	15.34	16.40	15.35	17.23	17.69	18.09	19.20	16.39	12.94	20.46	17.15	17.17	16.80	16.48	18.19	20.20	18.33	17.27	16.06	18.30
DM 59R03RSF	19.85	18.14	18.42	16.45	20.34	22.52	19.88	20.04	18.54	20.76	19.83	19.46	19.70	21.51	22.13	19.43	21.73	18.81	16.72	24.97	20.71	20.63	19.73	21.84	18.29	19.20	18.60	18.20	17.56	19.48
DM 59160RSF IPRO	16.28	14.62	15.24	12.59	15.91	18.09	16.15	15.51	15.37	17.83	15.56	15.76	13.78	15.33	17.02	16.47	20.27	15.93	11.15	21.69	18.77	16.45	20.07	0.00	18.59	19.00	20.20	16.73	14.23	14.45
RA6124BR	18.94	15.90	17.33	14.94	19.62	20.22	17.17	17.95	16.31	19.59	16.34	17.80	16.13	19.93	20.71	18.73	22.20	18.48	12.52	21.52	18.48	18.78	20.07	18.46	16.11	17.67	19.60	15.67	16.39	17.96
LG60261IPR	17.46	15.56	15.86	13.91	17.19	19.07	16.81	16.42	15.08	18.20	17.65	16.56	16.52	17.74	19.78	18.13	20.67	16.86	13.13	21.40	17.07	17.78	19.13	17.83	19.44	20.73	21.53	18.00	15.19	19.89
US63-16IPRO	18.05	15.01	16.19	15.10	16.34	20.81	17.55	16.53	16.39	19.68	16.16	17.17	14.53	18.72	19.31	19.28	20.67	16.64	11.30	23.04	18.31	18.19	20.20	19.80	18.20	18.20	16.87	15.74	18.61	
US6410IPRO	16.13	13.45	14.61	13.19	17.94	17.66	16.55	15.20	13.38	16.53	13.53	15.47	13.75	15.45	17.13	17.68	20.20	15.11	10.90	19.57	15.74	16.22	19.40	16.74	18.03	18.20	20.93	16.40	14.08	18.48
Y657	15.29	15.27	15.39	13.25	16.91	18.86	16.93	16.48	15.24	18.02	15.89	16.16	14.20	16.83	18.54	17.05	18.30	16.65	11.71	21.22	17.65	16.81	21.60	16.39	17.80	20.60	21.33	16.73	16.03	19.03
Y651 IPRO	18.39	14.52	16.51	14.95	18.39	20.41	17.99	16.24	15.88	18.07	16.13	17.14	14.31	17.84	17.64	18.03	19.27	15.77	11.33	24.59	17.98	17.35	19.87	17.53	17.58	19.73	18.93	15.87	14.69	18.45
DM 61163RSF IPRO	18.67	16.55	16.58	19.13	18.06	21.97	17.46	18.06	16.45	18.86	16.03	18.18	15.22	17.47	19.79	19.20	21.60	18.10	14.12	26.56	19.88	19.01	20.27	20.35	20.11	16.73	19.20	17.00	17.60	19.10
PAN 1644R	17.48	16.18	17.47	14.56	17.90	23.75	16.69	18.09	15.62	18.20	17.01	17.57	15.46	17.52	20.37	18.60	20.07	17.54	13.96	26.49	19.04	18.79	20.40	19.77	16.83	17.00	20.33	16.27	18.66	18.48
RA6824BR	15.09	14.14	15.56	17.56	17.56	21.79	15.91	15.40	14.01	17.93	13.80	16.20	14.58	17.31	19.11	17.60	19.07	17.36	10.66	24.19	17.08	17.47	20.40	19.19	16.49	16.20	18.47	14.67	14.06	17.58
RA7024BR	18.00	15.65	16.85	15.88	18.85	23.22	17.44	17.13	15.88	19.81	15.06	17.87	16.81	20.38	20.03	19.20	21.73	18.81	11.61	26.11	17.57	19.34	21.87	17.35	16.61	19.07	19.67	16.00	16.43	18.17
Gem/Mean	18.08	16.07	17.28	14.80	17.41	20.76	17.54	17.89	16.34	18.54	16.73	17.47	16.36	18.46	19.36	18.52	20.38	16.87	13.92	22.93	18.12	18.35	17.76	18.29	18.51	19.74	19.73	16.88	16.71	19.09

Tabel 15: Olepersentasie op vogvrye basis van die verskillende sojaboonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 15: Oil percentage on moisture free basis of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool										Matig/Moderate								Warm														
	Bapfontein Agricol	Belfast	Bethlehem PD1	Clarens	Delmas	Greylingstad	Hendrina	Kinross	Kokstad	Petrus Steyn	Standerton (Agri Seeds)	Gem/Mean	Bronkhorstspruit	Cedara	Greytown	Kranskop	Kroonstad	Leedorningstad	Potchefstroom	Limagrain	Umtata (Dimanda School)	Umtata (Ross Mission)	Winterton	Gem/Mean	Barberspan	Brits	Groblersdal ARC	Hoopstad	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Warrenton	Gem/Mean	
Lake 5021 IPRO	22.64	19.10	20.07	20.43	19.94	21.41	21.84	20.37	21.12	23.09	20.36	21.00	22.07	23.66	-	21.04	22.33	21.47	22.68	23.35	22.68	23.35	22.51	22.37	23.19	24.63	22.03	24.33	21.83	21.72	23.98	23.21	
US50-14R	23.46	19.54	20.74	20.45	21.43	20.83	22.49	21.65	21.52	23.17	20.95	21.53	22.68	24.07	-	20.85	22.37	23.19	23.37	22.83	22.58	22.77	22.83	22.58	23.19	23.24	23.10	21.27	24.04	21.51	21.75	23.74	22.48
PAN 1515R	22.12	18.65	18.45	19.56	21.18	20.19	21.68	19.83	20.04	22.85	18.43	20.46	20.64	21.90	-	20.83	21.97	21.92	21.66	21.24	20.69	21.45	20.69	21.45	22.84	20.80	22.73	20.69	20.15	23.13	21.41	21.41	
RA5022BR	23.48	20.00	20.30	19.29	21.46	20.42	21.93	20.62	21.11	22.61	20.36	21.12	21.83	23.31	-	20.01	22.48	21.80	22.89	22.76	22.40	22.15	22.40	22.15	24.37	19.18	23.68	21.02	20.35	23.23	21.84	22.35	
P51T42 R	21.26	19.24	20.18	19.97	39.29	19.96	21.49	20.47	23.19	19.76	22.70	21.71	21.71	22.70	-	20.17	22.27	22.63	22.00	22.70	22.57	22.07	22.57	22.07	23.72	23.24	21.78	23.31	21.07	20.00	22.34	22.35	
Lake 5122 IPRO	22.19	18.50	18.61	19.10	20.72	19.72	21.24	19.62	19.93	22.50	18.75	20.21	20.80	22.00	-	19.49	21.87	20.33	21.47	21.55	22.16	21.07	22.16	21.07	22.85	22.25	20.48	22.67	20.59	20.29	22.22	21.50	
DM 53154RSF IPRO	22.27	19.13	19.00	19.71	20.80	20.08	22.00	19.68	20.08	22.72	19.24	20.55	21.08	21.65	21.74	19.53	21.78	20.26	21.57	21.95	21.93	21.20	21.93	21.20	23.22	22.29	20.32	23.43	20.95	20.24	22.29	21.75	
P52T52 R	22.53	19.77	19.93	18.30	22.12	20.63	22.32	21.72	20.71	22.11	20.56	21.01	21.94	22.36	22.78	21.30	23.13	23.22	21.59	23.27	21.31	22.45	21.31	22.45	21.79	23.98	20.33	23.84	20.15	20.85	23.07	22.08	
LG60353R	23.60	19.98	20.19	20.37	22.48	20.94	22.43	21.11	21.59	20.38	20.80	21.31	20.63	23.64	-	18.40	22.21	21.31	21.22	21.73	21.32	21.11	21.32	21.11	21.60	22.20	19.54	22.66	20.19	20.23	21.87	21.15	
Y540	21.49	18.13	19.98	18.72	21.53	20.26	21.34	20.28	18.93	21.70	19.36	20.14	20.87	22.09	21.00	18.48	22.21	21.31	21.22	21.73	21.32	21.11	21.32	21.11	21.60	22.20	19.54	22.66	20.19	20.23	21.87	21.15	
RA565 R	23.02	20.18	20.99	20.30	22.03	20.50	22.15	20.39	22.74	18.52	21.35	22.05	22.85	23.15	22.65	20.56	22.88	21.64	21.88	22.56	23.41	22.13	22.13	22.13	21.54	23.27	20.35	24.21	21.92	20.98	22.40	22.44	
US56-26R	23.64	20.70	22.03	19.14	22.93	21.51	21.63	22.75	21.67	23.75	20.96	21.98	22.98	24.59	25.05	22.27	23.92	23.37	22.67	23.80	23.95	23.58	23.41	23.58	25.44	25.27	21.17	25.39	22.65	22.24	23.95	23.62	
LG60366R	23.76	19.73	21.77	21.75	22.61	21.35	24.18	22.42	21.57	23.83	21.14	22.30	22.30	23.72	23.87	20.81	23.90	22.96	23.36	23.71	23.51	22.95	23.51	22.95	25.64	24.19	21.52	25.06	22.75	22.06	23.43	23.38	
LS6851R	23.51	19.37	21.09	20.73	22.41	21.24	22.69	21.80	21.16	22.91	20.47	21.69	21.87	22.51	22.79	20.31	23.25	22.73	21.10	23.11	23.79	22.21	23.79	22.21	24.47	23.83	22.33	22.12	21.70	20.86	22.19	22.49	
PAN 1521R	22.76	19.03	19.41	19.92	21.07	20.03	22.31	20.70	20.11	23.46	18.70	20.88	21.48	22.49	21.62	20.44	21.71	20.49	21.25	22.42	21.69	21.47	21.69	21.47	21.94	22.40	20.60	22.66	20.80	20.72	21.65	21.38	
Lake 5920 IPRO	22.80	19.00	19.42	19.58	21.71	20.00	22.31	20.65	20.51	21.71	19.33	20.77	20.49	22.18	21.61	20.00	22.66	22.23	19.59	21.42	22.19	21.27	22.19	21.27	21.94	22.40	20.60	22.66	20.80	20.62	22.20	21.82	
P59T03 R	22.93	20.41	20.43	20.95	22.75	21.14	22.40	21.55	20.84	22.38	20.60	21.58	21.54	23.54	22.19	20.94	23.71	21.69	21.55	22.65	22.75	22.23	22.75	22.23	23.56	24.33	21.75	23.14	22.34	21.31	22.77	22.89	
RA5924BR	21.63	19.32	19.31	19.06	21.45	18.94	21.32	20.65	19.97	21.34	18.90	20.30	20.16	20.96	20.59	18.51	21.15	21.00	20.58	20.84	20.09	20.47	20.09	20.47	22.03	21.98	19.96	22.02	20.39	19.80	21.64	21.09	
LG60359R	21.23	19.78	19.17	19.24	20.77	18.90	21.13	20.10	19.62	21.19	18.46	20.11	20.27	20.99	20.31	18.60	20.96	20.04	19.78	20.59	21.84	20.19	21.84	20.19	22.66	22.28	19.47	22.37	19.98	19.74	21.21	21.03	
LG60260IPR	22.57	19.15	19.66	19.76	20.83	19.90	22.45	20.92	20.03	20.88	19.86	20.62	20.89	22.98	21.83	20.41	22.35	21.14	22.13	22.44	22.58	21.77	22.58	21.77	25.00	23.37	20.60	23.29	19.73	19.75	22.34	21.75	
DM 59R03 RSF	22.63	18.54	18.99	19.46	21.82	19.84	21.71	20.76	19.81	21.66	19.37	20.52	21.18	21.99	22.16	19.54	21.23	21.49	22.30	22.46	21.50	22.46	21.50	22.46	24.22	23.23	19.34	23.30	21.31	20.28	22.79	21.80	
DM 59160 RSF IPRO	22.19	19.21	20.95	18.41	22.80	20.45	22.02	21.27	20.34	21.64	19.28	20.94	20.92	23.16	21.01	20.66	23.00	21.96	21.46	22.54	21.32	21.84	21.32	21.84	24.08	23.83	20.34	23.78	21.77	20.64	22.90	22.43	
RA6124BR	21.90	19.94	19.37	18.52	22.81	19.70	21.42	20.13	19.76	22.52	18.83	20.61	19.95	22.62	21.44	20.02	22.08	21.45	20.33	21.50	20.72	21.17	20.72	21.17	21.63	23.16	17.85	22.88	21.04	19.21	21.77	21.23	
LG60261IPR	21.16	19.03	19.05	18.46	21.37	19.25	21.89	20.02	19.65	21.46	20.65	20.13	20.27	21.84	20.45	18.58	21.74	20.03	21.30	22.54	20.91	20.84	20.91	20.84	23.01	22.14	18.03	22.19	21.36	20.93	21.99	20.93	
US63-16IPRO	21.25	19.70	19.15	18.51	22.57	19.70	21.50	20.33	19.63	23.06	19.29	20.54	20.15	22.42	21.86	19.89	22.06	21.68	21.46	22.51	21.70	21.50	21.70	21.50	24.02	22.75	19.19	22.44	20.88	20.53	22.27	21.32	
US6410IPRO	21.36	19.70	20.07	18.74	22.36	20.01	22.44	20.88	19.37	22.38	19.57	20.73	21.03	22.97	21.26	19.81	21.72	21.36	20.27	21.66	21.80	21.26	21.80	21.26	23.06	23.36	19.46	22.81	19.61	20.14	22.10	21.31	
Y657	20.91	20.24	18.66	19.34	21.57	19.95	21.00	20.23	19.07	22.82	18.68	20.32	20.84	21.14	20.68	20.88	22.13	20.98	20.35	21.47	21.69	20.86	21.69	20.86	24.19	23.06	17.80	22.58	21.29	19.66	22.00	21.15	
Y651 IPRO	21.49	20.33	19.47	19.53	21.51	19.84	21.72	21.21	20.56	21.72	20.00	20.82	21.81	22.25	20.98	19.99	22.69	22.37	21.32	22.22	22.51	21.70	22.51	21.70	22.67	23.76	19.71	22.89	21.49	21.33	23.51	21.96	
DM 61163 RSF IPRO	20.92	19.38	19.00	18.45	20.91	18.97	21.64	19.78	19.80	21.20	18.85	20.01	20.22	21.76	20.47	19.33	21.57	18.58	20.98	22.12	21.51	20.63	22.12	21.51	22.64	22.30	17.42	22.19	20.86	19.90	21.65	20.69	
PAN 1644R	18.31	20.29	18.65	19.66	21.53	19.30	21.47	19.75	19.30	21.67	19.31	19.99	20.15	21.24	21.14	19.59	21.84	20.91	20.09	21.40	21.43	20.80	21.43	20.80	24.48	22.93	17.93	21.93	20.91	19.39	21.34	20.93	
RA6824BR	20.92	20.10	17.98	18.13	20.70	18.96	21.68	19.86	19.52	20.99	18.73	19.88	20.49	21.84	20.80	18.23	21.64	20.43	19.95	22.06	21.27	20.68	22.06	21.27	20.68	23.96	22.44	19.23	21.89	20.78	19.19	21.09	
RA7024BR	20.23	19.13	17.67	19.01	20.76	18.54	21.37	19.22	18.82	23.06	18.24	19.78	19.83	20.97	20.14	17.83	21.13	19.66	19.34	20.99	19.56	19.96	19.56	19.96	21.73	22.41	17.72	21.26	20.19	18.45	20.07	20.40	
Gem/Mean	22.07	19.51	19.68	19.45	22.22	20.05	21.93	20.70	20.22	22.25	19.57	20.81	21.09	22.46	21.65	19.97	22.30	21.46	21.31	22.23	21.96	21.57	21.96	21.57	23.34	23.18	19.95	23.06	21.09	20.46	22.39	21.81	

Table 16: Ru-proteïenpersentasie op vogvrye basis van die verskillende soja-boonkultivars by die verskillende proef lokaliteite, 2024/25
 Table 16: Percentage crude protein on moisture free basis of the different soybean cultivars at the different trial localities, 2024/25

Kultivar/ Cultivar	Koel/Cool										Maitig/Moderate										Warm										
	Bapfontein Agricol	Belfast	Bethlehem PD1	Clarens	Delmas	Greylingstad	Hendrina	Kinross	Kokstad	Petrus Steyn	Standerton (Agri seeds)	Gem/Mean	Bronkhorstspuit	Cedara	Greytown Kranskop	Kroonstad	Leedoringsstad	Polehrstroom	Umtata (Dimanda School)	Umtata (Ross Mission)	Winterton	Gem/Mean	Barberspan	Brits	Groblersdal ARC	Hoopstad	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Warrenton	Gem/Mean	
Lake 5021 IPRO	40.77	41.93	39.69	40.45	39.21	40.49	40.41	41.11	37.44	39.20	39.48	40.07	38.97	37.68	-	41.22	40.80	38.26	38.92	39.97	39.01	39.40	36.74	39.23	41.39	36.14	39.12	39.16	34.41	38.97	
US50-14R	38.80	41.15	38.97	39.31	39.29	39.99	40.27	38.88	34.85	37.05	37.50	38.86	37.19	36.22	-	41.69	39.18	36.37	34.63	38.67	39.37	37.71	36.11	38.90	42.76	36.03	38.71	37.92	34.15	39.10	
PAN 1515R	40.48	40.79	39.27	39.59	39.79	40.31	40.05	39.26	37.19	37.76	39.74	39.45	38.85	41.22	-	41.46	40.93	38.07	39.33	41.07	42.69	40.13	37.50	-	43.50	38.82	41.09	39.69	32.15	41.14	
RA5022BR	38.92	40.29	39.97	40.97	39.95	39.70	39.79	39.74	37.47	39.93	38.93	39.67	38.66	38.52	-	42.42	39.30	38.70	38.45	40.45	39.73	39.50	33.45	36.69	43.10	36.62	40.80	39.72	35.15	39.30	
P51T42 R	40.49	39.16	38.16	38.98	38.57	39.62	39.49	37.67	36.07	38.30	38.25	38.65	37.85	37.67	38.21	40.19	40.75	37.60	39.86	40.08	37.95	39.03	35.31	37.48	41.19	37.22	39.33	38.51	34.82	38.81	
Lake 5122 IPRO	39.79	41.48	40.29	40.57	39.98	40.09	41.35	40.74	38.32	38.80	40.56	40.14	38.99	37.73	-	41.89	40.00	40.73	38.53	40.39	38.55	39.75	35.04	38.65	41.03	37.20	39.92	39.46	35.69	39.20	
DM 53154RSF IPRO	39.59	41.07	41.55	40.57	40.09	39.87	40.09	41.74	37.64	41.55	39.45	40.38	39.50	39.94	40.36	42.38	40.96	38.76	39.25	40.22	39.56	40.17	36.02	40.46	41.82	36.66	40.48	39.47	37.43	39.86	
P52T52 R	37.41	37.51	38.06	40.29	37.27	37.56	38.80	37.72	35.57	38.25	35.72	37.84	36.21	37.73	39.61	38.70	37.31	40.35	38.39	40.63	38.39	37.39	37.39	37.39	38.03	42.91	37.63	39.70	36.99	32.34	39.57
L660353R	38.71	38.18	39.55	39.89	38.74	39.48	38.89	39.73	35.68	39.77	37.79	38.86	38.50	38.38	-	40.51	39.47	37.64	39.31	38.80	38.38	38.94	35.63	38.51	41.46	38.16	39.77	38.90	37.58	39.48	
Y540	39.54	40.28	38.83	40.51	39.89	39.00	39.57	39.06	38.10	38.88	38.67	39.37	38.54	38.53	40.96	41.18	40.59	37.34	39.73	40.48	40.46	39.67	36.58	38.92	42.13	39.17	39.63	38.86	35.12	39.96	
RA565R	38.45	39.84	38.44	38.41	38.95	38.95	39.22	39.59	35.28	38.26	39.94	38.54	38.62	38.84	40.27	40.08	40.25	38.79	38.71	40.43	37.79	39.50	36.44	38.84	43.39	38.85	39.53	38.53	34.79	40.15	
US56-26R	37.49	38.55	37.48	37.54	38.80	39.09	39.21	38.48	34.17	35.67	38.61	37.68	38.59	37.79	37.96	40.35	39.94	36.18	40.30	39.40	39.18	38.81	35.56	38.88	42.26	37.19	38.13	37.56	31.71	39.12	
L660356R	38.49	41.24	38.30	37.88	38.53	39.12	38.45	37.54	34.55	38.66	37.82	38.08	38.29	38.77	39.28	41.87	39.14	37.38	40.77	39.93	39.13	39.43	32.39	38.66	43.10	37.20	38.69	39.06	33.84	39.41	
L66051R	39.76	41.62	38.33	39.00	38.65	40.03	38.88	39.03	35.13	37.13	39.64	38.76	39.80	40.56	39.76	41.82	41.03	37.47	41.16	42.13	38.58	40.47	35.22	39.46	42.15	41.93	42.05	40.38	37.27	41.40	
PAN 1521R	40.19	39.86	39.56	39.29	39.17	40.15	38.26	38.76	37.66	39.19	39.41	39.21	38.97	39.52	43.02	41.36	41.10	39.64	34.95	40.77	40.81	39.92	35.72	40.98	43.92	40.04	40.31	38.37	37.01	41.31	
Lake 5920 IPRO	39.00	38.35	37.84	38.56	39.76	38.10	38.82	38.03	33.09	37.46	37.65	37.90	38.55	37.63	39.63	39.69	39.32	36.95	38.11	40.13	39.18	38.75	34.87	38.51	41.04	37.46	38.75	37.77	34.59	38.94	
P59T03 R	40.47	39.79	39.49	39.20	40.49	39.31	38.93	38.87	36.76	38.14	39.15	39.15	39.66	39.87	41.21	40.85	40.70	39.38	40.95	41.65	41.94	40.53	37.42	39.44	42.39	38.98	40.19	39.27	37.51	40.25	
RA5924BR	39.65	41.64	38.89	39.62	38.57	38.83	39.04	38.12	34.77	38.54	39.58	38.77	39.67	39.22	39.82	40.67	40.58	37.27	39.61	41.82	41.54	39.83	37.57	38.68	42.11	37.83	38.80	38.53	32.48	39.36	
L660359R	40.12	39.68	39.21	39.19	39.60	40.19	39.59	40.11	36.19	39.29	39.19	39.32	39.59	38.97	43.24	40.90	40.90	41.95	39.35	41.94	42.55	39.35	37.11	40.65	43.85	39.54	40.96	39.43	35.85	41.25	
L660260IPR	38.93	41.19	40.16	38.44	38.88	38.68	38.87	39.46	37.98	39.58	38.12	39.22	40.10	39.37	39.19	39.91	40.02	37.73	39.01	41.11	40.71	39.56	31.64	37.64	42.32	37.74	40.82	40.08	34.59	39.58	
DM 59R03RSF	39.42	40.95	40.70	40.75	40.32	39.09	39.09	38.86	37.51	39.16	39.73	39.59	39.18	39.66	39.78	40.93	40.04	38.82	40.68	41.50	39.41	40.07	37.14	39.32	43.76	38.71	40.84	39.43	31.93	40.66	
DM 59160RSF IPRO	39.57	40.21	37.63	40.41	38.81	39.22	38.93	37.52	36.95	38.70	39.23	38.80	39.38	38.17	40.72	39.35	40.01	38.26	35.60	39.76	42.02	38.91	35.41	38.35	43.01	37.70	40.10	39.39	35.40	39.79	
RA6124BR	37.07	38.56	37.46	38.58	40.11	37.47	38.26	38.76	33.60	37.05	37.34	37.69	38.61	37.98	39.07	38.13	38.37	37.39	38.46	39.24	39.67	38.41	37.05	37.14	41.87	36.82	38.22	38.71	31.76	38.51	
L660261IPR	39.71	41.90	39.26	40.71	39.68	39.81	39.40	38.93	36.75	38.97	38.11	39.23	38.76	38.76	41.18	41.00	40.00	39.54	40.26	38.18	40.96	39.77	35.43	39.44	44.00	38.68	38.90	39.70	33.35	40.26	
US63-16IPRO	38.85	39.41	38.92	40.75	38.64	38.89	39.26	38.62	37.62	37.72	38.73	38.50	38.50	38.37	40.06	39.89	39.15	37.65	38.24	40.05	40.80	38.99	31.69	38.29	43.10	38.41	38.87	38.61	33.88	39.67	
US6410IPRO	39.64	41.29	37.62	38.55	40.08	38.18	38.06	38.01	36.62	37.04	38.12	38.51	38.32	37.57	40.48	39.71	38.82	39.41	38.93	41.51	40.72	39.33	36.06	39.13	43.14	36.81	39.49	41.84	33.02	39.64	
Y657	39.44	39.25	39.87	39.59	38.87	39.47	39.60	39.09	36.60	36.82	39.21	38.86	38.36	38.65	40.58	40.30	40.56	39.02	36.81	41.53	39.54	39.48	31.60	38.61	44.23	38.04	39.41	39.76	35.47	40.07	
Y651 IPRO	38.37	39.28	37.72	37.18	38.07	38.37	37.32	36.91	35.00	36.37	37.29	37.66	36.87	36.34	39.04	38.58	38.30	36.35	38.07	40.01	38.73	37.95	36.20	37.24	40.45	37.39	37.01	39.09	29.64	38.02	
DM 61163RSF IPRO	39.70	41.30	38.90	39.13	40.58	39.08	39.42	39.61	37.14	38.00	40.07	39.42	40.57	40.60	40.33	40.43	39.07	41.25	39.38	40.32	39.73	39.83	36.17	39.14	44.35	38.19	39.19	39.09	34.96	40.24	
PAN 1644R	40.29	40.06	40.37	40.39	40.64	40.01	39.09	37.06	38.77	39.43	39.64	40.40	40.57	40.60	41.60	41.18	41.24	38.06	42.24	40.06	40.74	40.85	31.81	40.14	44.82	39.58	40.68	40.44	37.14	41.31	
RA6824BR	38.65	39.95	39.63	40.39	39.74	37.79	38.53	39.07	35.80	41.93	39.40	39.15	39.08	38.86	40.61	39.06	39.02	40.01	40.30	41.04	39.40	39.40	29.81	38.90	42.46	36.75	38.57	38.50	32.83	39.17	
RA7024BR	38.40	40.28	38.78	40.03	38.57	37.81	37.96	39.18	35.15	38.35	38.55	38.45	38.81	39.03	39.64	39.01	38.34	38.68	38.74	39.97	40.30	39.03	31.26	37.53	42.19	37.82	37.33	38.58	33.60	38.72	
Gem/Mean	39.26	39.50	39.03	39.49	39.32	39.18	39.15	39.04	36.24	38.54	38.76	38.88	38.82	38.62	40.22	40.53	39.90	38.26	39.10	40.37	39.94	39.45	35.10	38.77	42.66	37.98	39.54	39.07	34.41	39.76	

Tabel 17: Gemiddelde van die olie-en proteïen persentasie saamgevoeg (Protolie), 2024/25
 Table 17: Average of the oil and protein percentage joined (Protol), 2024/25

Kultivar/ Cultivar	Koel/Cool										Matig/Moderate										Warm												
	Bapfontein Agricol	Belfast	Bethlehem PD1	Clarens	Delmas	Greylingstad	Hendrina	Kinross	Kokstad	Petrus Sleyrn	Standerton (Agri seeds)	Gem/Mean	Bronkhorstspuit	Cedara	Greytown Kranskop	Kroonstad	Leedorfingstad	Potcheitroom	Limagrain	Umtata (Dimanda School)	Umtata (Ross Mission)	Winterton	Gem/Mean	Barberspan	Brits	Groblersdal ARC	Hoopstad	Schweizer-Reneke PD1	Schweizer-Reneke PD2	Warrenton	Gem/Mean		
Lake 5021 IPRO	63.41	61.03	59.76	60.88	59.15	61.90	62.25	61.48	58.56	62.29	59.84	61.07	61.04	61.34	-	62.26	63.13	59.73	61.60	63.32	61.52	61.77	59.93	63.86	63.42	60.47	60.95	60.88	58.39	62.18			
US50-14R	62.26	60.69	59.71	59.76	60.72	60.82	62.76	60.53	56.37	60.22	58.45	60.38	59.87	60.29	-	62.54	61.55	59.56	59.00	61.50	61.95	60.47	62.00	64.03	64.03	60.07	60.22	59.67	57.89	61.58			
PAN 1515R	62.60	59.44	57.72	59.15	60.97	60.50	61.73	59.09	57.23	60.61	58.17	59.90	59.49	63.12	-	62.29	62.90	59.99	60.99	62.31	63.38	61.58	60.34	64.30	61.55	61.78	59.84	55.28	62.54				
RA5022BR	62.40	60.29	60.27	60.26	61.41	60.12	61.72	60.36	58.58	62.94	59.28	60.80	60.49	61.83	-	62.43	61.78	60.50	61.34	63.21	62.13	61.65	57.82	62.28	60.30	61.82	60.07	58.38	61.15				
P51T42 R	61.75	58.40	58.34	58.95	77.86	59.58	61.47	59.16	56.54	61.49	58.01	61.35	59.56	60.37	60.61	60.36	63.02	60.23	61.86	62.78	60.52	61.10	59.03	60.72	62.97	60.53	60.40	58.51	56.96	61.16			
Lake 5122 IPRO	61.98	59.98	58.90	59.67	60.70	59.81	62.59	60.36	58.25	61.30	59.31	60.35	59.79	59.73	-	61.38	61.87	61.06	60.00	61.94	60.71	60.82	57.89	60.90	61.51	59.87	60.51	59.75	57.91	60.70			
DM 5315RFSF IPRO	61.86	60.20	60.55	60.28	60.89	59.95	62.09	61.42	57.72	64.27	58.69	60.92	60.58	61.59	62.10	61.91	62.74	59.02	60.82	62.17	61.49	61.37	59.24	62.75	62.14	60.09	61.43	59.71	59.72	61.60			
PS2152 R	59.94	57.28	57.99	58.59	59.39	58.19	61.12	59.44	56.28	60.16	58.59	58.15	60.09	62.39	60.13	61.83	60.53	61.94	61.66	61.94	61.66	61.94	60.84	59.18	62.01	63.24	61.47	59.85	57.84	55.41	61.64		
LG6035BR	62.31	58.16	59.74	60.26	61.22	60.42	61.32	60.84	57.27	60.15	58.59	60.17	59.13	62.02	-	62.11	62.60	60.15	61.65	62.19	60.83	61.41	59.89	63.00	63.48	62.23	61.73	60.36	60.30	62.61			
Y540	61.03	58.41	58.81	59.23	61.42	58.26	60.91	59.34	57.03	60.58	58.03	59.50	59.41	60.62	61.96	59.66	62.80	58.65	60.95	62.21	61.78	60.78	58.18	61.12	61.67	61.83	59.82	59.09	56.99	61.11			
RA565R	61.47	60.02	59.43	58.71	60.98	59.45	61.37	60.74	55.67	61.00	58.46	59.88	60.67	61.99	62.92	60.64	62.83	60.43	60.59	62.99	61.20	61.63	57.98	62.11	63.74	63.06	61.45	59.51	57.19	62.59			
US56-2BR	61.43	59.25	59.51	56.68	61.73	60.60	60.84	61.23	55.84	59.42	59.59	59.65	61.57	62.38	63.01	62.62	63.86	59.55	62.97	63.20	63.13	62.40	64.15	63.43	62.58	60.78	59.80	55.66	62.74				
LG6035BR	62.25	38.97	60.07	59.63	61.14	60.47	62.63	59.96	56.32	62.49	58.96	58.37	60.59	62.49	63.14	63.04	60.34	62.13	63.64	62.64	62.64	62.38	61.00	64.15	63.43	62.58	61.44	59.51	57.19	62.59			
LS6851R	63.27	60.99	59.42	59.73	61.06	61.27	61.57	60.83	56.29	60.04	60.11	60.45	61.67	63.07	62.55	62.13	64.28	60.20	62.26	65.24	62.37	62.88	59.69	63.29	64.48	64.05	63.75	61.24	59.46	63.89			
PAN 1521R	62.95	58.89	58.97	59.21	60.24	60.18	60.57	59.46	57.77	62.65	58.11	60.09	60.45	62.01	64.64	61.80	62.81	60.13	56.20	63.01	62.50	61.38	58.18	61.12	61.67	61.83	59.82	59.09	56.99	61.11			
Lake 5920 IPRO	61.80	57.35	57.26	58.14	61.47	58.10	61.13	58.68	53.60	59.17	56.98	58.67	59.04	59.81	61.24	59.69	61.98	59.18	57.70	61.55	61.37	60.02	60.91	61.64	60.12	59.55	58.39	56.79	60.56				
P59T03 R	63.40	60.20	59.92	60.15	63.24	60.45	61.33	60.42	57.60	60.52	59.75	60.72	61.20	63.41	63.40	61.79	64.41	61.07	62.50	64.30	64.69	62.76	60.98	63.77	64.14	62.12	62.53	60.58	60.28	63.14			
RA5924BR	61.28	60.96	58.20	58.68	60.02	57.77	60.36	58.77	54.74	59.88	58.48	59.07	59.83	60.18	60.41	59.18	61.73	58.27	60.19	62.66	61.63	60.31	59.60	60.86	62.07	59.85	59.19	58.33	54.12	60.44			
LG60260IPR	61.35	59.46	58.38	58.43	60.37	59.09	60.72	60.21	55.81	60.48	57.65	59.43	59.86	59.96	63.55	59.50	62.91	59.39	61.72	63.14	61.19	61.25	59.77	62.93	63.32	61.91	60.94	59.17	57.06	62.28			
DM 59R03RFSF	61.50	60.34	59.82	58.20	59.71	58.58	61.32	60.38	58.01	60.46	57.98	59.83	60.99	62.35	61.02	60.32	62.37	58.87	61.14	63.55	63.29	61.33	56.64	61.01	62.92	61.03	60.35	59.83	56.93	61.33			
DM 59R03RFSF	62.05	59.49	59.89	60.21	62.14	58.93	60.80	59.62	57.32	60.82	59.10	60.11	60.36	61.65	61.94	60.47	62.18	60.05	62.17	63.80	61.87	61.58	61.36	62.55	63.10	62.01	62.15	59.71	54.72	62.45			
DM 59160RFSF IPRO	61.76	59.42	58.58	58.82	61.61	59.67	60.95	58.79	57.39	60.34	58.51	59.73	60.30	61.33	61.73	60.01	63.01	60.22	57.06	62.30	63.34	60.75	59.49	62.18	63.35	61.48	61.87	60.03	58.30	62.22			
RA6124BR	58.97	58.50	56.83	57.10	62.92	57.17	59.68	58.89	53.36	59.57	56.17	58.30	58.56	60.60	60.51	58.15	60.45	58.84	58.79	60.74	60.39	59.58	58.68	60.30	59.72	59.70	59.26	57.92	53.53	59.75			
LG60261IPR	60.87	60.93	58.31	59.17	61.05	59.06	61.29	58.95	56.40	60.43	58.76	59.65	59.50	60.60	61.63	59.58	61.74	59.57	61.56	60.72	61.87	60.61	60.81	60.87	60.87	60.87	60.87	60.26	60.63	55.34	61.19		
US563-16IPRO	60.10	60.91	58.07	59.26	61.21	58.59	60.76	58.95	57.25	60.78	58.02	59.41	58.65	60.79	61.92	59.78	61.21	59.33	59.70	62.56	62.50	60.49	55.71	61.04	62.29	60.85	59.75	59.14	56.15	60.98			
US56410IPRO	60.35	59.49	58.53	58.93	60.44	59.42	60.60	59.32	55.67	59.04	57.89	59.18	59.20	59.79	61.26	59.60	62.89	60.00	57.16	63.00	61.23	60.34	55.79	61.32	62.03	60.62	60.70	59.42	57.47	61.22			
Y657	59.86	59.61	57.19	56.71	60.38	58.21	59.04	58.12	55.56	60.09	57.29	58.48	58.68	58.59	60.02	58.57	60.99	58.72	59.39	62.23	61.24	59.65	61.00	60.16	60.28	58.50	59.31	53.15	53.15	59.99			
DM 6163RFSF IPRO	60.62	60.68	57.90	57.58	61.49	58.05	61.06	59.69	56.94	60.20	58.92	59.42	60.53	59.56	60.80	59.76	60.84	59.83	60.36	62.17	61.24	60.46	58.81	61.94	61.77	60.38	60.05	58.99	56.61	60.94			
PAN 1644R	58.60	60.35	59.02	59.06	62.17	59.31	60.56	60.42	56.36	60.44	59.63	60.72	61.84	62.74	62.17	63.08	58.97	62.33	62.72	62.17	61.65	56.29	63.07	61.51	61.59	59.83	58.48	62.93					
RA6824BR	59.57	60.05	57.61	58.52	60.44	56.75	60.21	58.93	55.32	62.82	58.13	59.03	59.57	60.70	61.41	57.29	59.87	59.45	59.96	62.36	62.31	60.08	53.77	61.34	61.69	58.64	59.35	58.19	54.54	60.26			
RA7024BR	58.63	59.41	56.45	59.04	59.33	56.35	59.33	58.40	53.97	61.41	56.79	58.23	58.44	60.00	59.78	56.84	59.47	58.34	58.08	60.96	59.86	59.99	59.94	59.91	59.08	57.52	57.03	53.67	59.11				
Gem/Mean	61.33	59.01	58.71	58.95	61.54	59.23	61.08	59.74	56.46	60.79	58.34	59.68	59.91	61.08	61.86	60.49	62.20	59.72	60.41	62.60	61.90	61.02	58.44	61.96	62.61	61.03	60.62	59.53	56.80	61.56			

Tabel 18: Die saadopbrengs van elke kultivar by die verskillende lokaliteite, 2024/25
 Table 18: The seed yield of the cultivars at the different localities, 2024/25

Kultivar/ Cultivar	Koel/Cool							Matig/Moderate							Warm															
	Bapsfontein Agricol	Belfast	Bethlehem PD1	Clarens	Delmas	Greylingstad	Hendrina	Kinross	Kokstad	Petrus Steyn	Standerfont Agri Seed	Gem/Mean	Bronkhorstspuit	Cedara	Greytown Kranskop	Kroonstad	Leudoringstad	Potchefstroom Limgrain	Umtata (Dimanda School)	Umtata (Ross Mission)	Winterton	Gem/Mean	Barberspan	Brits	Groblersdal ARC	Hoopstad	Schweizer- Reneke PD1	Schweizer- Reneke PD2	Warrenton	Gem/Mean
Lake 5021 IPRO	2337	1774	3515	2235	3478	2269	2578	1963	2873	3431	3144	2691	4577	4806	4817	2295	2608	5345	2549	4132	4830	3995	1422	4300	3312	5364	2245	2754	3938	3334
US50-14R	2879	2271	4152	2673	3992	2431	4143	1953	2739	3290	3274	3072	4955	4705	4533	1834	3434	5231	2410	3477	4655	3915	1381	3717	2893	5459	2697	1484	4431	3152
PAN 1515R	2267	2867	4241	2186	4206	3053	4092	3070	3506	3077	3412	3271	4492	4216	3823	2230	2467	4152	3275	3358	4939	3661	1265	3987	2458	3763	2886	1569	3031	2708
RA5022BR	2447	2569	2747	2339	4549	2368	3927	2228	3607	3723	4403	3173	4686	4508	5511	1953	3231	3552	3779	5091	4201	1720	5125	2835	4959	2887	1998	4152	3382	
P51T42 R	2491	2874	3838	2546	4091	3075	4440	3930	3455	3393	3432	3415	2110	4467	3577	2750	2248	4384	2564	3120	4317	3282	1486	3402	2409	5202	2255	1810	3663	2890
Lake 5122 IPRO	2827	1346	3481	1821	4172	2262	2115	1320	2405	3144	3688	2598	4739	4565	5529	1849	2343	4849	2416	4568	5080	3993	1529	5211	3335	4969	3000	1872	3829	3392
DM 53154RSF IPRO	2711	1988	4336	2307	4600	2991	4290	2472	3691	3510	3920	3347	4581	4871	4414	1313	2039	5035	3068	3863	4982	3998	1405	4155	3403	5756	2687	2565	3441	3344
P52T52 R	2231	3451	4140	1997	4359	3385	4270	3026	3255	2984	3864	3360	4289	3767	795	3439	2470	4056	2495	3402	4961	3297	1596	4611	2255	4748	2640	2302	3493	3092
LG60353R	2460	3452	3728	2208	4122	2313	3694	3102	3442	3075	3340	3176	4741	4612	5171	2614	2221	4839	2419	3699	4176	3855	1353	4633	3115	4192	2902	1911	3881	3141
Y540	3161	2993	3603	2381	4366	3370	4514	3237	3915	3979	3690	3564	4128	4200	2380	3283	2789	4056	2700	3803	4077	3491	1432	4936	2681	3855	2475	2336	3929	3092
RA565R	3108	3865	4471	2490	4914	2779	5452	4182	3634	3808	4727	3948	4401	4434	3690	3003	2202	5654	2331	3952	4350	3780	1432	4829	2414	4697	2755	2388	4697	3309
US56-2BR	3654	3782	4160	2217	4234	3395	5241	3720	4238	4270	4344	3932	4197	4282	2817	3983	2083	4466	3093	3355	4633	3657	1811	3923	2510	5783	2728	2259	4457	3353
LG60356R	3337	2981	4309	2343	4902	3903	5223	3983	3855	3983	4707	3957	4506	4488	4820	3387	2768	5135	2865	4002	4394	4041	1419	4842	2884	5092	2610	2467	4801	3445
LS6851R	3028	3168	3789	2466	4553	3408	5515	3141	3749	3779	3404	3636	5129	5040	5828	2791	2034	3833	2736	3755	3925	3897	1814	4730	2493	3985	1977	2371	3275	2949
PAN 1521R	3712	3891	3964	2741	5412	4176	5005	4053	3791	3531	3596	3988	4476	4445	3744	3807	2428	5176	2366	4277	4415	3904	1680	4347	2640	5861	2119	2528	4086	3323
Lake 5920 IPRO	3286	4440	4968	2645	5510	4187	5726	4048	3411	3892	4808	4266	4707	4672	4698	3464	1811	4466	2258	4049	5538	3963	2175	4827	3618	4909	2980	3008	5011	3790
P69T03 R	3369	3628	4141	2304	4509	3230	5562	3354	4146	4358	3745	3850	4599	3573	3814	2912	2805	4935	2848	3353	3816	3628	1908	4386	2733	4259	2561	2100	4636	3226
RA5924BR	3809	3764	5632	2762	5103	4010	5847	3558	4588	4275	4859	4381	4594	5318	3924	3563	1975	4425	3056	3515	5266	3960	2003	5636	2816	5174	3010	2552	4723	3702
LG60359R	3749	3231	4993	2519	4816	3959	4912	3429	4032	4649	4180	4043	4535	4607	1554	3754	2608	5158	3514	3893	5789	3935	1676	5159	2794	5793	3392	2618	4941	3768
LG60260IPR	3185	3816	4149	2370	4278	4046	4550	3993	4014	4151	3922	3861	4376	4109	3284	4018	3144	4061	2841	3415	4677	3769	1515	4415	3103	4983	2843	2440	4531	3404
DM 59R03RSF	3591	3411	3570	2033	4441	3304	4525	3600	4053	4333	4132	3727	4548	5282	2938	3628	3300	4671	2858	3787	4655	3963	1589	4836	3000	4791	2696	2759	3820	3356
DM 59160RSF IPRO	3915	3206	4110	2406	4691	3707	4562	3105	2975	4165	4039	3716	4535	4420	2991	2700	2582	4780	2162	3401	4873	3605	2559	4397	3231	6697	3113	2621	4034	3807
RA6124BR	3628	3142	4526	3159	4993	4087	5548	3592	3494	3876	4469	4047	4329	5611	3454	3749	2728	4595	2536	3639	5135	3997	2009	5757	3072	4517	2967	3001	4470	3685
LG60261IPR	4013	2546	4734	2603	4840	3873	5431	2921	3826	3551	3818	3832	4100	4311	3074	4193	3623	4889	2754	2944	4045	3770	1803	4519	2855	5021	2431	2574	4657	3409
US63-16IPRO	3977	3528	4826	2560	4988	4210	5249	3651	4187	4346	3611	4103	4259	4497	3637	3922	2320	4962	2635	4600	3216	3783	1663	4840	2514	5591	3069	2628	4265	3510
US6410IPRO	3988	2031	4051	2642	4288	4368	5464	4086	3938	3594	4293	3886	4069	3793	3374	3959	2081	4339	2550	3735	3881	3531	1588	4781	2562	4736	2744	2677	4793	3412
Y657	4361	3576	4433	2480	5222	3838	3883	3883	3136	3924	3834	3924	4382	4515	4360	3459	3251	5163	2030	3203	4862	3914	1771	4934	2599	4929	2854	2325	4466	3411
Y651 IPRO	4405	3217	4465	2232	5160	4359	5307	4292	3851	4268	3589	4104	4321	4469	4203	3430	2922	4648	2557	3084	4219	3761	1667	4903	3623	4931	2717	2692	3454	3321
DM 6163RSF IPRO	4449	3757	4367	2575	5196	4165	6213	4447	3795	4168	4328	4315	4653	4395	4359	3609	3618	5436	2922	3939	5222	4239	1773	4881	2941	5113	2872	2486	4518	3512
PAN 1644R	3738	3645	4119	2436	5215	4050	4894	4746	3982	4363	4554	4158	4554	5032	4417	3561	2593	4953	3334	3768	4644	4095	2098	4953	2071	5423	2748	2662	4396	3479
RA6824BR	2589	3315	4160	2589	5226	4040	5106	3413	3965	4261	3860	3866	4772	4651	3302	3793	2452	4557	2724	3603	4415	3808	1896	4811	2270	6626	3176	3158	4810	3821
RA7024BR	3606	3489	3395	2610	5449	3842	6062	4349	4491	4378	4387	4187	4761	5754	3883	3539	2762	4680	2236	3715	2213	3727	2438	5451	1941	5321	2667	2623	4814	3608
Gem/Mean	3322	3157	4160	2434	4684	3514	4792	3414	4792	3414	3688	3980	3728	4445	4571	3836	3238	2623	4764	2708	3706	4540	1713	4673	2793	5078	2741	2423	4231	3379
CV	17.5	16.4	14.9	19.9	11.9	9.4	13.6	24.4	20.8	12.9	13.3	6.3	15.5	24.7	17.3	11.8	13.0	23.3	15.2	15.8	14.1	10.3	15.3	10.9	8.3	10.7	10.0	10.7	10.0	10.0

Tabel 19: Opbrengswaarskynlikheid (%) van kultivars geëvalueer in 2022/23, 2023/24 en 2024/25 vir die koeler produksiegebiede by verskillende opbrengspotensiale
 Table 19: Yield probability (%) of cultivars evaluated in the 2022/23, 2023/24 and 2024/25 for the cooler production areas at different yield potentials

Kultivar	Opbrengswaarskynlikheid/Yield potential (t/ha)										Regressie lyn/Regression line	
	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	Fprob	R2		
Cultivar												
RA5022BR	59	52	45	38	31	25	20	16	<0.001	0.6127		
DM 53154RSF IPRO	57	51	45	39	34	29	24	20	<0.001	0.6762		
Y540	53	49	46	41	38	35	32	28	<0.001	0.9214		
RA565R	57	59	62	64	67	69	71	73	<0.001	0.9109		
LS6851R	47	46	44	42	40	39	37	36	<0.001	0.9263		
PAN 1521R	61	61	61	61	61	61	61	61	<0.001	0.9312		
LG60260IPR	41	42	45	46	48	50	51	53	<0.001	0.9527		
DM 59R03RSF	48	47	47	47	47	47	47	47	<0.001	0.9334		
DM 59160RSF IPRO	47	48	49	50	51	51	52	53	<0.001	0.9201		
LG60261IPR	37	40	42	44	47	50	52	55	<0.001	0.9009		
Y657	52	53	53	53	53	54	54	54	<0.001	0.906		
Y651 IPRO	36	40	44	47	51	55	59	63	<0.001	0.885		
DM 61163RSF IPRO	50	55	60	65	69	74	77	80	<0.001	0.9089		
PAN 1644R	54	58	62	67	71	75	78	81	<0.001	0.9457		

Tabel 20: Graanopbrengs (kg/ha⁻¹) van kultivars gedurende die 2023/24 en 2024/25 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 2023/24 and 2024/25 growing season for the various localities situated in the cooler production areas

Kultivar/ Cultivar	2023/24										2024/2025															
	Alice	Bapsontein PD1	Bapsontein PD2	Belfast	Bethlehem PD1	Bethlehem PD2	Clarens	Delmas	Kinross	Kokstad	Marquard	Standerton	Zanyokwe	Gem/Mean	Bapsontein Agricol	Belfast	Bethlehem PD1	Clarens	Delmas	Greylingstad	Hendrina	Kinross	Kokstad	Petrus Steyn	Standerton Agril	Gem/Mean
Lake 5021 IPRO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2837	1774	3515	2235	3478	2269	2578	1963	2873	3431	3144	2691
US50-14R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2879	2271	4152	2673	3992	2431	4143	1953	2739	3290	3274	3072
PAN 1515R	678	2887	1808	2375	1975	1001	2092	2805	1475	1303	2281	732	835	1711	2267	2867	4241	2186	4206	3053	4092	3070	3506	3077	3412	3271
RA5022BR	827	2780	2538	3500	2245	1048	2863	4106	1764	1859	2848	678	1398	2187	2447	2569	2747	2339	4549	2368	3927	2228	3607	3723	4403	3173
P51T14Z R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2491	2874	3838	2546	4091	3075	4440	3930	3455	3393	3432	3415
Lake 5122 IPRO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2827	1346	3481	1821	4172	2262	2115	1320	2405	3144	3688	2598
DM 53154RSF IPRO	730	2044	2622	2155	1928	1120	2659	3572	1228	1589	2301	1059	725	1826	2711	1988	4336	2307	4600	2991	4290	2472	3691	3510	3920	3347
P52T2 R	1031	2705	2885	2937	1300	906	1368	3138	1195	1924	2911	894	876	1851	2231	3451	4140	1997	4359	3385	4270	3026	3255	2984	3884	3360
LG60353R	666	2420	2722	3126	1074	1106	1456	3969	1371	1520	2507	924	924	1830	2460	3452	3728	2208	4122	3213	3694	3102	3442	3075	3340	3176
Y540	833	2820	2713	3015	1256	846	1352	3440	1438	1943	2548	722	770	1823	3161	2993	3603	2381	4366	3370	4514	3237	3915	3979	3690	3584
RA5665R	718	3684	3009	3565	1193	684	1852	3562	1011	2380	3320	649	1054	2052	3108	3865	4471	2490	4914	2779	5452	4182	3634	3808	4727	3948
US56-28R	630	2800	3584	3067	1388	1190	1423	3470	1048	1420	2573	1041	1109	1903	3654	3782	4160	2217	4234	3395	5241	3720	4238	4270	4344	3932
LG60356R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3337	2981	4309	2343	4902	3903	5223	3983	3655	3983	4707	3957
LG6851R	740	2384	3071	2353	1230	1047	1343	3170	1483	2487	2730	668	896	1814	3028	3168	3789	2466	4553	3408	5515	3141	3749	3779	3404	3636
PAN 1521R	560	2558	2985	2855	1714	1596	1292	3505	1207	1682	2777	913	1052	1900	3286	4440	4968	2645	5510	4187	5726	4048	3411	3892	4808	4266
Lake 5920 IPRO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3286	4440	4968	2645	5510	4187	5726	4048	3411	3892	4808	4266
P59T03 R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3369	3628	4141	2304	4509	3230	5562	3354	4146	4358	4745	3850
RA5924BR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3609	3764	5632	2762	5103	4010	5847	3558	4568	4275	4859	4381
LG60260IPR	526	2668	3031	2836	846	1013	1065	3447	898	1628	2805	699	873	1713	3749	3231	4993	2519	4816	3959	4912	3429	4032	4649	4180	4043
DM 59103RSF	1256	2425	3226	2124	1005	726	828	3291	705	1968	2456	1026	968	1693	3185	3816	4149	2370	4278	4046	4550	3993	4014	4151	3922	3861
DM 59160RSF IPRO	700	2423	3171	3129	830	1428	1063	3555	704	1552	2646	1128	1099	1802	3915	3411	3570	2033	4441	3304	4525	3600	4053	4333	4132	3727
RA6124BR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3628	3142	4526	3159	4993	3707	4562	3105	2975	4165	4039	3716
LG60261IPR	657	2467	3039	2568	1751	614	870	2725	510	1721	2209	942	1016	1622	4013	2546	4734	2603	4840	3873	5431	2821	3826	3551	3818	3832
US63-16IPRO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3977	3528	4826	2560	4988	4210	5249	3651	4187	4346	3611	4103
Y657	1127	2920	3076	2867	1049	1173	1195	3369	1081	1488	2533	958	935	1828	3988	2031	4051	2642	4288	4368	5464	4086	3938	3594	4293	3886
Y651 IPRO	645	2412	2729	2361	883	1146	728	2768	671	1677	2741	819	895	1575	4361	3576	4433	2480	5222	3838	3883	3460	3136	3924	3834	3832
DM 61163RSF IPRO	1107	2757	2915	2250	809	859	1175	2832	626	2590	2882	1253	1109	1780	4405	3217	4465	2232	5160	4359	5207	4292	3951	4268	3589	4104
PAN 1644R	950	3305	3216	3125	663	1213	1102	2994	506	2322	2532	987	921	1833	3738	3645	4119	2436	5215	4050	4894	4746	3982	4363	4554	4158
RA6824BR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2589	3315	4160	2589	5226	4040	5106	3413	3965	4261	3860	3866
RA4918RR	796	2864	2608	2989	1992	1019	1764	3487	1710	1477	2867	984	808	1951	3606	3489	3395	2610	5449	3842	6062	4349	4491	4378	4187	-
NS5258R	923	2340	2277	3412	1955	948	2207	3657	1407	1617	2370	779	1108	1938	-	-	-	-	-	-	-	-	-	-	-	-
DM 5351RSF	743	2380	2573	2763	2019	837	2414	4034	1539	1908	2498	1122	971	1985	-	-	-	-	-	-	-	-	-	-	-	-
Lake 253 RR	918	1548	1665	1367	1498	1132	1124	2481	669	1217	1762	653	704	1289	-	-	-	-	-	-	-	-	-	-	-	-
PAN 1555R	1045	2281	2432	2426	717	914	1109	2829	580	1297	2366	685	978	1512	-	-	-	-	-	-	-	-	-	-	-	-
RA5821R	881	3018	3161	3550	1139	915	1145	3345	1079	1339	2233	850	1111	1830	-	-	-	-	-	-	-	-	-	-	-	-
Lake 250 RR	600	1142	2820	1271	1983	839	1650	2418	949	2188	2083	711	1047	1515	-	-	-	-	-	-	-	-	-	-	-	-
PAN 1588R	769	2652	2590	2943	930	916	1561	3059	614	2006	2289	837	947	1701	-	-	-	-	-	-	-	-	-	-	-	-
LG60259R	720	2747	2929	2745	895	996	1284	3365	651	2473	2325	923	1019	1773	-	-	-	-	-	-	-	-	-	-	-	-
P62T16R	845	2710	2282	2466	926	1036	940	2503	410	2508	2544	874	1060	1624	-	-	-	-	-	-	-	-	-	-	-	-
US63-22 IPRO	662	2594	3066	3313	887	1385	584	3011	633	1561	2260	1024	1203	1704	-	-	-	-	-	-	-	-	-	-	-	-
RA6422BR	807	2392	3109	2355	1017	1025	1292	3010	737	2150	2054	1090	981	1694	-	-	-	-	-	-	-	-	-	-	-	-
P64T39 R	576	2784	3189	2883	1010	911	1211	3185	708	2044	2418	1134	657	1747	-	-	-	-	-	-	-	-	-	-	-	-
DM 68R09RSF	878	2608	2855	2220	1031	1281	1287	3393	510	2074	2648	952	1183	1763	-	-	-	-	-	-	-	-	-	-	-	-
US68-12 IPRO	900	2171	3197	2766	629	1580	351	2838	251	1892	2305	952	1274	1625	-	-	-	-	-	-	-	-	-	-	-	-
P71T74 R	829	2663	2940	2555	841	965	867	3226	589	2189	2549	991	1024	1717	-	-	-	-	-	-	-	-	-	-	-	-
Gem/Mean	804	2576	2820	2703	1254	1041	1362	3218	934	1843	2503	904	985	1764	3322	3157	4160	2434	4684	3514	4792	3419	3688	3860	3980	3728

Tabel 21: Opbrengstwaarskynlikheid (%) van die kultivars geëvalueer in 2022/23, 2023/24 en 2024/25 vir die matige produksiegebiede by verskillende opbrengspotensiale
 Table 21: Yield probability (%) of cultivars evaluated in the 2022/23, 2023/24 and 2024/25 for the moderate production areas at different yield potentials

Kultivar	Opbrengstwaarskynlikheid/Yield potential(t/ha)										Regressie lyn/Regression line	
	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	Fprob	R2		
Cultivar												
RA5022BR	62	61	60	59	57	56	55	54	<0.001	0.7962		
DM 53154RSF IPRO	47	49	51	52	53	55	56	58	<0.001	0.8115		
Y540	48	48	49	49	50	51	52	52	<0.001	0.7955		
RA565R	46	47	49	51	52	54	56	57	<0.001	0.9426		
LS6851R	39	40	42	43	45	46	48	49	<0.001	0.8276		
PAN 1521R	59	58	58	57	57	56	55	54	<0.001	0.8724		
LG60260IPR	56	52	49	45	41	38	35	32	<0.001	0.8654		
DM 59R03RSF	48	47	46	46	45	44	43	43	<0.001	0.8876		
DM 59160RSF IPRO	48	48	49	49	51	51	52	52	<0.001	0.8424		
LG60261IPR	46	45	44	43	42	42	41	40	<0.001	0.8336		
Y657	41	43	45	46	48	50	51	53	<0.001	0.9036		
Y651 IPRO	43	43	45	45	47	48	49	50	<0.001	0.9166		
DM 61163RSF IPRO	70	67	64	61	58	55	51	48	<0.001	0.81		
PAN 1644R	45	47	49	51	53	55	58	59	<0.001	0.9148		

Table 22: Graanopbrengs (kg/ha⁻¹) van kultivars gedurende die 2023/24 en 2024/25 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 2023/24 and 2024/25 growing season for the various localities situated in the moderate production areas

Kultivar/ Cultivar	2023/24										2024/25											
	Cedara	Greytown Kranskop	Greytown Pannar	Heilbron	Kroonstad	Kroonstad (Agricol)	Leedoringsstad	Potchetstroom (Limagrain)	Umtata	Winterton	Gem/Mean	Bronkhorstspuit	Cedara	Greytown Kranskop	Greytown Kroonstad	Kroonstad	Leedoringsstad	Potchetstroom Limagrain	Umtata (School)	Umtata (Ross Mission)	Winterton	Gem/Mean
Lake 5021 IPRO	-	-	-	-	-	-	-	-	-	-	-	4577	4806	4817	2295	2608	5345	2549	4132	4830	3995	
US50-14R	-	-	-	-	-	-	-	-	-	-	-	4955	4705	4533	1834	3434	2608	2549	4132	4830	3995	
PAN 1515R	2931	3719	2105	981	1595	1234	1401	3453	1485	3968	2287	4492	4216	3823	2230	2467	4152	3275	3358	4939	3661	
RA5022BR	2889	3361	2515	1489	2209	1638	1698	3554	1714	3358	2443	4686	4508	5511	1953	3231	5504	3552	3777	5091	4201	
P5T142 R	-	-	-	-	-	-	-	-	-	-	-	2170	4467	3577	2750	2248	4384	2564	3120	4317	3282	
Lake 5122 IPRO	-	-	-	-	-	-	-	-	-	-	-	4739	4565	5529	1849	2343	4849	2416	4568	5080	3993	
DM 53164RSF IPRO	3035	2943	2326	1283	1133	1446	1923	4388	1896	3990	2436	4581	4871	4414	3131	2039	5035	3068	3863	4982	3998	
P52152 R	3827	2919	1859	1009	1319	2181	1592	3767	1567	2867	2289	4289	3767	795	3439	2470	4056	2495	3402	4961	3257	
LG60353R	3223	3437	2337	1014	1503	1141	1704	3104	1444	3456	2236	4741	4612	5171	2614	2221	4839	2419	3899	4176	3855	
Y540	3496	3815	2806	851	1110	1316	1654	4976	1476	3292	2459	4128	4200	2380	3283	2789	4056	2700	3803	4077	3491	
RA5655R	3633	3441	2649	763	1459	1436	2133	3358	1768	3282	2392	4401	4434	3690	3003	2202	5654	2331	3952	4350	3780	
US56-26R	3048	3247	2440	1130	1235	1168	2520	3067	1857	3489	2320	4197	4282	2817	3983	2083	4466	3093	3355	4633	3657	
LG60356R	-	-	-	-	-	-	-	-	-	-	-	4506	4488	4820	3387	2768	5135	2865	4002	4394	4041	
LS8851R	3285	2691	2256	932	1161	822	1581	3066	1591	2922	2031	5129	5040	5828	2791	2034	3833	2736	3795	3925	3897	
PAN 1521R	2878	3112	2612	926	942	2309	1982	3859	1692	4197	2451	4476	4445	3744	3807	2428	5176	2366	4277	4415	3904	
P59T03 R	-	-	-	-	-	-	-	-	-	-	-	4707	4672	4698	3464	1811	4466	2258	4049	5538	3963	
RA5624BR	-	-	-	-	-	-	-	-	-	-	-	4599	3573	3814	2912	2805	4935	2848	3353	3816	3628	
LG60359R	-	-	-	-	-	-	-	-	-	-	-	4594	5318	3924	3563	1975	4425	3056	3515	5266	3960	
LG60359R	-	-	-	-	-	-	-	-	-	-	-	4535	4607	1554	3754	2608	5158	3514	3893	5789	3935	
LG60260IPR	3225	3137	1995	1011	1507	1545	1576	4542	1824	2693	2305	4376	4109	3284	4018	3144	4061	2841	3415	4677	3769	
DM 59R03RSF	3507	3037	2224	805	1254	1765	1981	2296	1796	2693	2136	4548	5282	2938	3628	3300	4671	2858	3787	4655	3963	
DM 59I60RSF IPRO	3295	2347	2733	1008	1380	1752	2786	2499	1463	3391	2265	4535	4420	2991	2700	2582	4780	2162	3401	4873	3605	
RA6124BR	-	-	-	-	-	-	-	-	-	-	-	4329	5611	3454	3749	2728	4595	2536	3839	5135	3997	
LG60261IPR	3186	2387	2122	997	991	1460	1974	2259	1947	2911	2023	4100	4311	3074	4193	3623	4889	2754	2944	4045	3770	
US63-16IPRO	-	-	-	-	-	-	-	-	-	-	-	4259	4497	3637	3922	2320	4962	2635	4600	3216	3763	
US6410IPRO	-	-	-	-	-	-	-	-	-	-	-	4069	3793	3374	3859	2081	4339	2550	3735	3881	3531	
Y657	3377	2918	2348	1112	1466	1437	1784	2009	1682	2845	2098	4515	4360	4383	3459	3251	5163	2030	3203	4862	3914	
Y651 IPRO	3311	3237	2030	1138	1258	1205	2079	2894	1332	2562	2105	4321	4469	4203	3430	2922	4648	2557	3084	4219	3761	
DM 61I63RSF IPRO	3300	3264	2594	1406	1768	1995	2350	4849	1970	2736	2623	4653	4395	4359	3609	3618	5436	2922	3939	5222	4239	
PAN 1644R	3685	3086	2427	963	1113	1546	2012	2027	1676	3107	2164	4554	5032	4417	3661	2593	4953	3334	3768	4644	4095	
RA6824BR	-	-	-	-	-	-	-	-	-	-	-	4772	4651	3302	3793	2452	4557	2724	3603	4415	3808	
RA7024BR	-	-	-	-	-	-	-	-	-	-	-	4761	5754	3883	3539	2762	4680	2236	3715	2213	3727	
RA4918R	3532	3765	2502	789	1420	1485	1887	3257	1796	3903	2434	-	-	-	-	-	-	-	-	-	-	-
NS5259R	3393	3623	2869	837	1374	1836	1154	3573	1418	3729	2381	-	-	-	-	-	-	-	-	-	-	-
DM 5351RSF	3404	3712	2498	773	1150	1183	1705	3110	1026	3554	2211	-	-	-	-	-	-	-	-	-	-	-
Lake 253 RR	3482	2815	2023	1147	732	1084	2469	1686	1686	2562	2054	-	-	-	-	-	-	-	-	-	-	-
PAN 1555R	3347	3021	1844	857	1260	1918	2069	3440	1503	2747	2200	-	-	-	-	-	-	-	-	-	-	-
RA5624R	3288	3073	2858	790	937	1592	1479	3290	1769	3042	2182	-	-	-	-	-	-	-	-	-	-	-
Lake 250 RR	3011	2813	1803	806	941	1122	1472	1527	1528	2835	1786	-	-	-	-	-	-	-	-	-	-	-
PAN 1588R	2966	2365	2070	936	1299	1634	2088	3623	1674	2889	2154	-	-	-	-	-	-	-	-	-	-	-
RA660 R	3237	3086	2586	953	1211	1156	2260	3590	1848	2289	2222	-	-	-	-	-	-	-	-	-	-	-
LG60269R	3312	2682	2072	763	1117	1482	1837	3187	1677	3064	2119	-	-	-	-	-	-	-	-	-	-	-
P62T16R	3314	3038	2330	1081	1442	1597	2583	1915	1733	3064	2210	-	-	-	-	-	-	-	-	-	-	-
US63-22 IPRO	3088	1877	2252	1049	715	1396	1990	1690	1841	2050	2288	-	-	-	-	-	-	-	-	-	-	-
RA6422BR	3507	2994	2555	1210	1111	1828	2584	1560	1803	3412	2256	-	-	-	-	-	-	-	-	-	-	-
P64T39 R	3026	3416	2688	919	1186	1587	1823	2172	1716	2758	2129	-	-	-	-	-	-	-	-	-	-	-
DM 68R09RSF	3336	2593	2240	1125	1429	1588	2552	2357	1575	2540	2134	-	-	-	-	-	-	-	-	-	-	-
US68-12 IPRO	3466	3788	1962	1552	1537	1879	1594	4761	1712	1319	2357	-	-	-	-	-	-	-	-	-	-	-
P71T74 R	3172	3474	2156	891	1132	1559	1771	5395	1350	3096	2400	-	-	-	-	-	-	-	-	-	-	-
Gem/Mean	3286	3092	2320	1008	1268	1524	1944	3310	1652	3046	2245	4445	4571	3836	3238	2623	4764	2708	3706	4540	3825	

Table 23: Oprengswaarskynlikheid (%) van kultivars geëvalueer in 2022/23, 2023/24 en 2024/25 vir die warm produksiegebiede by verskillende opbrengspotensiale
 Table 23: Yield probability (%) of cultivars evaluated in the 2022/23, 2023/24 and 2024/25 for the warm production areas at different yield potentials

Kultivar	Oprengswaarskynlikheid/yield potential (t/ha)										Regressie lyn/Regression line	
	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	Fprob	R2		
Cultivar	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	Fprob	R2		
RA5022BR	52	50	48	47	45	43	42	40	<0.001	0.8527		
DM 53154RSF IPRO	58	56	53	51	48	45	42	40	<0.001	0.8146		
Y540	45	45	44	44	44	44	43	43	<0.001	0.9239		
RA565R	44	46	47	49	50	51	53	54	<0.001	0.9126		
LS6851R	33	33	34	35	36	37	37	39	<0.001	0.8762		
PAN 1521R	46	47	49	50	52	53	54	56	<0.001	0.9197		
LG60260IPR	46	46	46	46	46	46	45	45	<0.001	0.9426		
DM 59R03RSF	41	44	45	48	51	53	55	58	<0.001	0.9423		
DM 59160RSF IPRO	66	66	67	67	67	68	68	68	<0.001	0.8871		
LG60261IPR	60	60	59	58	58	57	56	56	<0.001	0.9257		
Y657	55	56	58	59	61	63	64	65	<0.001	0.9493		
Y651 IPRO	52	47	42	38	33	29	25	21	<0.001	0.8266		
DM 61163RSF IPRO	65	64	64	62	62	61	60	59	<0.001	0.9202		
PAN 1644R	37	41	45	49	54	57	61	65	<0.001	0.9298		

Tabel 24: Graanopbrengs (kg/ha⁻¹) van kultivars gedurende die 2023/24 en 2024/25 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 2023/24 and 2024/25 growing season for the various localities situated in the warm production areas

Kultivar	2023/24										2024/25									
	Barberspan	Brits	Hoopstad	Lichtenburg	Schweizer-PD1	Schweizer-PD2	Warrenton	Gem/Mean	Barberspan	Brits	Groblersdal	Hoopstad	Schweizer-PD1	Schweizer-PD2	Warrenton	Gem/Mean				
Lake 5021 IPRO	-	-	-	-	-	-	-	-	1422	4300	3312	5364	2245	2754	3938	3805				
US50-14R	-	-	-	-	-	-	-	-	1381	3717	2893	5459	2897	1484	4431	3691				
PAN 1515R	555	3856	1630	1248	2089	1578	3216	2022	1265	3987	2458	3763	2886	1569	3031	3273				
RA5022BR	885	4434	5088	1330	2455	2532	4094	2974	1720	5125	2835	4959	2887	1998	4152	3951				
P51142 R	-	-	-	-	-	-	-	-	1486	3402	2409	5202	2255	1810	3663	3317				
Lake 5122 IPRO	-	-	-	-	-	-	-	-	1529	5211	3335	4969	3000	1872	3629	4129				
DM 5314RSF IPRO	1124	3655	2981	1593	2720	2942	4317	2762	1405	4155	3403	5756	2687	2565	3441	4000				
P52132 R	881	3773	3501	1131	2307	1995	4868	2637	1596	4811	2255	4748	2840	2302	3493	3564				
LG60353R	725	3779	3147	1212	1936	1777	4563	2449	1363	4633	3115	4192	2902	1911	3881	3711				
Y540	799	3973	3631	1089	2849	1648	4917	2701	1432	4936	2881	3855	2475	2336	3929	3487				
RA565R	853	4216	5042	1530	2604	1190	4813	2893	1385	4829	2414	4697	2755	2388	4697	3674				
US56-26R	933	4642	3992	1209	3007	1720	5119	2946	1811	3923	2510	5783	2728	2259	4457	3736				
LG60356R	-	-	-	-	-	-	-	-	1419	4842	2884	5092	2610	2467	4801	3857				
LS6851R	702	2938	3735	1127	2176	1322	5440	2491	1814	4730	2493	3985	1977	2371	3275	3296				
PAN 1521R	855	4258	3108	1447	2819	2143	5113	2821	1680	4347	2640	5861	2119	2528	4086	3742				
Lake 5920 IPRO	-	-	-	-	-	-	-	-	2175	4827	3618	4909	2980	3008	5011	4084				
P59T03 R	-	-	-	-	-	-	-	-	1908	4386	2733	4259	2561	2100	4636	3485				
RA5924BR	-	-	-	-	-	-	-	-	2003	5636	2816	5174	3010	2552	4723	4159				
LG60359R	-	-	-	-	-	-	-	-	1676	5159	2794	5793	3392	2618	4941	4285				
LG60260IPR	1010	3466	3964	1412	2312	1631	4781	2657	1515	4415	3103	4983	2843	2440	4531	3836				
DM 59R03RSF	707	3892	3638	1238	3723	1128	5549	2839	1589	4836	3000	4791	2696	2759	3820	3831				
DM 61163RSF IPRO	1146	4089	4390	1586	4339	1176	5239	3138	2559	4397	3231	6697	3113	2621	4034	4360				
RA6124BR	-	-	-	-	-	-	-	-	2009	5757	3072	4517	2967	3001	4470	4078				
LG60261IPR	1024	4263	5139	1495	3121	2150	4699	3127	1803	4519	2855	5021	2431	2674	4657	3707				
US63-16IPRO	-	-	-	-	-	-	-	-	1663	4840	2514	5591	3069	2628	4265	4003				
US6410IPRO	-	-	-	-	-	-	-	-	1588	4781	2562	4736	2744	2677	4793	3706				
Y657	1069	3667	5000	1470	3509	1443	5195	3051	1771	4934	2599	4929	2854	2325	4466	3829				
Y651 IPRO	1105	2246	3614	1097	3652	1547	4514	2539	1667	4201	3623	4931	2717	2692	3415	3869				
DM 61163RSF IPRO	1129	3947	4357	1959	4115	997	4862	3052	1773	4881	2941	5113	2872	2486	4518	3952				
PAN 1644R	828	3445	4252	1251	3457	656	5446	2762	2098	4953	2071	5423	2748	2662	4396	3799				
RA6824BR	-	-	-	-	-	-	-	-	1896	4811	2270	6626	3176	3158	4810	4221				
RA7024BR	-	-	-	-	-	-	-	-	2438	5451	1941	5321	2667	2623	4814	3845				
RA4918RR	948	4372	4183	1489	3854	2650	4475	3139	-	-	-	-	-	-	-	-				
NS5258R	865	4268	3476	947	3144	1859	3663	2603	-	-	-	-	-	-	-	-				
DM 5351 RSF	685	4137	5008	1408	2825	2609	3859	2833	-	-	-	-	-	-	-	-				
LAKE 253 RR	1205	2339	2895	775	1733	1284	4893	2133	-	-	-	-	-	-	-	-				
PAN 1555R	975	2962	3216	1197	2347	1619	4606	2703	-	-	-	-	-	-	-	-				
RA5821R	607	3763	3233	1087	2806	1652	4530	2525	-	-	-	-	-	-	-	-				
LAKE 250 RR	1199	1571	2715	1063	1644	1109	3990	1899	-	-	-	-	-	-	-	-				
PAN 1588R	793	4118	3297	1489	2926	1361	4541	2644	-	-	-	-	-	-	-	-				
RA660 R	712	4686	3411	1320	3692	1693	4541	2862	-	-	-	-	-	-	-	-				
LG60259R	920	3513	2699	1335	2080	1386	4764	2380	-	-	-	-	-	-	-	-				
P62T16R	1158	2716	4344	1080	2521	1468	4835	2589	-	-	-	-	-	-	-	-				
US63-22 IPRO	1104	3780	4882	1307	3038	1250	5179	2896	-	-	-	-	-	-	-	-				
RA6422BR	1024	3504	3053	1485	3038	1804	5304	2745	-	-	-	-	-	-	-	-				
P64T39 R	746	3653	3992	1296	3368	1280	4968	2760	-	-	-	-	-	-	-	-				
DM 68R09RSF	1197	3655	4257	1497	4078	894	4862	2920	-	-	-	-	-	-	-	-				
US68-12 IPRO	1184	3035	3822	1622	3657	678	4350	2621	-	-	-	-	-	-	-	-				
P71174 R	912	2812	4083	1406	3457	719	4819	2601	-	-	-	-	-	-	-	-				
Gem/Mean	931	3641	3850	1320	2946	1569	4707	2709	1713	4673	2793	5078	2741	2423	4231	3379				

Table 25: Saamgevatte inligting van al die lokaliteite in die koel produksiegebiede, 2024/25
 Table 25: Summarised information for all the localities in the cool production areas, 2024/25

Kultivar/Cultivar	Dae tot blom/ Days to flowering	Fisiologies ryp/ Physiological mature	Oes datum/ Harvest date	Plant hoogte/ Plant height	Peulhoogte/ Pod height	Omvall/ Lodging	Groenstam/ Green stem	Oopspring/ Shattering	Planttelling/ Number of plants	Persentasie ongewenste sader/Percentage undesirable seed	Massa 100 sader/ Mass 100 seeds	Olie persentasie/Oil percentage	Ru- proteien- persentasie/ Crude protein percentage	Opbrengs/ Yield
Lake 5021 IPRO	57	129	147	56	6	1.00	3.06	1.00	236	0.15	19.04	21.00	40.07	2691
US50-14R	58	127	149	58	8	1.00	2.06	1.00	249	0.11	18.93	21.53	38.86	3072
PAN 1515R	62	126	147	71	9	1.20	1.17	1.00	246	0.12	18.25	20.46	39.45	3271
RA5022BR	57	125	149	57	7	1.00	2.06	1.00	259	0.15	17.83	21.12	39.67	3173
P51T42 R	66	138	164	79	10	1.00	1.06	1.00	244	0.11	16.57	22.70	38.65	3415
Lake 5122 IPRO	56	134	147	57	7	1.00	2.06	1.00	229	0.10	18.24	20.21	40.14	2598
DM 53154RSF IPRO	56	127	147	64	7	1.00	2.00	1.00	240	0.05	19.47	20.55	40.38	3347
P52T52 R	68	137	160	70	9	1.00	1.00	1.00	230	0.07	17.11	21.01	37.84	3360
LG60353R	61	133	154	67	7	1.00	1.22	1.00	215	0.15	17.61	21.31	38.86	3176
Y540	66	140	166	78	11	1.00	1.22	1.00	231	0.08	16.99	20.14	39.37	3564
RA565R	64	139	165	69	9	1.00	1.06	1.00	253	0.08	18.04	21.35	38.54	3948
US56-26R	71	143	167	79	12	1.00	1.06	1.00	257	0.09	17.95	21.98	37.68	3932
LG60356R	65	141	167	71	8	1.00	1.22	1.00	242	0.13	18.15	22.30	36.08	3957
LS6851R	65	147	165	62	9	1.00	1.06	1.00	250	0.30	16.09	21.69	38.76	3636
PAN 1521R	71	144	165	76	11	1.20	1.11	1.00	257	0.13	18.57	20.88	39.21	3988
Lake 5920 IPRO	67	147	165	70	8	1.40	1.17	1.00	251	0.05	16.53	20.77	37.90	4266
P59T03 R	65	139	170	82	13	1.00	1.33	1.00	248	0.17	18.00	21.58	39.15	3850
RA5924BR	67	142	177	81	11	1.27	1.22	1.00	261	0.19	16.85	20.30	38.77	4381
LG60359R	66	145	177	75	10	1.00	1.00	1.00	236	0.10	17.14	20.11	39.32	4043
LG60260IPR	71	145	166	84	11	1.00	1.00	1.00	247	0.28	16.40	20.62	39.22	3861
DM 59R03RSF	63	147	171	79	10	1.73	1.22	1.00	250	0.08	19.46	20.52	39.59	3727
DM 59160RSF IPRO	63	143	164	75	10	1.20	1.06	1.00	204	0.12	15.76	20.94	38.80	3716
RA6124BR	69	146	179	88	11	1.07	1.11	1.00	243	0.10	17.80	20.61	37.69	4047
LG60261IPR	71	149	174	80	12	1.00	1.56	1.00	216	0.16	16.56	20.13	39.51	3832
US63-16IPRO	71	147	176	89	14	2.40	1.39	1.00	274	0.07	17.17	20.54	38.87	4103
US6410IPRO	70	146	179	95	15	2.00	1.22	1.00	271	0.17	15.46	20.73	38.51	3886
Y657	69	146	172	78	9	1.00	1.00	1.00	215	0.11	16.16	20.32	38.86	3832
Y651 IPRO	72	149	179	94	18	2.07	1.11	1.00	256	0.18	17.14	20.82	37.66	4104
DM 61163RSF IPRO	70	146	177	87	13	1.60	1.11	1.00	249	0.13	18.18	20.01	39.42	4315
PAN 1644R	70	149	171	84	11	1.00	1.17	1.00	258	0.10	17.57	19.99	39.64	4158
RA6824BR	77	151	174	88	13	1.47	1.17	1.00	238	0.09	16.20	19.88	39.15	3866
RA7024BR	73	157	177	98	13	1.13	2.22	1.00	246	0.11	17.87	19.78	38.45	4187
Gem/Mean	66	141	166	76	10	1.21	1.36	1.00	244	0.12	17.47	20.81	38.88	3728

Tabel 26: Saamgevatte inligting van al die lokaliteite in die matige produksiegebiede, 2024/25
 Table 26: Summarised information for all the localities in the moderate production areas, 2024/25

Kultivar/Cultivar	Dae tot blom/ Days to flowering	Fisiologies ryp/ Physiological mature	Oes datum/ Harvest date	Plant hoogte/ Plant height	Peulhoogte/ Pod height	Omval/ Lodging	Groenstam/ Green stem	Opspring/ Shattering	Planttelling/ Number of plants	Per sentasie ongewenste sade/Percentage undesirable seed	Massa 100 sade/ Mass 100 seeds	Olie persentasie/Oil percentage	Ru- proteïen- persentasie/ Crude protein percentage	Opbrengs/ Yield
Lake 5021 IPRO	44	129	146	78	11	1.00	3.60	1.17	251	0.10	19.18	22.37	39.40	3995
US50-14R	48	126	139	82	12	1.00	2.13	1.08	281	0.13	19.22	22.77	37.71	3915
PAN 1515R	49	130	145	99	15	1.00	2.33	1.17	296	0.17	19.92	21.45	40.13	3661
RA5022BR	48	127	139	82	12	1.00	2.20	1.08	300	0.19	18.91	22.15	39.50	4201
P51T42 R	59	134	155	97	16	1.00	2.13	1.00	314	0.32	17.06	22.07	39.03	3282
Lake 5122 IPRO	48	127	140	78	10	1.00	3.27	1.42	244	0.06	19.40	21.07	39.75	3993
DM 53154RSF IPRO	48	132	148	89	12	1.00	2.60	1.17	267	0.36	20.79	21.20	40.17	3998
P52T52 R	60	134	152	92	15	1.27	1.40	1.00	226	0.34	17.30	22.45	38.39	3297
LG60353R	55	129	139	75	9	1.00	2.07	1.00	200	0.04	19.53	22.46	38.94	3855
Y540	64	134	167	97	16	1.00	1.33	1.00	280	0.29	18.18	21.11	39.67	3491
RA565R	60	136	157	92	16	1.00	1.67	1.08	319	0.35	19.03	22.13	39.50	3780
US56-28R	60	137	159	107	18	1.20	1.60	1.00	284	0.27	18.06	23.58	38.81	3657
LG60356R	61	136	157	90	12	1.00	1.20	1.00	254	0.38	18.02	22.95	39.43	4041
LS6851R	61	141	158	74	11	1.00	2.07	1.00	287	0.28	16.51	22.21	40.47	3897
PAN 1521R	64	139	159	103	16	1.27	1.87	1.00	274	0.47	19.71	21.47	39.92	3904
Lake 5920 IPRO	65	141	161	87	14	1.40	1.67	1.00	291	0.37	17.25	21.27	38.75	3963
P59T03 R	64	142	167	103	15	1.13	2.47	1.00	265	0.52	19.38	22.23	40.53	3628
RA5924BR	66	141	159	96	15	1.40	1.93	1.00	297	0.33	17.71	20.47	39.83	3960
LG60359R	63	142	159	92	15	1.07	1.73	1.00	277	0.13	18.09	20.19	41.06	3935
LG60260IPR	66	142	161	104	15	1.13	1.87	1.08	280	0.37	17.17	21.77	39.56	3769
DM 59R03RSF	58	138	160	100	16	1.87	1.93	1.00	288	0.34	20.63	21.50	40.07	3963
DM 59160RSF IPRO	65	141	162	100	16	1.33	1.33	1.00	215	0.26	16.45	21.84	38.91	3605
RA6124BR	68	145	170	108	19	0.93	2.60	1.08	278	0.24	18.78	21.17	38.41	3997
LG60261IPR	67	140	159	97	18	1.00	2.00	1.00	218	0.35	17.78	20.84	39.77	3770
US63-16IPRO	66	144	169	111	21	1.87	2.07	1.00	310	0.25	18.19	21.50	38.99	3783
US66410IPRO	69	146	169	115	19	1.87	1.67	1.00	319	0.27	16.22	21.26	39.33	3531
Y657	67	144	160	101	17	1.07	1.53	1.00	218	0.24	16.81	20.86	39.48	3914
Y651 IPRO	66	116	163	117	23	1.60	1.67	1.08	292	0.34	17.35	21.70	37.95	3761
DM 61163RSF IPRO	68	144	162	107	20	1.60	1.67	1.00	273	0.21	19.01	20.63	39.83	4239
PAN 1644R	67	145	159	99	17	1.00	2.00	1.00	286	0.26	18.79	20.80	40.85	4095
RA6824BR	71	151	172	113	20	1.53	1.73	1.00	295	0.30	17.47	20.68	39.40	3808
RA7024BR	71	152	173	118	21	1.00	2.00	1.00	306	0.43	19.34	19.96	39.03	3727
Gem	61	138	158	97	16	1.20	1.98	1.04	275	0.28	18.35	21.57	39.45	3825

Table 27: Saamgevatte inligting van al die lokaliteite in die warmer produksiegebiede, 2024/25
 Table 27: Summarised information for all the localities in the warmer production areas, 2024/25

Kultivar/Cultivar	Dae tot blom/ Days to flowering	Fisiologies nyp/ Physiological mature	Oes datum/ Harvest date	Plant hoogte/ Plant height	Peulhoogte/ Pod height	Omval/ Lodging	Groenstam/ Green stem	Oopspring/ Shattering	Planttelling/ Number of plants	Persentasie ongewenste sade/Percentage undesirable seed	Massa 100 sade/ Mass 100 seeds	Olie persentasie/Oil percentage	Ru-proteïen-persentasie/ Crude protein percentage	Opbrengrs/ Yield
Lake 6021 IPRO	37	117	133	69	9	1.00	3.56	1.00	179	0.17	19.47	23.21	38.97	3334
US50-14R	39	115	135	71	11	1.67	2.33	1.00	175	0.27	19.28	22.48	39.10	3152
PAN 1515R	38	119	130	76	14	2.00	2.78	1.00	207	0.24	20.60	21.41	41.14	2708
RA5022BR	40	200	131	63	11	1.00	3.00	1.00	185	0.42	20.22	21.84	39.30	3382
P51T42 R	46	120	141	77	12	1.08	2.44	1.00	180	0.28	17.62	22.35	38.81	2890
Lake 5122 IPRO	45	115	130	61	8	1.00	3.67	1.00	154	0.41	19.93	21.50	39.20	3392
DM 53154RSF IPRO	39	119	138	69	11	1.92	3.11	1.00	184	0.63	19.97	21.75	39.86	3344
P52T52 R	51	122	141	68	11	1.25	2.44	1.00	143	0.28	18.01	22.08	39.57	3092
LG60353R	45	120	130	62	8	1.17	2.67	1.00	149	0.36	19.72	23.14	39.48	3141
Y540	48	125	142	82	13	1.08	2.67	1.00	188	0.54	19.60	21.15	39.96	3092
RA565R	52	123	142	74	9	1.08	3.78	1.00	207	0.28	20.90	22.44	40.15	3309
US56-26R	48	123	147	92	18	2.00	2.56	1.00	191	0.74	19.77	23.62	39.12	3353
LG60356R	46	125	142	83	12	1.00	2.44	1.00	172	0.26	20.57	23.38	39.41	3445
LS6851R	44	124	141	64	13	1.25	2.56	1.00	220	0.41	18.71	22.49	41.40	2949
PAN 1521R	51	130	147	79	16	1.50	2.67	1.00	202	0.58	20.20	21.38	41.31	3323
Lake 5920 IPRO	53	126	141	84	18	1.25	2.78	1.00	204	0.23	18.55	21.62	38.94	3790
P59T03 R	50	129	146	86	18	1.42	4.44	1.00	172	0.38	20.10	22.89	40.25	3226
RA5924BR	52	129	146	87	14	1.33	3.22	1.00	190	0.35	20.19	21.09	39.36	3702
LG60359R	52	130	146	79	14	1.00	2.78	1.00	175	0.22	19.38	21.03	41.25	3768
LG60260IPR	54	89	142	90	17	1.42	3.22	1.00	162	0.33	18.30	21.75	39.58	3404
DM 59R03RSF	53	127	146	86	17	1.25	3.33	1.00	185	0.47	19.48	21.80	40.66	3356
DM 59160RSF IPRO	53	124	146	88	16	1.33	2.33	1.00	132	0.46	14.45	22.43	39.79	3807
RA6124BR	56	130	148	100	22	1.08	3.44	1.00	189	0.78	17.96	21.23	38.51	3685
LG60261IPR	58	88	145	92	20	1.17	4.33	1.00	184	0.26	19.89	20.93	40.26	3409
US63-16IPRO	55	132	150	101	23	1.33	4.00	1.00	208	0.28	18.61	21.32	39.67	3510
US6410IPRO	57	131	148	103	22	1.75	3.00	1.00	198	0.36	18.48	21.31	39.64	3412
Y657	60	133	148	86	15	1.25	2.11	1.00	121	0.20	19.03	21.15	40.07	3411
Y651 IPRO	57	127	144	113	26	1.83	2.11	1.00	199	0.17	18.45	21.96	38.02	3321
DM 61163RSF IPRO	59	127	148	102	19	1.58	3.33	1.00	195	0.11	19.10	20.69	40.24	3512
PAN 1644R	61	127	148	92	18	1.17	2.89	1.00	157	0.30	18.48	20.93	41.31	3479
RA6824BR	62	135	153	102	18	1.17	2.33	1.00	188	0.19	17.59	21.09	39.17	3821
RA7024BR	62	136	153	112	25	1.33	2.89	1.00	200	0.23	18.17	20.40	38.72	3608
Gem	51	125	143	84	16	1.33	2.98	1.00	181	0.35	19.09	21.81	39.76	3379



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GOVERNMENT NOTICES • GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

NO. R. 370

21 APRIL 2017

AGRICULTURAL PRODUCT STANDARDS ACT, 1990
(ACT No. 119 OF 1990)**REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF SOYA BEANS
INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA**

The Minister of Agriculture, Forestry and Fisheries has under section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990) --

- (a) made the regulations in the Schedule;
- (b) determined that the said regulations shall come into operation on date of publication; and
- (c) read together with section 3(2) of the said Act, repealed the Regulations published by Government Notice No. R478 of 20 June 2014.

SCHEDULE***Definitions***

1. In these regulations any word or expression to which a meaning has been assigned in the Act, shall have that meaning and, unless the context otherwise indicates --

"animal filth" means dead rodents, dead birds and dung;

"bag" means bag manufactured from --

- (a) jute or phormium or a mixture of jute and phormium; or
- (b) polypropylene that complies with SABS specification CKS632 1246: 2012;

"bulk container" means any vehicle or container in which bulk soya beans is transported or stored;

"consignment" means --

- (a) a quantity of soya beans of the same class, which belongs to the same owner, delivered at any one time under cover of the same consignment note, delivery note or receipt note, or delivered by the same vehicle or bulk container, or loaded from the same bin of a grain elevator or from a ship's hold; or
- (b) in the case where a quantity referred to in paragraph (a), is subdivided into different grades, each such quantity of each of the different grades.

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"container" means a bag or a bulk container;

"defective soya beans" means soya beans and pieces of beans which --

- (a) have been damaged by frost, heat or weather conditions;
- (b) have been visibly damaged by insects;
- (c) are contaminated by moulds or infected by plant diseases;
- (d) have a distinctly immature form or which are covered with a whitish membrane or where the testa have a green discolouration; and
- (e) when the testa is removed, display discolouration, excluding green discolouration:

Provided that soya beans which were damaged by insects in the green pod stage and of which the discolouration as a result of the damaged is not larger half of the surface of the soya beans, shall not be deemed as defective soya beans;

"foreign matter" means all matter that --

- (a) pass through the 1,8 mm slotted screen during the sieving process (including soya beans and pieces of soya beans);
- (b) that do not pass through the 1,8 mm slotted screen other than soya beans, glass, coal, dung, sclerotia or metal (including loose seed coats of soya bean as well as pods and parts of pods);

"frost damaged" soya beans with green to green brown seed-lobes with a waxy appearance;

"heat damaged" soya beans with light to dark brown seed-lobes in a cross section;

"insect" in relation to soya beans, means any live insect which is injurious to stored soya beans, irrespective of the stage of development of the insect;

"mould infected soya beans " means soya beans that is shrivelled and deformed in appearance with a colour that varies from medium to dark brown, whereby the parts of infected beans covered in mould;

"other grains" grains or pieces of grains of wheat, barley, oats, triticate, maize, rye and sorghum;

"pods" all whole or damaged soya bean pods;

"poisonous seeds" mean seeds or part of seeds of plant species that in terms of the foodstuffs, cosmetics and disinfectants Act No. 54 of 1972, may present a hazard to human or animal health when consumed, including seeds of *Argemone mexicana L*, *Convolvulus spp.*, *Crotalaria spp.*, *Datura spp.*, *Ipomoea spp.*, *Lolium temulentum*, *Ricinus communis* or *Xanthium spp.*;

"sclerotia" *Sclerotinia sclerotiorum* is a fungus that produces hard masses of fungi tissue, known as sclerotia. The sclerotia vary in size and form and consist of dark exterior, a white interior and rough surface texture;

"soiled soya beans" means whole soya beans which do not pass through the 4,75 mm screen and which are discoloured by soil or any other substances: Provided that if the discolouration is caused by plant material such as soya beans shall not be regarded as soiled soya beans;

"soya beans" means the threshed seed or pieces of seeds of the plant *Glycine max* and where the word "soya beans" is used in conjunction with the word "consignment", it includes matter other than soya beans that is included in a consignment;

"the Act" means the Agricultural Product Standards Act No. 119 of 1990;

"the 1,8 mm slotted screen" means a sieve --

- (a) with a flat bottom of metal sheet of 1,0 mm thickness with apertures 12,7 mm long and 1,8 mm wide with rounded ends. The spacing between the slots in the same row must be 2,43 mm wide and the spacing between the rows of slots must be 2,0 mm wide. The slots must be alternately oriented with a slot always opposite the solid inter segment of the next row of slots;
- (b) of which the upper surface of the sieve is smooth;
- (c) with a round frame of suitable material with an inner diameter of between 300 mm and 310 mm maximum and at least 50 mm high; and
- (d) that fits onto a tray with a solid bottom and must be at least 20 mm above the bottom of the tray.

"the 4,75 mm round-hole screen" means a sieve --

- (a) with a flat metal sheet of 1,0 mm thickness perforated with round holes of 4,75 mm in diameter that are arranged with the centres of holes at the points of intersection of an equilateral triangular grid with a pitch of 8 mm;
- (b) of which the upper surface of the sieve is smooth;
- (c) the frame of which is at least 40 mm high;
- (d) with the inner width of at least 200 mm and the inner length of at least 300 mm. or, in the case of a circular sieve, the inner diameter of at least 278 mm; and
- (e) that fits into a tray with a solid bottom; and not less than 20 mm above the bottom of the tray.

"wet pods" all whole or damaged soya bean pods with a moisture content higher than the permissible moisture content.

Restriction on sale of soya beans

2. (1) No person shall sell soya beans in the Republic of South Africa --
 - (a) unless the soya beans are sold according to the classes set out in regulation 3;
 - (b) unless the soya beans comply with the standards for the class concerned set out in regulation 4;

- (c) unless the soya beans, where applicable, comply with the grades of soya beans and the standards for grades set out in regulation 5 and 6 respectively;
- d) unless the soya beans are packed in accordance with the packing requirements set out in regulation 7;
- (e) unless the container or sale documents, as the case may be, are marked in accordance with the marking requirements set out in regulation 8; and
- (f) if such soya beans contain a substance that renders it unfit for human or animal consumption or for processing into or thereof as food or feed.

(2) The Executive Officer may grant written exemption, entirely or partially to any person on such conditions as he or she may deem necessary, from the provision of subregulation (1): Provided that such exemption is done in terms of section 3(1) (c) of the Act.

PART I

QUALITY STANDARDS

Classes of soya beans

3. There are two classes of soya beans, namely Class SB and Class Other soya beans.

Standards for classes of soya beans

4. (1) A consignment of soya beans shall --
- (a) be free from a musty, sour, khaki bush or other undesirable smell or odour;
 - (b) be free from any substance that renders it unsuitable for human or animal consumption or for processing into or utilisation as food or feed;
 - (c) contain not more poisonous seeds than permitted in terms of the Foodstuffs, Cosmetics and Disinfectants Act No. 54 of 1972;
 - (d) be free from glass, metal, coal or dung;
 - (e) with the exception of Class Other soya beans, be free from insects;
 - (f) be free from animal filth;
 - (g) with the exception of Class Other soya beans, have a moisture content of not more than 13 percent; and
 - (h) shall not exceed the maximum percentage of permissible deviation as determined in the Table in the Annexure for the grade.

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- (2) A consignment of soya beans is classified as Class SB if it --
 - (a) consists of any seeds of soya beans; and
 - (b) complies with the standards for the grade of Class SB soya beans as set out in regulation 5.
- (3) A consignment of soya beans is classified as Class Other soya beans if it does not comply with the standards for Class SB.

Grades for soya beans

5. (1) Soya beans of Class SB shall be graded as Grade SB1.
- (2) No grades are determined for Class Other soya beans.

Standards for grades of soya beans

6. A consignment of soya beans shall be graded as--

Grade SB1 soya beans if the nature of the deviation, specified in column 1 of Table 1 of the Annexure, in that consignment does not exceed the percentage specified in column 2 of the said table opposite the deviation concerned.

PART II**PACKING AND MARKING REQUIREMENTS****Packing requirements**

7. Soya beans of different classes and grades shall be packed in different containers or stored separately.

Marking requirements

8. Each container or the accompanying sales documents of a consignment of soya beans shall be marked or endorsed with the class and grade of the soya beans.

PART III**SAMPLING****Obtaining sample**

9. (1) A representative sample of a consignment of soya beans shall --
 - (a) in the case of soya beans delivered in bags and subject to regulation 10, be obtained by sampling at least ten per cent of the bags, chosen from that consignment at random, with a bag probe: Provided that at least 25 bags in a consignment shall be sampled and where a consignment consists of less than 25 bags, all the bags in that consignment shall be sampled; and

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- (b) in the case of soya beans delivered in bulk and subject to regulation 10, be obtained by sampling that consignment throughout the whole depth of the layer, in at least six different places, chosen at random in that bulk quantity, with a bulk sampling apparatus.
- (2) The collective sample obtained in subregulation (1) (a) or (b) shall --
- (a) have a total mass of at least 10 kg; and
- (b) be thoroughly mixed by means of dividing before further examination.
- (3) If it is suspected that the sample referred to in subregulation (1)(a) is not representative of that consignment, an additional five per cent of the remaining bags, chosen from that consignment at random, shall be emptied into a suitable bulk container and sampled in the manner contemplated in subregulation (1)(b).
- (4) If it is suspected that sample referred to in subregulation (1)(b) is not representative of that consignment, an additional representative sample shall be obtained by using an alternative sampling pater, apparatus or method.
- (5) A sample taken in terms of these regulations shall be deemed to be representative of the consignment from which it was taken.

Sampling if contents differ

10. (1) If, after an examination of the soya beans taken from different bags in a consignment in terms of regulation 9(1), it appears that the contents of those bags differ substantially --
- (a) all the bags in the consignment concerned shall be sampled in order to do such separation;
- (b) the bags concerned shall be placed separately; and
- (c) each group of bags with similar contents in that consignment shall for the purpose of these regulations be deemed to be a separate consignment.
- (2) If, after the discharge of a consignment of soya beans in bulk has commenced, it is suspected that the consignment could be of a grade other than that determined by means of that initial sampling, the discharge shall immediately be stopped and the part of the consignment remaining in the bulk container, as well as the soya beans that are already in the collecting tray, shall be sampled anew with a bulk sampling apparatus or by catching at least 20 samples at regular intervals throughout the whole off-loading period with a suitable container from the stream of grain that is flowing in bulk.

Working sample

11. A working sample shall be obtained by dividing the representative sample of the consignment according to the ICC (International Association of Cereal Chemistry) 101/1 method.

PART IV

INSPECTION METHODS

Determination of undesirable odours, harmful substances, poisonous seeds, glass, metal, coal, dung, insects and animal filth

12. A consignment or a sample of a consignment of soya beans shall be sensorially assessed or chemically analysed in order to determine --

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- (a) whether it has musty, sour, khaki bush or other undesirable odour;
- (b) whether it contains soya beans in which or on which a substance is found, that renders it unfit for human or animal consumption or for processing into or for utilisation as food or feed;
- (c) whether it contains poisonous seeds;
- (d) whether it contains glass, metal, coal or dung;
- (e) whether it contains any insects; and
- (f) whether it contains animal filth.

Determination of moisture content

13. The moisture content of a consignment of soya beans may be determined according to any suitable method: Provided that the result thus obtained is in accordance with the maximum permitted for a class 1 moisture meter as detailed in ISO 7700/2 based on result of the 72 hour, 103°C oven dried method [the latest revision of the AACCI ("American Association of Cereal Chemists International) Method 44 - 15A].

Determination of percentage of wet pods

14. The percentage of wet pods in a consignment of soya beans shall be determined as follows:
- (a) Obtain a working sample of at least 10 kg of soya beans from a representative sample of the consignment.
 - (b) Remove all wet pods by hands from the working sample and determine the mass thereof.
 - (c) Express the mass thus determined as a percentage of the mass of the working sample concerned.
 - (d) Such percentage represents the percentage of wet pods in the consignment concerned.

Determination of percentage of other grain, sunflower seed, stones, sclerotia and foreign matter

15. The percentage of other grain, sunflower seed, stones, sclerotia and foreign matter in a consignment of soya beans shall be determined as follows:

- (a) Obtain working samples of at least 200 g from a representative sample of the consignment.
- (b) Place the 1,8 mm slotted screen in the pan and the 4,75 mm round-hole screen on top of the 1,8 mm slotted screen. Place the sample on the 4,75 mm round-hole screen and sieve the sample by moving the sieve 30 strokes to and fro, alternately away from and towards the operator of the sieve, in the same direction as the long axes of the slots of the 1,8 mm screen, which rests on a table or other suitable smooth surface, 250 mm to 460 mm away and towards the operator with each stroke. The prescribed 30 strokes must be completed within 30 to 35 seconds: Provided that the screening process may also be performed in some or other container or an automatic sieving apparatus.
- (c) Remove the foreign matter from both sieves by hand and add it to the foreign matter below the 1,8 mm screen in the pan and determine the mass of the foreign matter. Remove all other grain, sunflower seed, stones and sclerotia by hand from the working samples and determine the mass of the other grain, sunflower seed, stones and sclerotia separately.

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- (d) Express the respective masses thus determined as a percentage of the total mass of the working sample concerned.
- (e) Such percentages represent the percentages of other grain, sunflower seed, stones, sclerotia and that of foreign matter in the consignment concerned.

Determination of the percentage defective soya beans

16. The percentage of defective soya beans shall be determined as follows:
- (a) Obtain a working sample of at least 100 g soya beans that remain on top of the 4,75 mm round-hole screen after sieving action, which is free of other grain, sunflower, stones, sclerotia and foreign matter, from the representative sample of the consignment.
 - (b) Sieve the working sample with the 4,75 mm round-hole screen by moving the screen 20 strokes to and fro, alternately away from and towards the operator of the sieve for 20 seconds.
 - (c) Remove all defective soya beans from the other soya beans on the 4,75 mm round-hole screen by hand.
 - (d) Determine the mass of the defective soya beans on the 4,75 mm round-hole screen and express it as a percentage of the mass of the working samples concerned.
 - (e) Such percentage represents the percentage of defective soya beans in the consignment.

Determination of the soya beans and pieces of beans which pass through the 4,75 mm round-hole screen

17. The percentage of soya beans and pieces of soya beans which pass through the 4,75 mm round-hole screen shall be determined as follows:
- (a) Determine the mass of the soya beans and pieces of soya beans that pass through the 4,75 mm round-hole screen and remain on top of the 1,8 mm slotted screen from which the other grain, sunflower seed, stones, sclerotia and foreign matter have been removed and express as percentage of the mass of the working sample.
 - (b) Such percentage represents the percentage soya beans and pieces of soya beans in the consignment which passes through the 4,75 mm round-hole screen and not through a 1,8 mm slotted screen.

Determination of percentage of soiled beans

18. The percentage of soiled soya beans in a consignment of soya beans shall be determined as follows:
- (a) Remove all soiled soya beans from the working sample obtained in regulation 17(a) by hand and determine the mass thereof.
 - (b) Express the mass thus determined, as a percentage of the mass of the working sample obtained in regulation 17(a).
 - (c) Such percentage represents the percentage of soiled soya beans in the consignment concerned.

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PART V**MASS DETERMINATION**

19. The mass of soya beans shall be determined by deducting the actual percentage sclerotia, screenings and foreign material found during the inspection process from the total mass of the consignment: Provided that the weighing instruments used for the determination of mass shall comply with the requirements of SANS 1649:2001 published in terms of the Legal Metrology Act No. 09 of 2014 for the specific class of instrument.

PART VI**OFFENCES AND PENALTIES**

20. Any person who fails to comply with any provision of these regulations shall be guilty of an offence and upon conviction be liable to a fine or imprisonment in accordance with section 11 of the Act.

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ANNEXURE

TABLE

STANDARDS FOR GRADES OF SOYA BEANS

<i>Nature of deviation</i>	<i>Maximum percentage permissible deviation (m/m)</i>
	Grade/Graad SB1
1	2
(a) Wet pods	0,2%
(b) Foreign matter, including stones, other grain and sunflower seeds: Provided that such deviations are individually within the limits specified in itmes (c), (d) and (e)	5%
(c) Other grain	0,5%
(d) Sunflower seed	0,1%
(e) Stones	1%
(f) Sclerotia	4%
(g) Soya beans and parts of soya beans above the 1,8 mm slotted screen which pass through the 4,75 mm round-hole screen	10%
(h) Defective soya beans on the 4,75 mm round-hole screen	10%
(i) Soiled soya beans	10%
(j) Deviation in (b) and (f) collectively: Providedthat such deviations are individually within the limits of said items	7%

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