



Potato Certification Service

ANNUAL REPORT

2021 / 2022



POTATO
CERTIFICATION
SERVICE

Reg. No. 1995/005404/08

2021/2022





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ABOUT

POTATO CERTIFICATION SERVICE

Vision

Potato Certification Service's vision is to play a leadership role in the pursuit of a sustained supply of healthy planting material for the South African potato industry.

Mission

Potato Certification Service's mission is to be an industry-related service, which supports the South African potato industry to perform optimally by ensuring the availability of high-quality planting material.

Values

Potato Certification Service strives towards excellence by living the following values:

- Client trust and satisfaction
- Effective utilization of resources
- Equal opportunities
- Performance orientation



Potato Certification Service (PCS) is a Non-Profit Company (NPC) under the Companies Act 71, 2008 (Act 71 of 2008), without members, established in 1995, with the mandate to certify seed potatoes and is contracted as the service provider of the Independent Certification Council for Seed Potatoes (ICCSP), appointed as the authority in terms of the South African Seed Potato Certification Scheme (Scheme) by the Minister of Agriculture, Land Reform and Rural Development (DALRRD).

The DALRRD audits PCS on its line functions and systems since PCS performs the functions and duties in terms of a statutory scheme.

The Scheme is promulgated in terms of the Plant Improvement Act, 1976 (Act No. 53 of 1976) and has been amended in 2021.



CHAIRMAN'S REPORT

Gerhard Posthumus

CHAIR | BOARD OF DIRECTORS

Potato Certification Service (PCS) is doing well, and the potato industry can be proud of the Company and the way in which it conducts its business.

In the reporting year, the staff handled all the inspections, data capturing, and processing, as well as administrative tasks associated with certification services related to 10 883 hectares registered for seed potato production under the South African Seed Potato Certification Scheme. More than 7.293 million 25 kg bags of seed potatoes had been certified. These are the most seed potatoes ever certified in one year.

Our personnel situation remained relatively stable, with only three resignations, the Assistant Data-Administrator at Head Office, and two certification officials, of which one was the Regional Manager in Pietermaritzburg. As a result, seed potato growers in the North-Eastern Cape will receive services from Christiana and no longer from Pietermaritzburg.

Sanette Thiar, our Managing Director, and André Wessels, our Technical Manager, had the opportunity to attend the online meeting of the Specialised Section on Standardisation of Seed Potatoes of the United Nations Economic Commission for Europe (UNECE) Working Party on Trade in Seed Potatoes on 17 and 18 March 2022.

Sanette was further part of a working group revising the UNECE Standard for Seed Potatoes. By participating in these international meetings, we can gauge our Scheme and its application against other seed potato certification schemes globally. It also gives us the opportunity to exchange information and share experiences on matters such as True Potato Seed and the latest pests that threatens the potato industries in different parts of the world.

I am grateful to report that PCS is financially in a very good position. The company is in good standing with regard to filing and payment of taxes. The Board of Directors managed to increase the certification rate for the 2022/2023 financial year by only R175.00 per hectare, thus to 7.54%, which now includes the transport costs of the post-control samples.

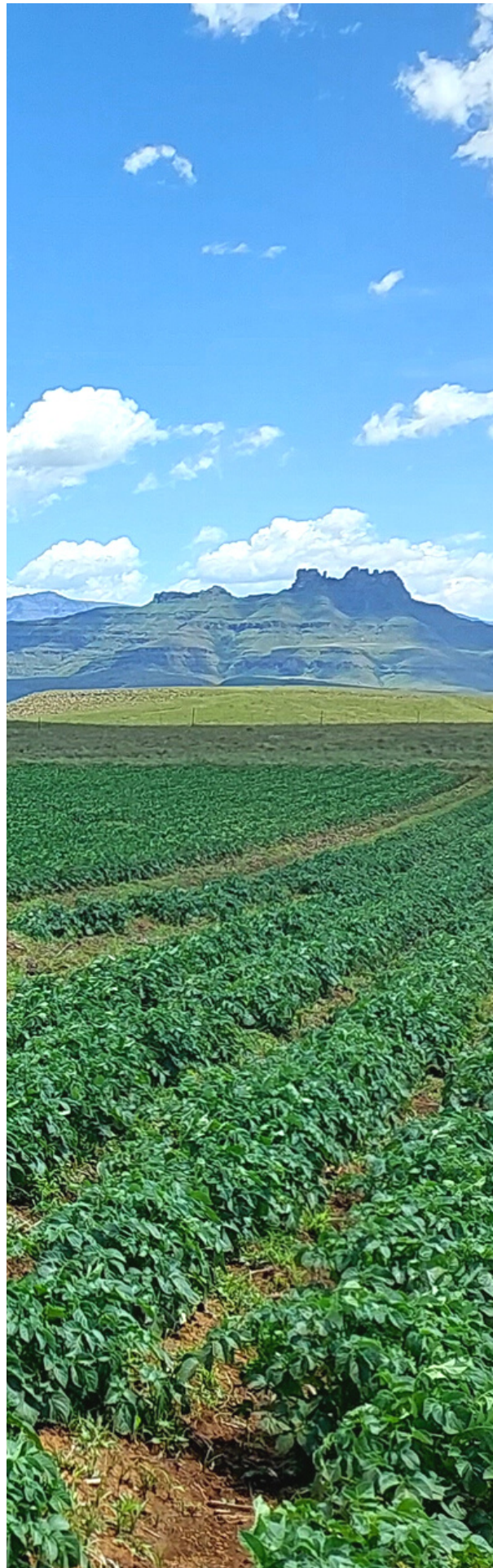
The Board of Directors is responsible for the fiduciary responsibilities of PCS, as well as personnel matters, and truly has the interests of the Company, staff, and seed potato growers at heart. My sincere thanks go to the Board of Directors for selflessly relinquishing their time and sharing knowledge and experience for the benefit of the seed potato industry and the potato industry as a whole. Adv. Les Kùgel, the Executive Chair of the ICCSP, is thanked for his role and commitment to our company as the service provider to the authority.

PCS plays a leading role in the cooperation and communication with the DALRRD. As convenor of the Potato Quarantine Pest Committee, the Managing Director of the Company ensures that biosecurity, in terms of import and export requirements, as well as national issues are dealt with and communicated.

Thank you to all the staff who worked very hard amidst of a lot of pressure. It is sincerely appreciated. Special thanks and appreciation go to Sanette Thiart, Managing Director, André Wessels, Technical Manager, the Management Team, Reinette van Deventer on the finance side, and Rolindie de Klerk at the head of the data department. You play an integral role in providing good quality plant material to assist the potato industry to perform optimally.

A special word of thanks goes to all seed potato growers. We consider PCS to be your partner in providing high-quality seed potatoes for sustainable potato production.

Gerhard Posthumus
CHAIR | BOARD OF DIRECTORS





MANAGING DIRECTOR'S REPORT

Sanette Thiar

MANAGING DIRECTOR

2021/2022 had been a tough, but very interesting year. The highlight of the year was the publication of the amended Scheme after many years of hard work, and the biggest challenge was the discovery of a new pest, namely Pepper Ringspot Virus (PepRSV). Needless to say, we never stop learning and what doesn't kill you, makes you stronger.

Certification services were rendered on 10 883 hectares, after only 9 800 hectares were budgeted for the 2021/2022 season. Certification actions consisted of 2 611 registrations, 4 725 field inspections, 1 965 samples collected for micro-propagative material and mini tubers, 8 711 samples taken on the other generations in the Scheme, of which 1 726 were bacterial wilt field samples, and 2 612 tuber inspections (mini tubers/G0 to Certified Commercial) conducted.

André Wessels continued monitoring of the certification standards to ensure that the Scheme is applied in the same way in and between regions. He and his data administration team are responsible for the continuous technological upgrade of the Database, as well as the SharePoint administrative system. The integrity of our data and statistics withdrawn from the database remain a high priority, as well as to continually improve the efficiency of the data system.

Besides the normal certification services, PCS also plays a major role in the administration of the seed potato grower meetings. PCS certification officials also conducted two informal trials, one on the possible transmission of Alfalfa Mosaic Virus (AMV/Calico) and the other a demonstration trial on virus infection. PSA's Research Committee has since approved a formal research project on the findings of the AMV trial.

A lot of time and effort went into revisiting the movement of seed potatoes, joint sorting facilities, and certification in bulk for inclusion in the Scheme. This is so that the practical challenges that seed potato growers have in this regard are addressed in an orderly manner in order to reduce risk.

The Company is fortunate to have staff that is always willing to walk the extra mile. It is an absolute pleasure to work with a team that shares my passion for the potato industry. We are continuously working towards the improvement of our efficiency and quality of service to the seed potato growers.

The finances of the Company are sound. Growers who make full payment upon registration still enjoy the benefit of a 5% discount. The tariff increased from R2 320 to R2 495 per hectare. PCS's certification costs, including post-control transport costs, amount to approximately R3.65 per 25 kg bag of seed potatoes. This was made

possible by budgeting for a loss and eating into company reserves. However, we are hopeful that the budgeted hectares for 2022/2023 will materialize.

The Department of Agriculture, Land Reform, and Rural Development is thanked for their role in the application of the Scheme, as well as phytosanitary matters. Thank you very much to the various directorates we work so closely with. Thank you for understanding the unique challenges the potato growers face and for the good collaboration and relationship we have.

My sincere appreciation goes to my directors for taking the time in their busy schedules to apply their knowledge and expertise to Company matters. A special thank you to the Chair and Vice-Chair for your support to me as Managing Director. It is much appreciated. I would further like to thank the ICCSP's Executive Chair, Adv. Kugel, for always being available to assist with special requests and matters that require his input. His legal background and clear and decisive guidance are invaluable to us.

Our seed potato growers are once again encouraged to apply good management practices in order to produce the best possible quality seed potatoes. The PCS team is always ready to assist wherever we can in the pursuit of high-quality planting material for the industry.

In summary

The Company is doing well. PCS is in a good financial position and much better off than originally anticipated in the budget. New entrants to seed potato production keep on registering seed potatoes, although we see growers leaving the system as well.

A special word of thanks goes to all seed potato growers and the PCS team.

Together we make a difference and put potatoes on the plates of our nation!

Sanette Thiar
MANAGING DIRECTOR





INDEPENDENT CERTIFICATION COUNCIL FOR SEED POTATOES

I am pleased to report that one of the biggest milestones in the reporting year certainly is the publication of the amended South African Seed Potato Certification Scheme on 17 September 2021. This was after the process of reviewing the Scheme and Protocol started in 2016. Several sessions with role players and a legal team helped evaluate and rewrite the Scheme. Greater emphasis in the amended scheme is particularly placed on the seed potato grower and his responsibilities.

The biggest changes, however, are the respective dispensations enrolled in the Scheme after very careful consideration, as well as the combination of Generation 8 and Class Standard Grade as Certified Commercial seed potatoes. Currently, the handling of Fissure Scab is the only dispensation and is applicable until September 2023. In this regard, PCS is collecting data in order to make a sensible decision on the handling of Fissure Scab under the Scheme. Since the publication of the new Scheme, 109 seed potato growers, assignees, Council members, and role players have already written the open-book examination to ensure they are up to speed with the changes. The latest amendment to the Protocol was also completed in November 2021. The cost of transporting post-control samples is no longer a Plantovita cost but is now included in the PCS certification tariff.

Varietal identification methods such as field descriptions and diffused light sprout evaluation, as well as DNA fingerprinting methods received a lot of attention. A task team has been assigned to look at the possibility of a centralized DNA bank with backup sets to be kept at test facilities.

Meanwhile, all role players making use of DNA fingerprint testing of varieties are called upon to channel such requests via PCS to ensure that the best solutions can be obtained. This matter will be discussed in depth at the next NUMPRO meeting.

The Scheme already allows for certification of True Potato Seed (TPS). It is also expected that the first planting of Hybrid True Potato Seed (HTPS) will be entered under the Scheme in the coming year. There are still many aspects of uncertainty, but the process is being undertaken with the Department responsible for Agriculture and role players, and so everyone will learn from it.

The occurrence of Black Dot has received a lot of attention. *Colletotrichum coccodes* / Black Dot is a big problem and will remain a problem. Virtually 100% of all soils in South Africa are already infected with *Colletotrichum coccodes* / Black Dot. It does not help to plant “clean” tubers in contaminated soil. Seed treatment with fungicides inhibits the growth of mycelia and prevents deterioration of seed potatoes during storage. Seed or soil treatment is not

effective against microsclerotia, the survival mechanism, which is formed by the fungus. Research by Plantovita has shown that some fungicides have 100% inhibition of radial mycelial growth.

Table 5 of the Scheme refers to "Pathogen infected seed potatoes permissible" and therefore recognizes *Colletotrichum coccodes* / Black Dot as a full-fledged pathogen with its own tolerance. It falls into the same group as *Helminthosporium solani* / Silver Scurf with a combined tolerance equal to the maximum permissible for each pathogen separately.

As it is extremely difficult in practice to visually distinguish between the two pathogens, the two pathogens are scored together under the joint tolerance. The dispensation for the treatment of tubers has been approved and has been included in the amended Seed Potato Certification Scheme. The seed treatment is indicated on the bags with a label so the buyer can see that it has been treated, as well as on the tuber inspection report. It is very important to follow an integrated control strategy for Black Dot.

The review of Government Notice No. R. 110 of 27 January 1984 with regards to control measures to prevent and curb the spread of regulated pests, such as Bacterial Wilt, Golden Cyst Nematode, and Wart disease, also received considerable attention. The biggest amendment that matters here affects Bacterial Wilt. Bacterial Wilt is henceforth regulated as a Regulated Non-Quarantine Pest (RNQP) and no longer as a Regulated Quarantine Pest (RQP). As a result, the pathogen is now regulated only in terms of propagation material and no longer in totality. Thus, there are no more orders issued by the Department, and potatoes derived from units that have tested positive for *Ralstonia* spp., the Bacterial Wilt-causing organism, can then be sold as table potatoes.

However, with regard to the application of the Scheme, nothing changes - the eight-year withholding period on positive units still applies.

It was noted that the Plant Health Bill will repeal the current Agricultural Pest Act. The Agricultural Pest Act did not provide for export, and it is now included in the Plant Health Bill. The industry will be updated on progress made.

Biosecurity is a standing item on the ICCSP's agenda and the Council is regularly kept abreast of the latest notices of pathogens detected from all over the world.

Spain recently issued a notice regarding an undiagnosed virus that causes spots on potatoes and occurs rather widely distributed in Europe. *Candidatus Liberibacter solanacearum*, which causes Zebra Chip, is also regularly in the news and the spread of the pathogen is closely monitored in order to enable early detection.

Biosecurity is not just about what happens across borders but starts at farm level. Concerns have been expressed that potatoes from units that have been rejected for certification as they do not meet certification standards, or even as a result of infection with Regulated Pests, could still be sold as seed potatoes. Buyers of such seed potatoes are urged to note that such seed potatoes have been rejected for a reason. Planting uncertified seed potatoes can be detrimental to the spread of unwanted pests.

A word of thanks and appreciation go to the ICCSP's two service providers, Potato Certification Service (PCS) and Plantovita, and their teams under the guidance of Sanette and Marieta. PCS is responsible for applying the Scheme, as well as for the ICCSP's secretariat, and Plantovita is the controlling laboratory of the potato industry. Without these two organizations, providing good quality plant material to the industry is not possible.

Many thanks also go to the Council members appointed by the National Seed Potato Committee. Your input and contribution to the Scheme are invaluable.

A final special word of thanks to Joan Sadie, former Registrar of the Plant Improvement Act, who retired at the end of July 2021. Thank you so much for your good cooperation and your support of the seed potato industry over the years. Herman Mootane is welcomed in her place to the Council and is wished all the best with the new responsibility.

Yours sincerely



Adv. Les Kügel
EXECUTIVE CHAIRMAN





COUNCIL MEMBERS

EXECUTIVE CHAIR

Adv. Les Kügel

INDEPENDENT REPRESENTATIVE

INDUSTRY REPRESENTATIVES

JF van der Merwe

POTATOES SOUTH AFRICA - CHAIR

Gerhard Posthumus | Vice-Chair

NATIONAL SEED POTATO COMMITTEE - CHAIR

Jakkie Mellet

NATIONAL SEED POTATO COMMITTEE - VICE-CHAIR

Dawie Ras

NATIONAL SEED POTATO COMMITTEE - ADDITIONAL MEMBER

TECHNICAL REPRESENTATIVES

Dirk Uys

PSA - RESEARCH MANAGER

Marieta Botha

PLANTOVITA - CHIEF EXECUTIVE OFFICER

Sanette Thiar

POTATO CERTIFICATION SERVICE - MANAGING DIRECTOR

DALRRD REPRESENTATIVES

Herman Mootane | Acting Registrar

PLANT IMPROVEMENT ACT - DIRECTORATE OF PLANT PRODUCTION

Gilbert Mediroe | Deputy Director

AGRICULTURAL PESTS ACT - DIRECTORATE OF INSPECTION SERVICES

Maanda Rambauli | Executive Officer

AGRICULTURAL PESTS ACT - DIRECTORATE OF PLANT HEALTH



BOARD OF DIRECTORS

POTATO CERTIFICATION SERVICE

The Board of Directors remains unchanged after all four directors representative of the four regions were re-elected by the seed potato growers at the respective seed potato grower meetings. The Board of Potato Certification Service comprises of the four Chairpersons of the Regional Seed Potato Grower Meetings, namely Gerhard Posthumus (Western), Jakkie Mellet (Northern), Johan van Greunen (Southern), and Gavin Hill (Eastern) as non-executive directors, with Sanette Thiart, Managing Director, as the executive director. Gerhard Posthumus serves as Chair, with Jakkie Mellet as Vice-Chair.

Jakkie Mellet represents the Company as Director of Potato House (Pty) Ltd., Registration Number, 93/004345/07. The Company has a 26% share in the building. In March 2022, the building had been valued at R6 750 000.

The Chair of the ICCSP, Adv. Les Kùgel, attends the Board meetings as an observer to ensure that the Company, as the ICCSP's (Authority) service provider, has the human and financial resources to apply the Scheme efficiently and effectively.

The Board is responsible for the human and financial resources of the Company and does not discuss certification matters. The ICCSP is responsible for all certification aspects of the Scheme. The Company is also responsible for the secretariat of the ICCSP.



BOARD OF DIRECTORS

POTATO CERTIFICATION SERVICE



Gerhard Posthumus | Chair

WESTERN REGION | NON-EXECUTIVE



Jakkie Mellet | Vice-Chair

NORTHERN REGION | NON-EXECUTIVE



Sanette Thiar
Managing Director
EXECUTIVE

Johan van Greunen

SOUTHERN REGION | NON-EXECUTIVE

Gavin Hill

EASTERN REGION | NON-EXECUTIVE





HUMAN RESOURCES

POTATO CERTIFICATION SERVICE

STAFF THAT LEFT THE COMPANY

Shashika Naran

Assistant Data-Administrator | Head Office
30 November 2021 | 2.5 months

Ferdus Erasmus

Regional Manager | Pietermaritzburg
31 May 2022 | 13 Years, 5 months

Juhan Swarts

Certification Official in Training | Christiana
31 May 2022 | 1 Year, 3 months

STAFF THAT JOINED THE COMPANY

Shashika Naran

Assistant Data-Administrator | Head Office
13 September 2021

Stephen Fouché

Assistant Data-Administrator | Head Office
19 April 2022

Colleen Botes

Administrative Assistant | Head Office
19 April 2022

Kevin Swiegers

Certification Official in Training | Christiana
1 June 2022

STAFF THAT WERE PROMOTED

Johan Germishuys

Promoted to Regional Manager | Pietermaritzburg
1 July 2022

Kevin Swiegers

Qualified on sampling | Christiana
23 June 2022

HW Coen

Fully qualified on all aspects of certification | Christiana
14 December 2021



FINANCES

POTATO CERTIFICATION SERVICE

The financial position of the Company is very good thanks to more hectares registered than initially budgeted and the expenditure was kept to a minimum.

The budgeted hectares for the reporting period were 9 800, and 10 806 were realized, which were 1 006 more than expected.

The Total Income (R24 800 042) was R1 230 840 more than the budgeted R23 569 202, mainly due to the more hectares registered. The Total Expenditure (R24 254 282) was R1 727 655 less than expected for the year (R25 296 856), which makes the net surplus before tax for the year R545 760, instead of a budgeted shortage of R1 727 655. The surplus after tax was R377 785.

PCS still has a 26% share in Potato House and Potatoes South Africa (PSA) has a 74% share. The building was originally purchased for an amount of R4 124 243, to which PCS contributed a loan to the value of R1 072 303. The roof of the building required major maintenance to which PCS contributed a further R115 000 loan to the building, bringing the PCS loan amount to R1 187 303. On 20 August 2021, R85 000, and on 7 February 2022, a further R65 000 was contributed, bringing PCS' loan amount to R1 337 303.24. On 29 March 2022, the building was valued at R6 750 000.

The active seed potato growers are all the growers who have for the past four years registered plantings for the certification of seed potatoes under the South African Seed Potato Certification Scheme (Scheme). Currently, there are 142 active seed potato growers, of which 100 have registered plantings under the Scheme in the reporting year.

The seed potato growers are thanked for the timeous payment of registrations and other services rendered.

FINANCES

AT A GLANCE



INCOME **R 24 800 042**

Unit registrations	R23 443 173
Services and commission	R412 714
Other	R944 155

EXPENDITURE **R 24 254 282**

RESULT

Surplus	R545 760
Income Tax	- R167 975
Net surplus for the Year	R377 785

FUTURE PLANS FOR GROWTH

Technology upgrade	R371 500
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ADDITIONAL SOURCES OF REVENUE **R 392 880**

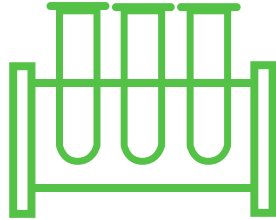
Audit of facilities	R61 351
Database info	R72 503
Sampling, renewal of varieties etc.	R129 051
Other	R129 975



BUDGET VS ACTUAL

REGISTERED HECTARES

REGION	12 MONTHS	ACTUAL	DIFFERENCE
Eastern	1 974	2 346	+372
Eastern Free State	248	284	+36
KwaZulu-Natal	1 416	1 618	+202
North-Eastern Cape	310	444	+134
Northern	625	980	+355
Limpopo	320	469	+149
Mpumalanga	305	511	+206
Southern	273	294	+21
Ceres	2	2	0
Sandveld	78	114	+36
Sandveld (R)	135	106	-29
Southern Cape	58	72	+14
Western	6 928	7 164	+236
Eastern Cape	30	31	+1
North West	810	893	+83
Northern Cape	1 270	980	-290
Western Free State	4 818	4 902	+84
TOTAL	9 800	10 784	+984



MICRO-PROPAGATIVE MATERIAL

All potato micro-propagative material registered in mini tuber production facilities must have originated from an *in vitro* facility approved by the authority.

All potato micro-propagative material (imported clones or newly established clones) have been tested at Plantovita, the controlling laboratory in the potato industry.

All initial material must:

- test negative for the presence of Potato Leaf Roll Virus (PLRV), Tomato Spotted Wilt Virus (TSWV), and Potato Viruses X, M, A, S, and Y;
- test negative for *Ralstonia* spp.;
- test negative for Soft Rot *Enterobacteriaceae* (SRE);
- be visually free from symptoms characteristic of any other pests; and
- test negative in an enriching medium for general microbial contamination.

ICCSP APPROVED FACILITY TYPES

FACILITY TYPE	L 001	N 196	R 015
Single-Crop Facility	–	●	–
Multi-Crop Facility	●	–	●
Post-Entry Quarantine Facility (PEQ)	●	–	●
Establishment Facility	●	–	●
Maintenance Facility	●	●	●
Propagation Facility	●	●	●

ICCSP APPROVED MICRO PROPAGATION FACILITIES

CODE	FACILITY NAME
L 001	Rascal Seed Research
N 196	Dwen Farming (Pty) Ltd.
R 015	Vitroplant South Africa (Pty) Ltd.

ICCSP APPROVED MICRO PROPAGATION FACILITY

CODE	APPROVAL VALID UNTIL
L 001	2024/04/30
N 196	2023/12/31
R 015	2024/04/30



MINI TUBER PRODUCTION

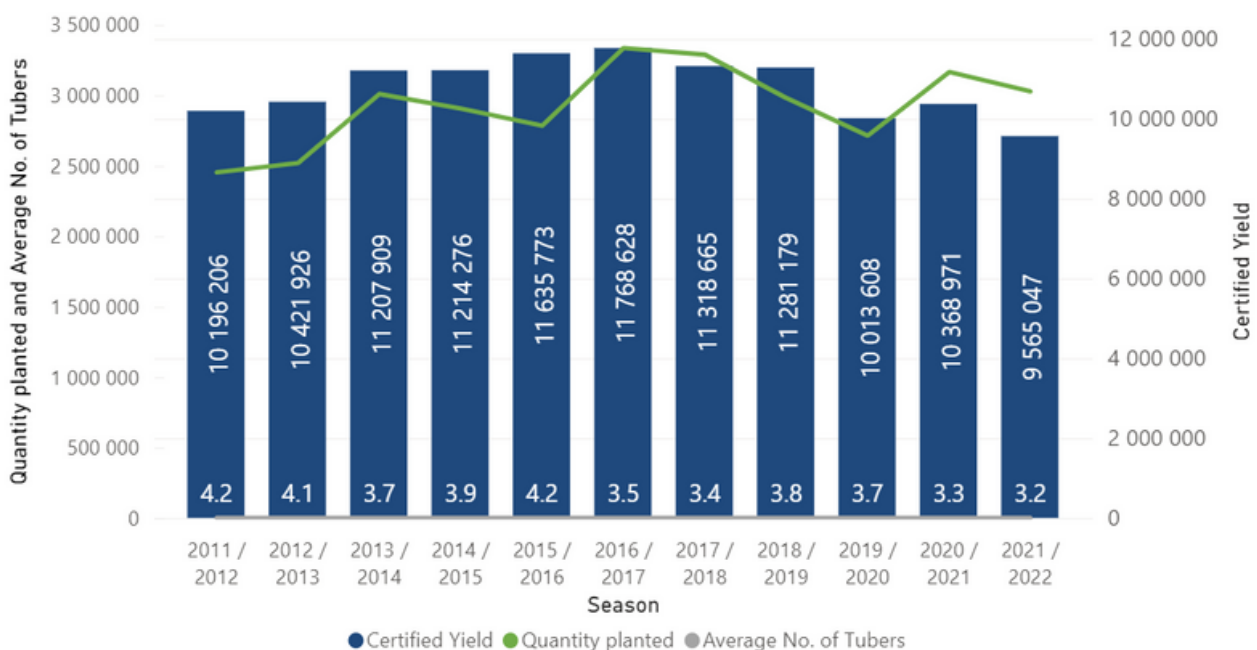
The South African Seed Potato Certification Scheme recorded the greatest number of *in vitro* plants registered in mini tuber production facilities during the 2017/2018 season, namely 3 288 455.

3 027 131 *in vitro* plants were planted in 8 ICCSP-approved facilities originating from 114 different varieties and/or breeding lines, which resulted in 9 565 047 mini tubers being certified. An estimate of 103 754 mini tubers was lost due to infection with Soft Rot *Enterobacteriaceae* (SRE).

During the 2021/2022 season, an average of 3.2 mini tubers were produced per *in vitro* plant.

Due to the sacrifice of tubers, the cost of mini tubers, transport cost, and the period for which mini tubers are required to sprout prior to testing, growers opt to make use of leaf samples (88.30%) rather than tuber samples (11.70%) in determining the virus status.

QUANTITY PLANTED (*IN VITRO'S*) - CERTIFIED YIELD (MINI TUBERS)



ICCSP APPROVED MINI TUBER PRODUCTION FACILITIES

GROWER CODE	GROWER NAME	APPROVAL VALID UNTIL
B 008	Potato Seed Production	2024/11/30
C 001	Ceres Aartappels (Edms.) Bpk.	2024/11/30
D 064	GWK Kweekhuis	2023/03/31
L 001	Rascal Seed Research	2024/04/30
N 196	Dwen Farming (Pty) Ltd	2023/12/31
P 020	Maluti Mini Tubers CC	2024/11/30
R 015	Vitroplant South Africa (Pty) Ltd	2024/04/30
S 169	Advanced Potato Propagation (Pty) Ltd	2024/04/30

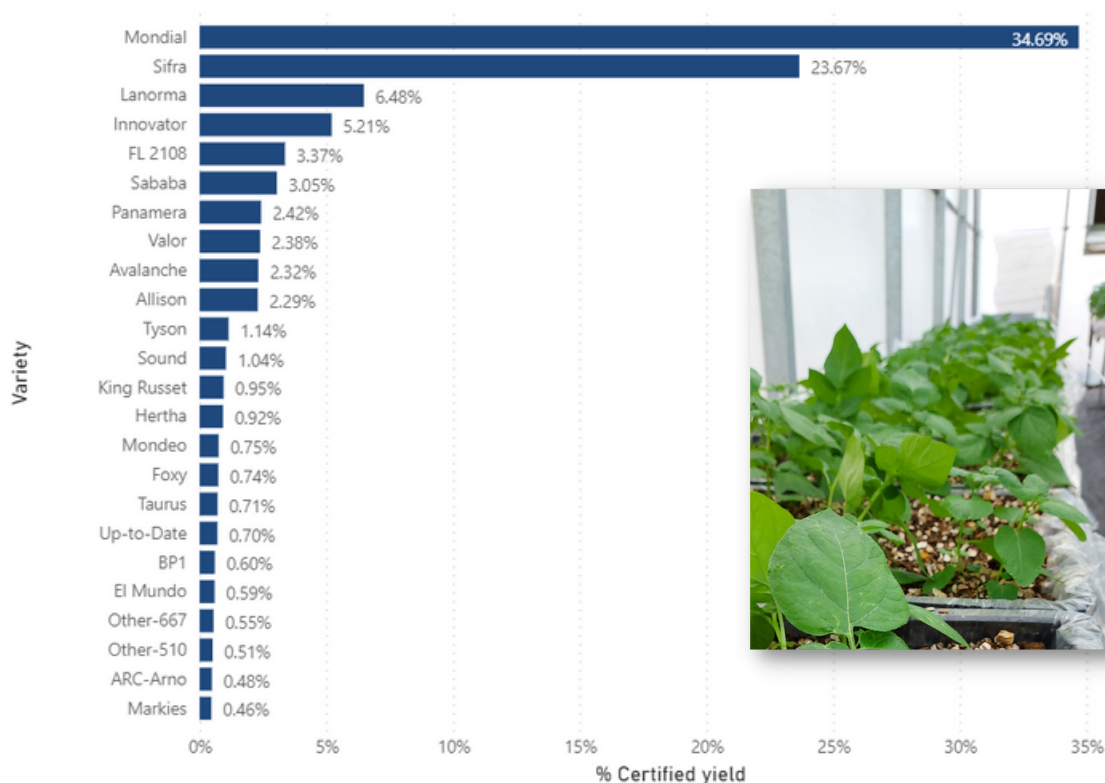
Mini tuber production facilities are audited on a biennial basis for ICCSP approval.

During the reporting period, 4 out of 577 samples submitted to the controlling laboratory, tested positive for Soft Rot *Enterobacteriaceae* (SRE) which resulted in potential mini tubers being destroyed. There was a huge improvement since the previous year when 29 out of 602 samples submitted tested positive.

Mini tubers originating from insect-proof ICCSP-approved greenhouse facilities and which complied with a zero-tolerance during field inspection, sampling, and tuber inspection, are awarded a gold certification label as proof of Generation 0 planting material.

All mini tuber production facilities are continuously monitored by the certification officials during each aspect of certification.

VARIETIES | 2021 / 2022





GO - G7 SEED POTATO PRODUCTION

REGISTERED HECTARES

For the 2021/2022 season, 10 806 hectares were registered, which is more than the 9 848 hectares that had been registered for the 2020/2021 season. Western Free State (4 858 ha), KwaZulu-Natal (1 615 ha), and the Northern Cape (1 314 ha) registered the greatest number of hectares. It is noted that Limpopo grew from 303 hectares in 2020/2021 to 548 hectares in 2021/2022.

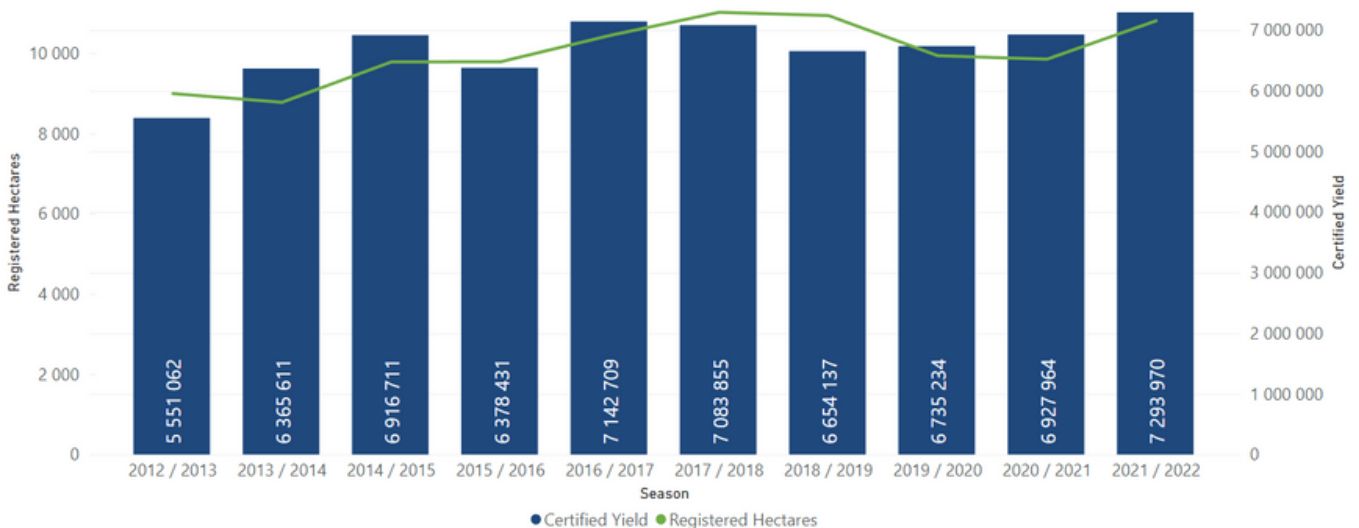
Considering the number of bags required for planting all the hectares of potatoes in

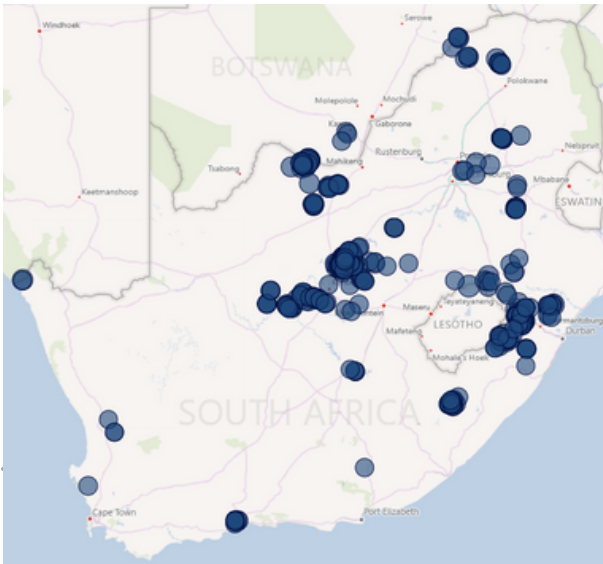
South Africa, and one subtracts the number of bags exported, the percentage of farm-saved seed and seed potatoes planted as uncertified, varies between 10 and 15%.

NUMBER OF SEED POTATO GROWERS

100 Seed potato growers registered plantings under the Scheme in the reporting year, certifying on average 675 x 25 kg bags (16.87 tons) of seed potatoes per hectare.

REGISTERED HECTARES AND CERTIFIED YIELD





Production Area	Hectares	25 kg bags	Ton/ha
Eastern Cape	31	5 400	4.37
Eastern Free State	281	202 199	18.00
KwaZulu-Natal	1 615	1 296 296	20.07
Limpopo	548	496 893	22.68
Mpumalanga	505	345 588	17.11
North West	907	1 452 132	40.02
North-Eastern Cape	444	337 041	18.97
Northern Cape	1 314	773 016	14.71
Sandveld	82	11 520	3.50
Sandveld (R)	150	35 848	5.99
Southern Cape	72	76 053	26.50
Western Free State	4 858	2 261 984	11.64
Total	10 806	7 293 970	16.87

CERTIFIED YIELD

A total of 6 927 964 x 25 kg bags of seed potatoes were certified in the 2020/2021 season and during the 2021/2022 season, the most seed potatoes ever had been certified, namely 7 293 970 x 25 kg bags of seed potatoes. The Western Free State production area certified the most seed potatoes (2 261 984 x 25 kg bags) for the 2021/2022 season, followed by North West (1 452 132 x 25 kg bags), and KwaZulu-Natal (1 296 296 x 25 kg bags).

GENERATION DISTRIBUTION

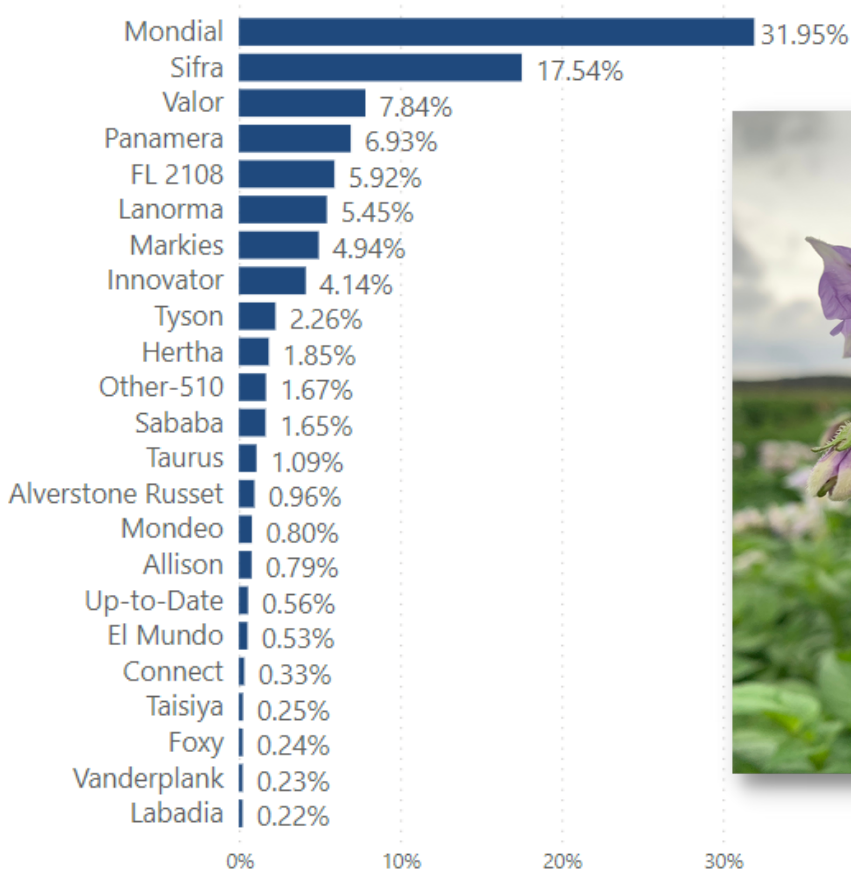
Based on the certified yield for the 2021/2022 season, the biggest portion of seed potatoes was certified as Generation 3, namely 2 620 780 x 25 kg bags or 35.93%, followed by Generation 4, 2 326 828 x 25 kg bags or 31.9% and then Generation 2, 1 179 833 x 25 kg bags or 16.18%. 86.14% of all seed potatoes are certified as generation 1 to 4.

CERTIFIED YIELD AND NUMBER OF BAGS PER HECTARE



TOP VARIETIES

The variety distribution is shown below. During the evaluation of post-control variety purity samples under diffused lights, it was found that only 22 344 x 25 kg bags contained tubers other than the said variety out of the 7 293 970 x 25 kg bags evaluated so far.



POST-CONTROL VARIETY PURITY

PRODUCTION AREA	BAGS CERTIFIED (25 KG)	NO. OF BAGS WITH MIXING	% BAGS WITH MIXING	AVERAGE % MIXING IN BAGS
Eastern Free State	202 199	5 000	2.47%	1.82%
KwaZulu-Natal	1 292 296	7 890	0.61%	2.22%
Limpopo	496 893	3 000	0.60%	1.67%
Mpumalanga	345 588	5 002	1.45%	1.67%
Western Free State	2 261 984	1 452	0.06%	1.67%
RSA	7 293 970	22 344	0.31%	1.90%

VIRUS INFECTION

For the 2021/2022 season, which is not complete, average infections of 0.144% PVY and 0.220% PLRV were detected during the testing of field samples, with PVY occurring in 11.67% and PLRV in 14.1% of all field samples, compared to 43.24% the previous year.

During the same period, average infections of 0.161% PVY and 0.220% PLRV were detected during testing of post-control samples, with

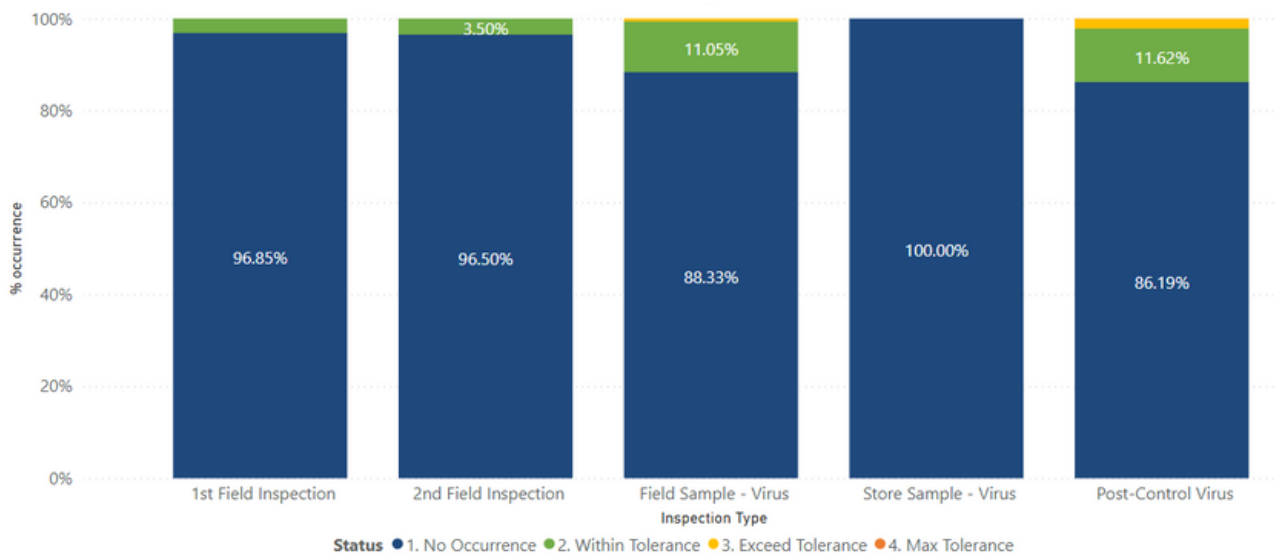
PVY occurring in 13.81% and PLRV in 18% of all post-control samples.

A total of 5 441 305 x 25 kg bags certified (86.19%) had no PVY-virus infection in the post-control samples.

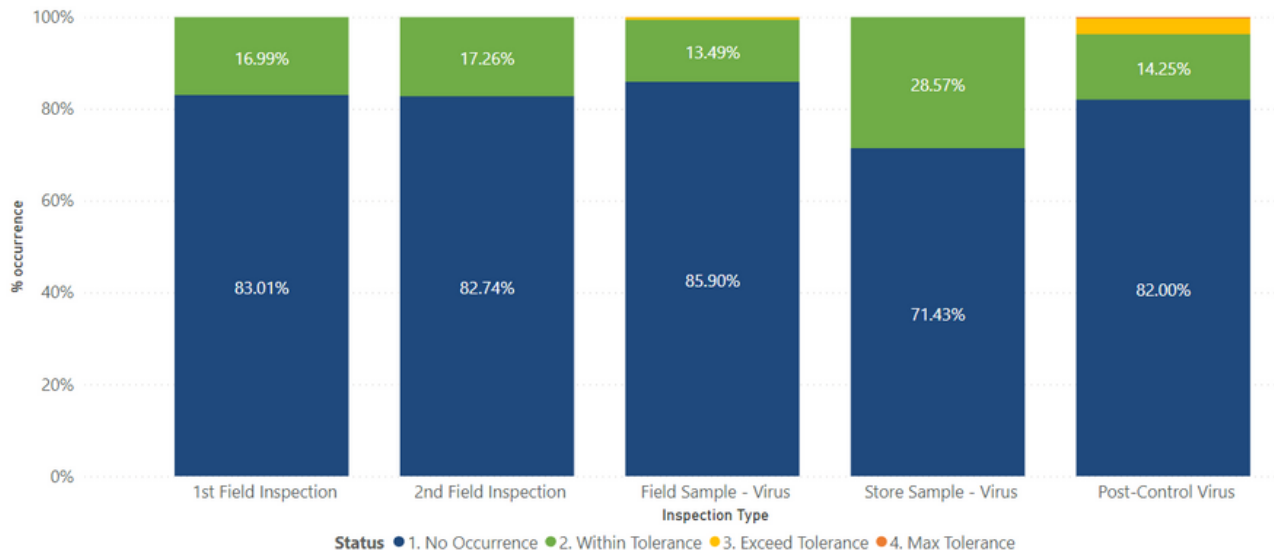
For the same period, 5 096 026 x 25 kg bags certified (82%) had no PLRV-virus infection.

VIRUS INFECTION | TOLERANCE COMPLIANCE

POTATO VIRUS Y (PVY)

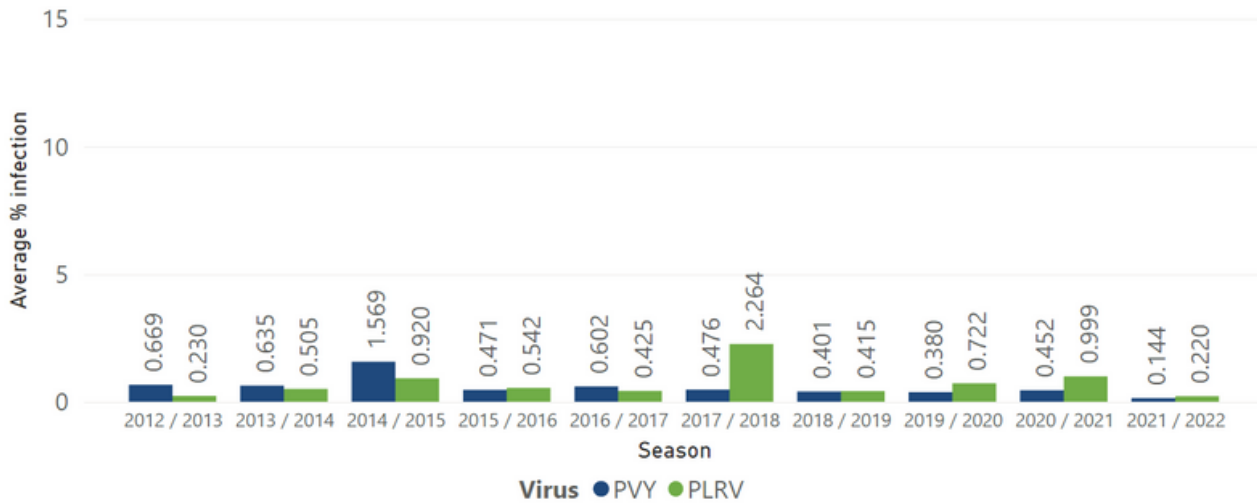


POTATO LEAF ROLL VIRUS (PLRV)

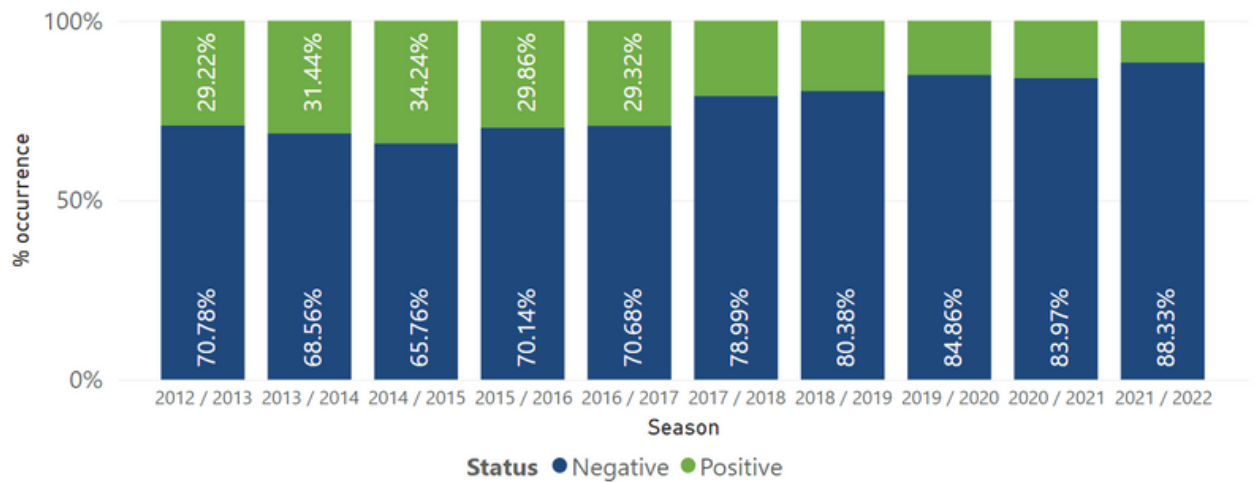


VIRUS INFECTION | FIELD SAMPLE

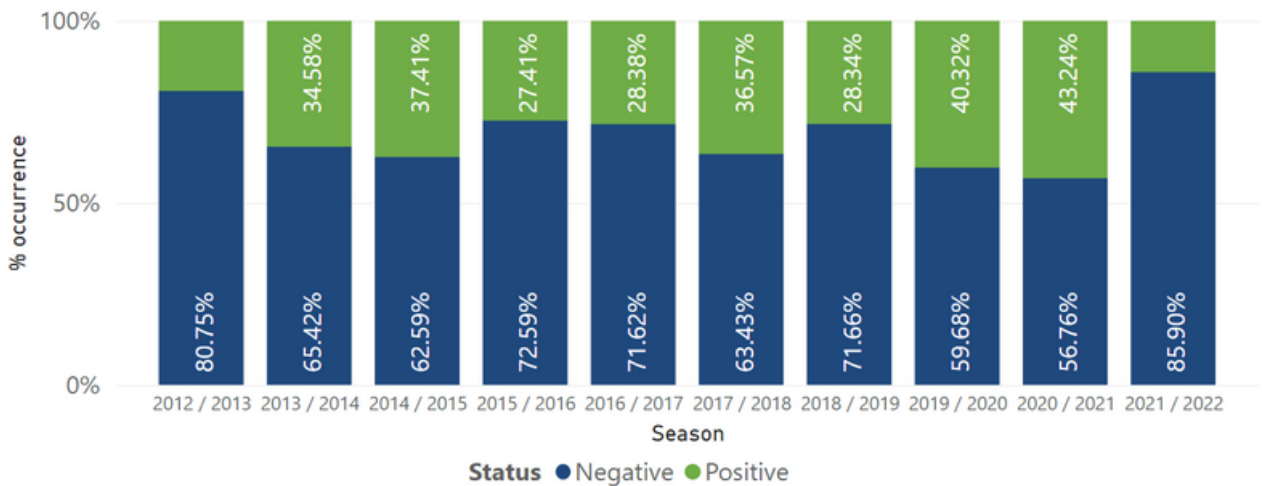
AVERAGE PERCENTAGE VIRUS INFECTION



POTATO VIRUS Y (PVY)

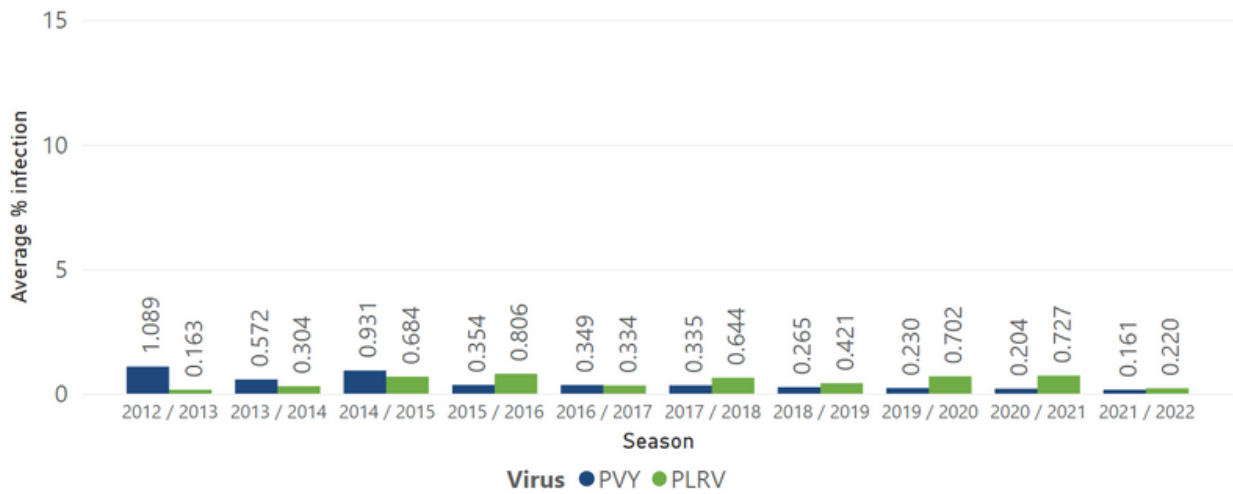


POTATO LEAF ROLL VIRUS (PLRV)

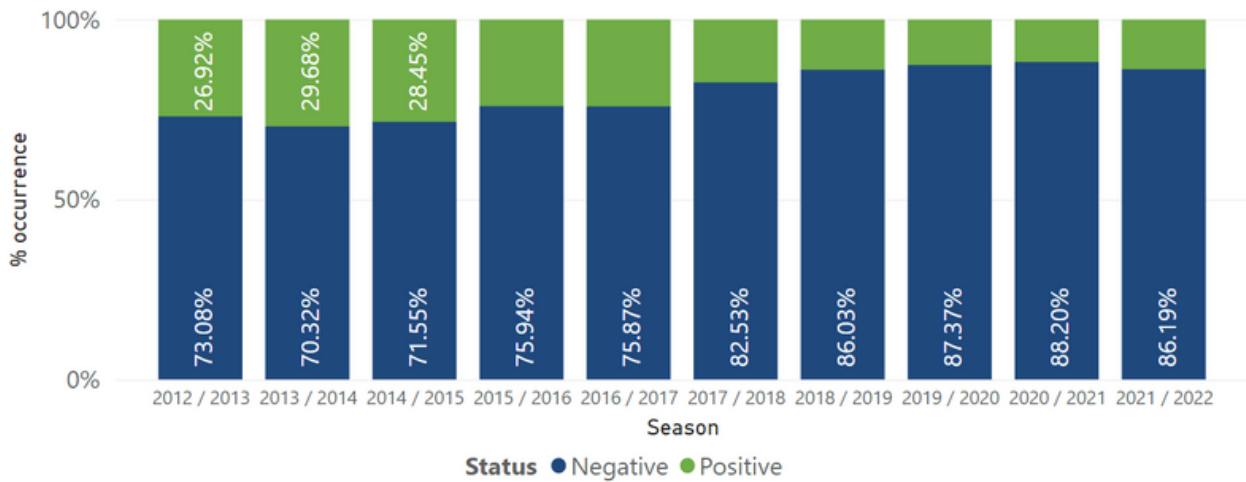


VIRUS INFECTION | POST-CONTROL SAMPLE

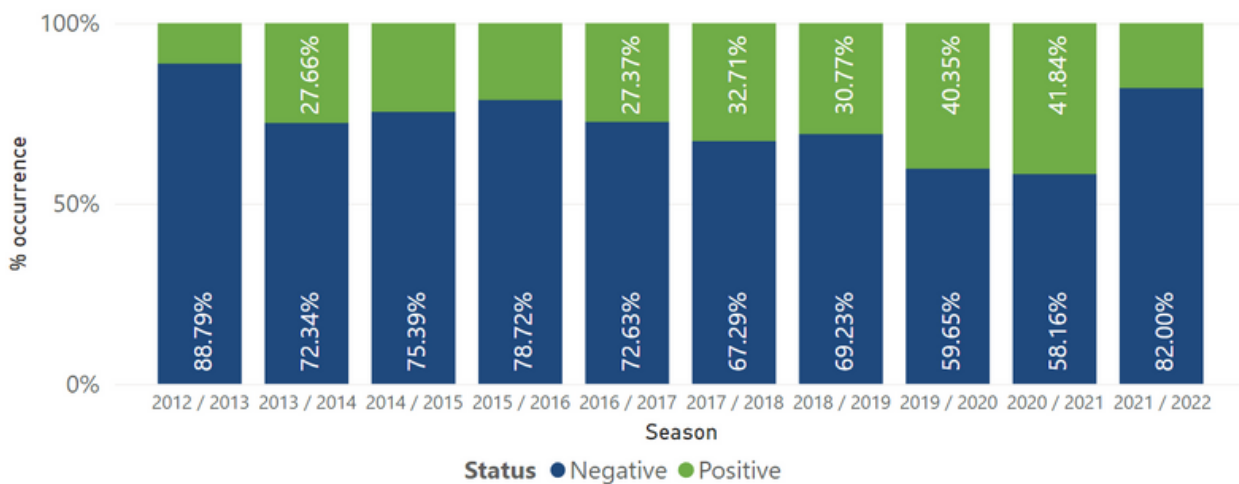
AVERAGE PERCENTAGE VIRUS INFECTION



POTATO VIRUS Y (PVY)



POTATO LEAF ROLL VIRUS (PLRV)



TUBER DEVIATIONS

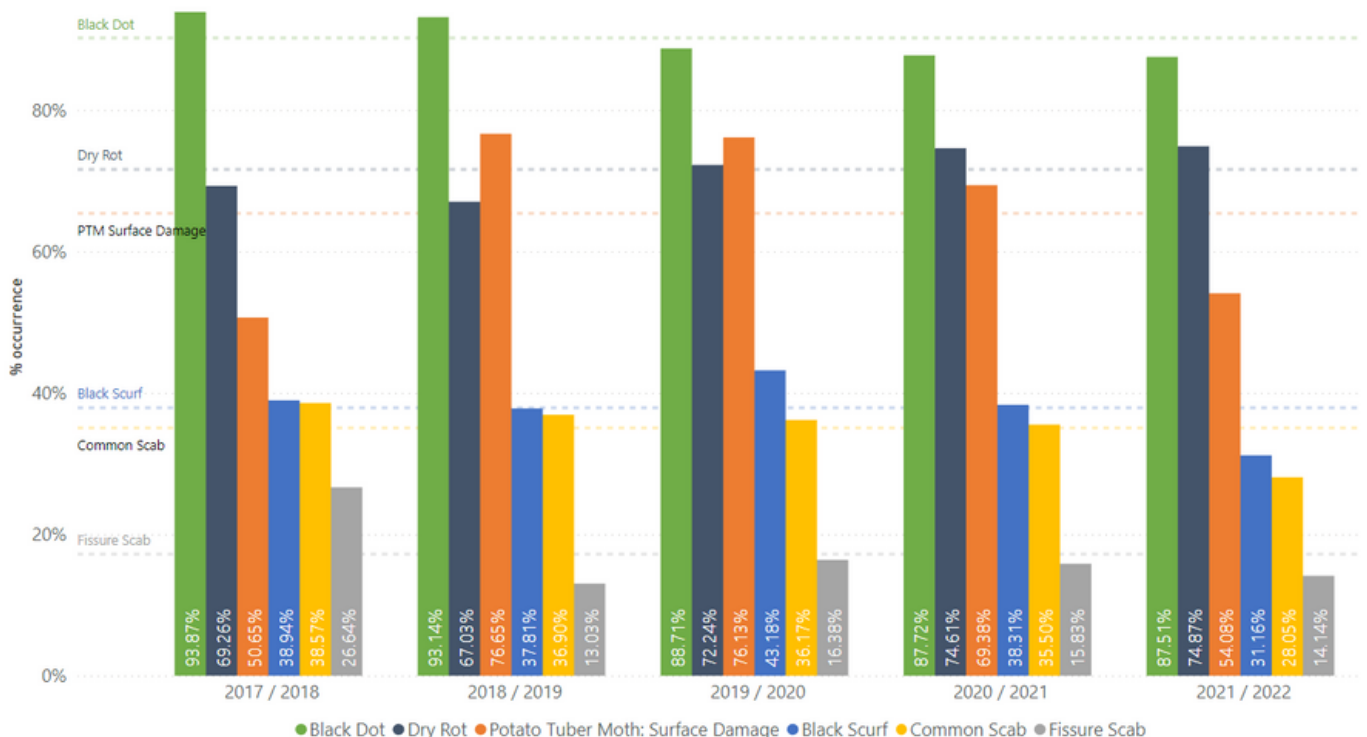
During visual tuber inspections conducted for the 2021/2022 season, an average of 2.292% Black Dot / Silver Scurf was found on material planted as Generation 0 to Generation 2, and 5.449% for material planted as Generation 3 to Generation 5, and it was detected in 87.51% of all tuber inspections.

An average of 0.139% Dry Rot was found on material planted as Generation 0 to Generation 2, and 0.118% for material planted as Generation 3 to Generation 5, and detected in 74.87% of all tuber inspections.

Black Dot / Silver Scurf (87.51% of all tuber inspections), Dry Rot (74.87%), and Potato Tuber Moth: Surface Damage (54.08%) are the biggest concerns for deviations that occurred during tuber inspections, followed by Black Scurf, Common Scab, and Fissure Scab.



TOP 6 DEVIATIONS





ADDRESSING RISKS

All incidences where post-control results from certified seed lots exceed the maximum tolerances for PVY (15%), PLRV (5%), TSWV (5%), or the total virus infection (15%), are investigated by PCS, and growers are informed in writing.

Where very high infections are detected in post-control samples, the grower is expected to inform the buyer in writing and a copy of the notification must be supplied to PCS.

During the 2021/2022 season, one post-control sample exceeded the maximum tolerance for PVY, 12 samples for PLRV, and one sample for total virus infection.

During diffused lightsprout evaluations, varietal mixing was only detected in eight post-control variety samples.

Other matters dealt with included a few seed complaints, grower investigations on aspects such as provisionally certified seed potatoes sold, incorrect labeling of seed potatoes, variety switching, Table 1 crops planted in rotation, as well as special written requests submitted by growers.

REGULATED PESTS

RALSTONIA SPP.

Ralstonia solanacearum and *Ralstonia pseudosolanacearum* are classified as Regulated Non-Quarantine (RNQ) pests which are regulated only in terms of propagation material.

All units registered under the Scheme are tested for the Bacterial wilt-causing organisms, *Ralstonia* spp.

The number of seed potato production units infected with bacterial wilt has decreased from 35 in 1994, to none or one in the last six years, with two reported in the 2021/2022 planting season, one in KwaZulu-Natal and one in the Northern Cape. The unit in Kwa-Zulu Natal was the biggest unit ever infected with Bacterial Wilt.

Units at five growers are still being monitored by PCS. One in KwaZulu-Natal, two in the Northern Cape, one in Limpopo, and one in the Sandveld.



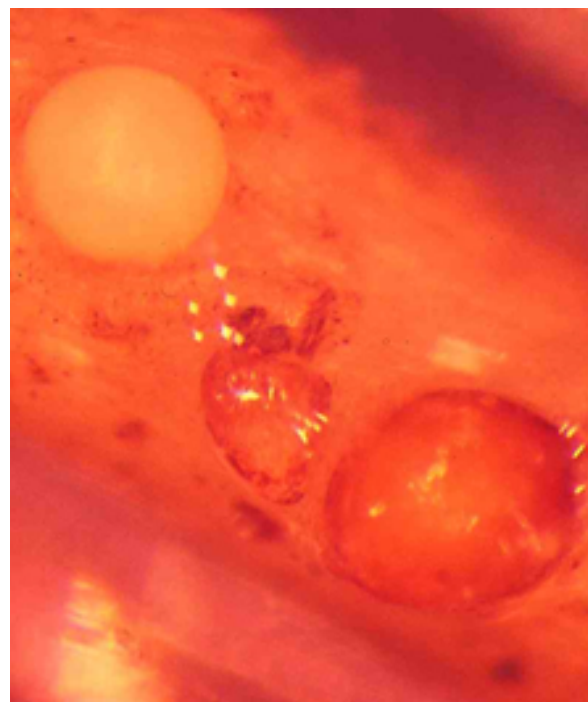
GOLDEN CYST NEMATODE

No seed potato production units had been infected with *Globodera rostochiensis* for many years.

The last units where cyst-forming nematodes had been found were identified as *Globodera capensis*, which is endemic to South Africa and is not a regulated pest.

All units with orders for Cyst Nematode had been resampled, tested, and found negative. There are therefore no longer any units with orders for Golden Cyst Nematode in South Africa.

DALRRD has ongoing surveillance for this pest and all units registered for export are sampled and laboratory tested for the presence of the organism.



WART DISEASE

Synchytrium endobioticum, the organism causing wart disease was last found in the 1920s in South Africa. Control Measures R.110 as amended in R.1998 of 8 April 2022, removed some of the areas in KwaZulu-Natal, after monitoring and samples taken tested negative.

The DALRRD has ongoing surveillance for this pest.



https://live.staticflickr.com/3768/10680400636_28e7c7c4ab.jpg

PEPPER RINGSPOT VIRUS (PepRSV)

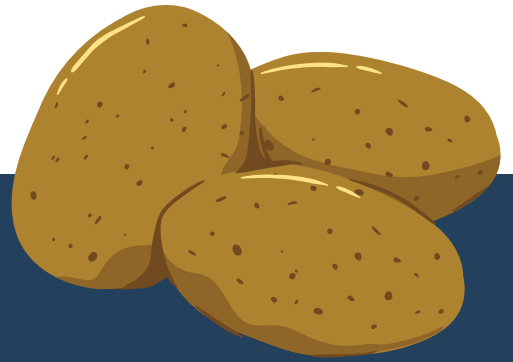
Potatoes with strange corky ring symptoms on the skin tested positive for PepRSV, formerly known as a Brazilian strain of Tobacco Rattle Virus (TRV) or Tobacco Rattle Virus serotype 3. In April 2022, a diagnostic sample taken during a tuber inspection of a seed potato planting in the Eastern Free State tested positive for the presence of PepRSV, which led to the subsequent withdrawal of certification in terms of the Scheme. This has since been confirmed by foliar symptoms.

Producers and role-players encountering such symptoms are requested to contact the DALRRD at 012 319 6384/012 309 8773 or the nearest PCS office for assistance.



FACTS AT A GLANCE

POTATO CERTIFICATION SERVICE



2021/2022



R 24 800 042

TOTAL INCOME

R 24 254 282

TOTAL EXPENDITURE

R 377 785

NET SURPLUS

25

EMPLOYEES

16

OFFICIALS

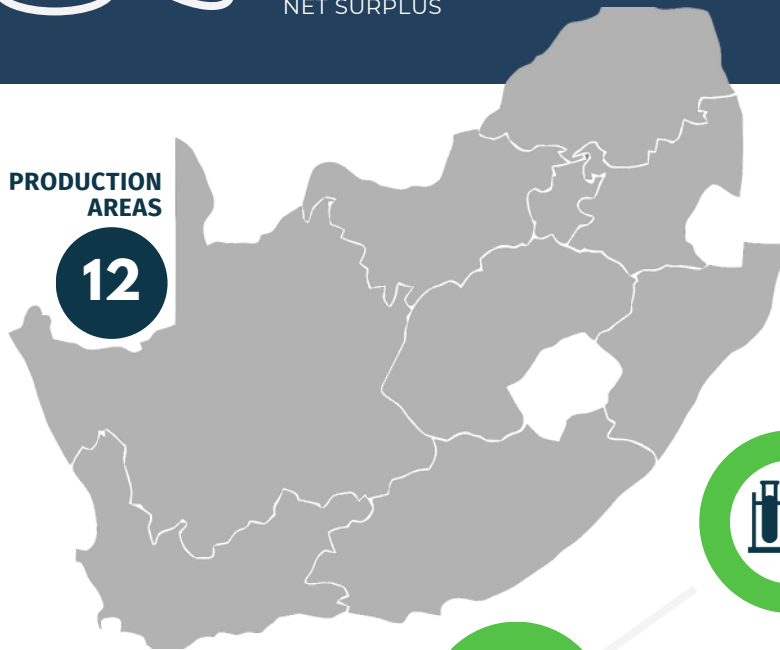
6

OFFICES



PRODUCTION
AREAS

12



GROWERS

100

SEED POTATO
GROWERS

51

AVERAGE
GROWER AGE

20

MOST NO.
OF SEASONS
REGISTERED
BY A GROWER

CERTIFICATION
PROCESS



10 883

HECTARES
REGISTERED

REGISTRATION



4 725

FIELD
INSPECTIONS

FIELD INSPECTION



5.1 M

TUBERS
SAMPLED

SAMPLING



8.2 M

TUBERS
VISUALLY
INSPECTED

TUBER INSPECTION



474 472 KM

TRAVELLED BY
CERTIFICATION
OFFICIALS



10 YEARS

AVERAGE EXPERIENCE
OF CERTIFICATION
OFFICIALS

MINI TUBER PRODUCTION

- 3** *IN VITRO* MULTIPLICATION FACILITIES
- 5** TESTING FACILITIES
- 8** MINI TUBER PRODUCTION FACILITIES

114
REGISTERED VARIETIES

77
REGISTERED HECTARES

3 027 131
IN VITRO'S PLANTED

9 565 047
MINI TUBERS CERTIFIED

1 965
TISSUE CULTURE AND MINI TUBER PRODUCTION SAMPLES COLLECTED



SCHEME GO-G7

123 K
SOUTHERN REGION

842 K
NORTHERN REGION

1.84 M
EASTERN REGION

7.29 M
CERTIFIED YIELD
25 KG BAGS

4.49 M
WESTERN REGION

70

REGISTERED VARIETIES

10 806
HECTARES

REGISTERED HECTARES

108.06
HECTARES

AVERAGE HECTARES REGISTERED BY A GROWER

698.3
HECTARES

MOST HECTARES REGISTERED BY A GROWER

596 840

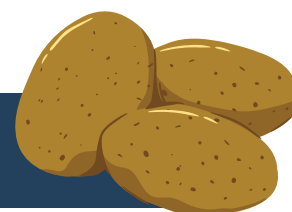
MOST BAGS CERTIFIED BY A GROWER

675
AVERAGE BAGS PER HECTARE

72.9 K
AVG BAGS PER GROWER

16.8
TONNES

7.24 M
TUBERS VISUALLY INSPECTED





CONTACT US

POTATO CERTIFICATION SERVICE

HEAD OFFICE



Sanette Thiar

MANAGING DIRECTOR

+27 82 927 7752

sanette@potatocertification.co.za



André Wessels

TECHNICAL MANAGER

+27 76 390 0085

andre@potatocertification.co.za



Reinette van Deventer

BOOKKEEPER AND PAYROLL
ADMINISTRATOR

+27 82 561 6250

reinette@potatocertification.co.za



Rolindie de Klerk

DATA ADMINISTRATOR

+27 72 672 4919

rolindie@potatocertification.co.za

REGIONAL MANAGERS



Jaco Botes

CHRISTIANA

+27 60 997 5628

jaco@potatocertification.co.za



Jamie Jansen van Vuuren

DOUGLAS

+27 82 388 4038

jamie@potatocertification.co.za



Johandré Breitenbach

LYDENBURG

+27 72 780 9176

johandre@potatocertification.co.za



Dániel Möller

MALMESBURY

+27 82 522 2033

daniel@potatocertification.co.za



Johan Germishuys

PIETERMARITZBURG

+27 72 780 9879

johan@potatocertification.co.za



OFFICES OF POTATO CERTIFICATION SERVICE

HEAD OFFICE

Tel	+27 (0) 60 716 2607
E-mail	info@potatocertification.co.za
Web	www.potatocertification.co.za
Physical Address	Potato House 6 De Havilland Crescent Persequor Technopark Pretoria 0020
Postal Address	Private Bag X 135 Pretoria 0001

PRODUCTION AREAS

REGIONAL OFFICE

CHRISTIANA

DOUGLAS

LYDENBURG

MALMESBURY

PIETERMARITZBURG

PRODUCTION AREA

Eastern Free State
North West
Western Free State

Eastern Cape
Northern Cape

Limpopo
Mpumalanga

Ceres
Sandveld
Around Sandveld
Southern Cape

KwaZulu-Natal
North-Eastern Cape

GPS COORDINATES

● Head Office	E28° 16.381' S25° 44.722'
● Malmesbury	E18° 43.459' S33° 26.825'
● Douglas	E23° 46.287' S29° 03.233'
● Christiana	E25° 09.929' S27° 54.864'
● Lydenburg	E30° 28.262' S25° 06.311'
● Pietermaritzburg	E30° 25.059' S29° 39.415'

