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GROWING FOOD • PEOPLE • PROSPERITY

PGP MAGAZINE FOR DEVELOPING FARMERS

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PHAHAMA GRAIN PHAKAMA

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Editorial team

PHAHAMA GRAIN PHAKAMA: PRETORIA
PO Box 74087
Lynnwood Ridge
0040
■ 086 004 7246
■ www.grainsa.co.za

EDITOR AND DISTRIBUTION
Jane McPherson
■ 082 854 7171 ■ Office: 012 943 8285
■ jane@grainsa.co.za

PUBLISHING PARTNER
INFOWORKS MEDIA PUBLISHING
Assistant editor – Louise Kunz
■ louise@infoworks.biz
Team leader – Johan Smit
■ 082 553 7806 ■ Office: 018 468 2716
■ johan@infoworks.biz
Publishing – Elizma Myburgh, Joritha Hechter

PGP Farmer Development Programme

REGIONAL DEVELOPMENT MANAGERS

Free State
JACQUES ROUX
■ 082 377 9529 ■ jacques@grainsa.co.za

Mpumalanga
JERRY MTHOMBOTHI
■ 084 604 0549 ■ jerry@grainsa.co.za
■ Office: 012 943 8289 ■ Lanalie Swanepoel (Office assistant)

KwaZulu-Natal
GRAEME ENGELBRECHT
■ 082 650 9315 ■ graeme@grainsa.co.za

PHUMZILE NGCOBO (Assistant: Dundee)
■ 060 477 7940 ■ phumzile@grainsa.co.za
■ Office: 012 943 8287 ■ Nkosinathi Mazibuko (Office assistant)

North West
DU TOIT VAN DER WESTHUIZEN
■ 082 877 6749 ■ dutoit@grainsa.co.za
■ Office: 012 943 8290 ■ Lebo Mogatlanyane (Office assistant)

Eastern Cape
ERIC WIGGILL
■ 082 620 0058 ■ eric@grainsa.co.za
■ Office: 012 943 8277
■ Luthando Diko (Office assistant: Kokstad)
■ Cwayita Mpotyi (Office assistant: Mthatha)
■ Lindie Pretorius (Office assistant: Maclear)

Western Cape
MJ SWART
■ 072 090 7997 ■ mj@grainsa.co.za
■ Office: 012 943 8285 ■ Hailey Ehrenreich (Office assistant)



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Cover: Tiani Claassen

From the PGP desk

PHAHAMA GRAIN PHAKAMA

Liana Stroebel, Operations and Training Manager at PGP, sadly passed away from cancer on 4 June this year. She was a dedicated team member, passionate about farmer development, a fun-loving colleague and loyal friend who will be sorely missed. May she rest in peace.

TRIBUTE

We got to know Liana when she was a young lady living in Napier working for AgriMega. Liana joined the Grain SA Farmer Development Team in 2012.

She was placed in the Paarl office where she served the Western Cape developing farmers with passion and commitment. The farmers in the Western Cape who knew Liana well remember her with great appreciation and fondness.

After a previous leadership change at PGP, Liana was willing to jump into the position and keep the entire programme afloat. She managed to work under the most challenging conditions and kept the personnel and the farmers happy. Despite all the challenges, Liana always continued to do her very best for the farmers. Her attention to detail, commitment to the farmers and the work we do, and the hard work she put in have been an example to all of us.

Through her illness, Liana showed immense courage and endurance – her enthusiasm for the work was always clear. She remained cheerful and committed to working right up to the end and even attended an online meeting that we had with Standard Bank on the Friday before her passing. ■

JANE MCPHERSON, PGP ADVISOR

Meet the 2025 Farmer of the Year *finalists*

THE MAIN OBJECTIVE OF THE GRAIN SA FARMER OF THE YEAR COMPETITION IS NOT ABOUT WINNING, BUT ABOUT CELEBRATING THE LEARNING, GROWTH, DEVELOPMENT AND HARD WORK OF THE THOUSANDS OF FARMERS WHO ARE PART OF THE FARMER DEVELOPMENT PROGRAMME (FDP).

After the judging panel travelled nearly 6 000 km to visit all the nominees. These farmers were selected as the top achievers for 2025:

NEW ERA COMMERCIAL FARMERS (MORE THAN 250 TONS)

Botlhale Jacob Tshabalala (35) farms in the Lichtenburg region in North West. He decided to join his father on the farm in 2013 after completing his studies in electrical engineering and fitting and turning, and he has never looked back. To Botlhale, increasing his agricultural knowledge is key to being a successful farmer. This is why he attends the PGP study group meetings in the area on a regular basis.

His mentor, Du Toit van der Westhuizen, the regional development manager in North West, has also played a significant role in the development of his farming operation. Maize, sunflower and small white beans are produced at Driehoek, and he also has a commercial Brahman herd.

Mpho Patrick Munya (44) not only dreams of being a recognised successful farmer but is also committed to making a difference in the farming industry. He mentors aspiring farmers from Gauteng and North West, and also hosts Unisa students on his farm for their practical training.

Although he has a masters' degree in business management and over 20 years of experience in the corporate and agricultural environment, his passion for farming eventually led him back to his roots. In 2020, he started producing maize on his farm, Vlakfontein in the Magaliesburg area. He joined Grain SA in 2023 and, under the guidance of Du Toit van der Westhuizen, has been making strides as a new era commercial farmer. He is also a recognised Boran and Droughtmaster stud farmer.

At just 31, **Simphiwe Senzeko Mabuza (31)** is the youngest finalist in this year's competition. He produces maize and soybeans on his farm, Mooiplaats, in the Ermelo district in Mpumalanga.

He has been a member of Grain SA since 2018 and is mentored by Chris de Jager and the regional development manager, Graeme Engelbrecht from Grain SA's regional office in Dundee. His father, Shadrack Mabuza, ignited his passion for farming. He wants to continually expand his agricultural knowledge and hopes to inspire the youth to develop an interest in agriculture, and he would love to be a mentor for developing farmers.

POTENTIAL NEW ERA FARMERS (51 HA TO 249 TONS)

Madinda Matshinini (33) worked alongside his father for a few years before he passed away in 2022. He then had to step in and take over the 435 ha farm, Naudeskop, near Bethlehem in the Free State.

Under the guidance of his mentor, Jacques Roux, regional development manager in the Free State, Madinda produces maize, sunflower and soybeans and has a Bonsmara herd. He is an active member of the Kaallaagte farming association and also grows vegetables, which are sold in the community.

Nkosana Mtimkulu (41) farms at Amantle near Zeerust in North West. He produces sunflowers, soybeans and small white beans under the guidance of his mentor, Du Toit van der Westhuizen. His parents' resilience shaped his journey into agriculture.

After he left the city life and a career in sales and marketing behind, he was determined to create something from ground level. He joined Grain SA two years ago and has benefitted from study group sessions and other growth opportunities presented through the Farmer Development Programme.

Thwala Jacob Mlungisi (44) worked as a driver for various farmers and companies, but he started farming part-time in 2012. He is now farming full-time at Kaalvlakte in the Dannhauser region in KwaZulu-Natal, where he produces maize and soybeans. His livestock component consists of cattle, sheep and goats.

He joined the Grain SA Farmer Development Programme in 2022 and is mentored by Graeme Engelbrecht. To expand his agricultural knowledge, he has attended several courses presented by Grain SA. He dreams of becoming a fully-fledged commercial farmer, producing more than 1 000 ha.

SMALLHOLDER FARMERS (11 HA TO 50 HA)

After working in the mines in Rustenburg for a few years, **Itumeleng Mongane (63)** made the decision in 1991 to return home to Mahikeng in North West to farm with his father. Together they farmed on 30 ha of communal land in the village, where they planted sunflowers and kept some cattle.

He joined Grain SA in 2012 and produces maize and sunflower under the guidance of the PGP regional office in North West. He is part of the Mooifontein Study Group and grabs any opportunity to increase his agricultural knowledge.

The chairperson of the Syferfontein Study Group, **Magolela Ali Morena (54)**, grows maize and beans in the Sikhukhune Village in Limpopo. He joined Grain SA in 2020 and is developing as a farmer under the guidance of Jerry Mthombothi, regional development manager at PGP's regional office in Mbombela.

In the 2023/2024 planting season, he harvested 6,5 t/ha and is hoping for an even higher yield this season. His mother ignited his passion for agriculture. Magolela helped to establish a few other PGP study groups in his area.

Vusumuzi Mnyandu (68) produces maize and potatoes on Plot 5 Slovo in the Ermelo region in Mpumalanga. Vusumuzi was a provincial healthcare manager in Gauteng, but after retiring in 2010, he started planting potatoes and maize on the family's lease lands in Dundonald.

Before joining Grain SA in 2015, the yields were poor. However, the knowledge he acquired through study group sessions and his mentor, Jerry Mthombothi, has helped him to improve his agricultural practices. As chairperson of the Sijamekuthuleni Study Group, he has recruited many members, and the study group has grown to 62 members.

SUBSISTENCE FARMERS (LESS THAN 10 HA)

The difference agricultural knowledge can make is clear in the farming operation of **Boyees Mrwetyana (56)**, who farms in the Mount Fletcher area in the Eastern Cape under the care of PGP's regional office in Maclear.

After joining the Farmer Development Programme in 2014, he started understanding agricultural terms such as hectares and tons. Before joining the programme, he used to get twelve to 15 bags of maize per hectare, but now his yield is always between 5 t/ha to 6 t/ha. Boyees is the chairperson of the Hlankomo Study Group.

Lindiwe Maureen Kubheka (58) produces maize on communal land in the Dannhauser district of KwaZulu-Natal. This area is serviced by PGP's regional office in Dundee. Lindiwe is also the chairperson of the Newcastle/Doornkop Study Group.

While employed as a cleaner, Lindiwe was also farming part-time. After being retrenched in 2012, she made her living from farming, just like her parents. She is now also imparting her knowledge to her children. She joined the FDP in 2015.

Sarah Ramasego Matladi (49) developed an interest in agriculture as a little girl, watching her father grow maize and other vegetables. After she resigned as a cleaner at a school, she turned to farming as a way to provide for her family. Her husband, who worked at a mine, supported her by buying a tractor and other farm implements.

She joined Grain SA in 2021 and is an active member of the Mahukubyane Study Group in Limpopo, where Jerry Mthombothi plays a mentoring role. Since attending these sessions and other workshops, she has improved her yield and managed to harvest 7 t/ha in the previous season. ■

LOUISE KUNZ,
ASSISTANT EDITOR, PULA

Why it is important to keep your equipment clean

RECENT OUTBREAKS OF DISEASES SUCH AS FOOT-AND-MOUTH DISEASE IN CATTLE, BIRD FLU IN POULTRY AND GOSS'S WILT IN MAIZE HAVE REMINDED FARMERS HOW IMPORTANT STRONG BIOSECURITY MEASURES ARE FOR SOUTH AFRICAN FARMS. THESE DISEASES DO NOT JUST HURT FARMERS' POCKETS – THEY ALSO PUT THE COUNTRY'S FOOD SUPPLY AND EXPORT OPPORTUNITIES AT RISK.

Considering that a disease outbreak could destroy an entire harvest or wipe out a herd, it is easy to see why good biosecurity practices have become a farmer's first and most important line of defence.

MACHINERY AND EQUIPMENT

One simple but essential way farmers can protect their farms is by regularly cleaning machinery and equipment. Why? When soil, plant rests or manure sticks to tractors, ploughs, harvesters or even shovels, it can carry harmful germs, pests and weed seeds. By keeping equipment clean, farmers can avoid spreading these problems to their own fields or their neighbours' farms.

According to Morné le Roux, a new business development and technical consultant at Ecowise, farms must have a proper daily cleaning and disinfection programme as part of their biosecurity plan. 'Implementing a formal terminal clean-out programme and using approved cleaning and disinfecting chemicals after every production day is vital for biosecurity on farms,' Le Roux explains.

He adds that farms should also have a pre-requisite programme (PRP) and a complete hazard analysis and critical control points (HACCP) plan as part of their biosecurity programme. These plans help to control risks and keep the production environment safe. Farmers can get help and advice from their veterinarians or suppliers regarding these programmes and plans.

According to Le Roux, daily cleaning and disinfection tasks should include the following:

- All vehicles must be disinfected before entering the farm.
- Staff and visitors must use showers, hand sanitisers, surface sanitisers and foot baths, as well as disinfect their boots, before entering the farm.
- Places such as poultry houses, pig farms, dairies and packhouses must be cleaned and disinfected, including all surfaces that touch food.
- All equipment must be washed and disinfected on the outside. On the inside, pipes and systems with rectangular shapes (for example, dairy equipment) should be cleaned using approved cleaning-in-place (CIP) chemicals that circulate inside to clean and sanitise.
- Feed silos and storage areas must be cleaned and disinfected when they are empty and not in use.
- With any disease outbreak, farmers could apply aerial disinfection or fumigation to help control the disease.

Le Roux stresses that these steps are essential to protect animals, people and the farm business.

Reasons why clean machinery matters

- Diseases such as Sclerotinia on sunflower and Goss's wilt, which affects maize, can spread through contaminated equipment. If you borrow a tractor from a neighbour whose field is infected, the soil or plant material on its tyres could bring the disease to your farm. Regular cleaning ensures that your machinery does not spread diseases.
- Clean equipment reduces the risk of introducing pests or weeds that compete with your crops or harm your livestock. For example, gerbils thrive in areas with abundant food sources such as seeds or crop residues. If machinery is not cleaned, it can spread weed seeds or leftover grains across fields, providing food and a habitat for this critical pest that can reduce a grain harvest by up to 70%. Weed seeds carried on equipment can also reduce yields when these seeds sprout and compete for nutrients and water.
- South Africa's agricultural exports depend on meeting strict international biosecurity standards. If your crops become contaminated, they may fail to meet maximum residue limits or be rejected due to pest or disease presence.
- Preventing disease outbreaks through clean machinery is far cheaper than managing an outbreak. Treating infected crops or livestock, replacing lost yields or dealing with quarantine measures can strain your resources.
- As a farmer, you are part of a broader agricultural community. Poor biosecurity on your farm could spread diseases to neighbouring farms, damaging relationships and the local economy. Clean machinery helps you contribute to a safer community.

> Traceability is gaining importance as consumers and industry players demand food safety, consistent quality and supply chain transparency.

PRACTICAL STEPS TO KEEP MACHINERY AND EQUIPMENT CLEAN

There are practical, cost-effective ways to maintain clean machinery and enhance biosecurity on your farm. A recent article in *SA Graan/Grain* named 'Key guidelines for on-farm biosecurity', written by Dr Lavinia Kisten, research coordinator at Grain SA, provides some of the following guidelines:

1. **Designate a parking area:** Direct all visitors to park in a monitored area away from production zones. Input suppliers and technicians visiting the farm should preferably utilise on-farm vehicles rather than their own to prevent contamination across other farms.

2. **Set up a wash-down area:** Create a designated area for cleaning machinery, ideally away from production zones, to prevent recontamination. If water is scarce, a simple gravel or concrete pad where you can sweep off debris can work. Use a high-pressure hose or broom to remove soil, plant material and manure from tyres, undercarriages and blades. Do not forget also to wash small tools, such as spades.

3 **Disinfect after cleaning**: After removing debris, disinfect your equipment to kill any remaining pathogens. A cost-effective solution is a 1:10 bleach-to-water mix (one part bleach to ten parts water), which can be applied with a sprayer or cloth. Focus on high-risk areas such as tyres and cutting surfaces. Leave equipment in the sun after cleaning, as sunlight can help to kill some pathogens.

4 **Clean before and after use:** Always clean machinery before entering your fields, especially if it is borrowed or shared. Similarly, clean it after working in a field, particularly if you suspect pests or diseases. This prevents cross-contamination between fields or farms.

5 **Monitor and maintain equipment:** Regularly inspect your machinery for wear and tear, as damaged surfaces can hide pathogens. Simple maintenance, such as greasing moving parts or patching cracks, can improve cleaning effectiveness and extend equipment life.

6 **Train yourself and your workers:** Educate yourself and your workers about the importance of clean equipment. Display a simple biosecurity checklist near your wash-down area to remind everyone of cleaning protocols.

7 **Use digital tools:** Apps such as Biosecurity Africa, developed by Cropwatch Africa, allow you to report and monitor pest and disease outbreaks in your area. This knowledge can help you to decide when to intensify cleaning efforts, especially if a nearby farm reports an outbreak. Download the app in the Play Store for Android phones or the App Store for IOS phones.

OVERCOMING CHALLENGES

Limited access to water, disinfectants or cleaning facilities can make biosecurity challenging. However, you can adapt by using dry cleaning methods (brushing off debris), pooling resources with neighbours to buy disinfectants in bulk or seeking support from agribusinesses or government programmes.

Financial constraints may also discourage investment in biosecurity. However, the cost of cleaning is minimal compared to the potential losses from a disease outbreak. Start small, focussing on one or two key machines and gradually building your biosecurity system as your farm grows.

CONCLUSION

South African farmers are not just farming for today but building a legacy for future generations. By prioritising biosecurity through clean machinery, farmers position their farms to seize future opportunities, whether supplying local markets or exporting to global buyers.

Good biosecurity practices also support the bigger goal of sustainable farming, which is vital, as farmers face challenges such as soil damage, water shortages and climate change. By controlling pests and diseases, farmers help protect the environment and play their part in building a stronger, more reliable food system for everyone.

Keeping machinery and equipment clean is a simple yet powerful biosecurity practice that can protect farms, livelihoods and communities.

For advice or diagnostic services, contact Grain SA's research team (086 004 7246) or the Diagnostic Clinic at the Forestry and Agricultural Biotechnology Institute (FABI) (012 420 3939 or *diagnostic.clinic@fabi.up.ac.za*). ■

VALERIE CILLIERS, PULA CONTRIBUTOR

Farms, food and trade protection is crucial

THE BIOSECURITY SUMMIT 2025 WAS A KEY GATHERING AIMED AT HELPING FARMERS PROTECT THEIR CROPS AND LIVESTOCK FROM DAMAGING THREATS, SUCH AS GOSS'S WILT AND FOOT-AND-MOUTH DISEASE. THESE DISEASES NOT ONLY REDUCE HARVESTS AND ANIMAL HEALTH, BUT CAN ALSO BLOCK EXPORTS, LEAD TO BILLIONS IN LOSSES AND PUT JOBS AT RISK.

The event, which was held at the University of Pretoria (UP) and hosted by the National Biosecurity Hub under the theme 'Collaborative actions for food security and trade', brought together experts, farmers, government and agribusiness leaders.

Together they looked at ways to build a strong national biosecurity plan, which includes early warning systems, good on-farm practices and teamwork across all sectors to ensure farmers can keep producing food, earn a living and create rural jobs for the future.

It was a reminder that a strong farming sector needs proper support and systems to stop these threats before they spread.

THE IMPORTANCE OF BIOSECURITY FOR THE GRAIN INDUSTRY

Farmers face significant challenges from pests, diseases and weeds, which can wipe out crops or livestock and lead to a profound income loss. Diseases such as Sclerotinia have caused up to 80% yield losses in oilseeds, while others like Goss's wilt and Sudden Death Syndrome can lead to immediate export bans.

These threats highlight the need for every farmer to have a strong, practical biosecurity plan to keep farms safe before, during and after production, with support from the government, researchers and the farming industry.

Recent biosecurity threats

During the past five years, the grain industry has faced several serious threats:

- Goss's wilt was detected in South Africa in 2024, leading to trade bans, but through a task team and science-based action, the Namibia and Botswana ban was lifted, allowing over 550 000 tons of maize to be exported again.
- Sclerotinia hit sunflower production hard, with 90% of grain in the Koster area needing to be cleaned before delivery. The South African Sclerotinia Research Network has been set up to help manage this.
- Weeds such as Palmer amaranth, which is herbicide-resistant, continue to spread.
- And although not a plant disease, avian flu has affected the grain demand by reducing feed needs in the poultry sector, showing how animal health also impacts grain farmers.

CURRENT INDUSTRY ACTIONS

Grain SA, in partnership with other stakeholders such as the Department of Science, Technology and Innovation (DSTI) and the Technology Innovation Agency (TIA), are actively building biosecurity capacity in the sector. This includes setting up diagnostic clinics to quickly and accurately identify diseases and pests.

However, there is still a major need to improve pest and disease monitoring systems across the country. More investment is required to train young people and researchers to respond to these threats before they grow into crises.

Planning for a safer future

To prepare for the future, Grain SA is working closely with the Biosecurity Hub at the University of Pretoria to develop a national Grain Industry Biosecurity Plan. This plan depends on strong teamwork across the sector and includes clear, practical biosecurity guidelines for farmers to use on their farms. Education and awareness are key, and Grain SA is actively sharing information to help farmers protect their crops and livestock.

WHAT DO THE LEADERS SAY?

Key takeaways from some of the leaders in the agricultural sector who were part of the summit:

- Prof Francis Petersen (vice-chancellor of UP) opened the summit by stressing that biosecurity is a global challenge, requiring local solutions and rapid response systems.
- Dr Wandile Sihlobo, chief economist at Agbiz, highlighted that South Africa's agricultural sector has doubled in value since 1994, with record exports and over 930 000 jobs in 2025.
- Dr Noluthando Netnou Nkoana from the Department of Agriculture, stated that strengthening biosecurity and protecting farmers from pests, weeds and diseases are essential to ensuring sufficient food production to uphold this right.
- The minister of agriculture, John Steenhuisen, emphasised that biosecurity and food security are core pillars of the national agricultural strategy, and that success requires trust, data sharing and inclusive governance.
- Prof Lisa Korsten from UP highlighted the importance of diagnostics in safeguarding food security, sovereignty and trade, while raising concerns about food safety incidents such as listeriosis and spaza shop disasters.

The consensus is clear, biosecurity is a shared responsibility among the government, industry, researchers, farmers and the public. Building a resilient system means embedding trust, transparency, commitment and enabling legislation.

CONCLUSION

The Biosecurity Summit 2025 made it clear that protecting South Africa's farms from pests, diseases and other biosecurity threats is not just a technical issue, it's essential for ensuring food security, safeguarding trade and securing rural jobs. Through strong collaboration, practical on-farm measures, investment in diagnostics and research, and clear national planning, the agricultural sector can build a more resilient future.

DR GODFREY KGATLE, RESEARCH COORDINATOR, GRAIN SA

Calibrate implements to maximise yield and profit

FARMING IS ALL ABOUT DOING THE RIGHT ACTION CORRECTLY. THIS WILL INCREASE YOUR YIELD AND PROFITS. THE CALIBRATION OF EQUIPMENT CAN SIGNIFICANTLY IMPACT PROFITABILITY BY IMPROVING EFFICIENCY, REDUCING WASTE, ENSURING QUALITY AND PREVENTING COSTLY ERRORS.

The mistake of not calibrating the planter and sprayer can drastically influence the final yield. A plant population that is too high or too low will cost you money, so it is best to plant adequate seeds to ensure that the final plant stand is optimum for the desired yield. Unfortunately, a fertiliser mistake will also cost you a lot of money. It doesn't matter if you apply too little or too much fertiliser – your profit is harmed.

HOW TO CALIBRATE

Table 1 and **2** (on page 10 and 11) show examples of calibration sheets. Use a sheet like this, apply your own data to the coloured blocks and do your own calculations.

Example: Table 1

In Table 1, the example of a 400-litre sprayer, spraying 7 m wide with a 21-nozzle sprayer and an 8-ton fertiliser or lime spreader, spreading 11 m wide, is demonstrated.

In the first section (in blue), you must determine the size of the area over which the product is applied, secondly (with the brown) how much is used and thirdly (with the green) how much is used per hectare, and then how to change the application rate to meet the required application rate. In the last portion (with the yellow), determine how much chemicals must be added to the sprayer.

Example: Table 2

In Table 2 an example of a maize planter with six rows applying fertiliser at planting is demonstrated.

In the first part (in blue) you can apply general information. In the second part (green) the number of pips per metre needed is calculated. The third part (pink) shows how much is applied per hectare or per metre, and then how to change the application rate to meet the required application rate.

Let's take planting maize seed as an example. Suppose the desired maize stand is 40 000 plants per hectare. Assuming the number of surviving, healthy plants will be approximately 90%, the planting rate (PR) can be calculated by the following equation:

PR = plants per hectare desired/emergence percentage

PR = 40 000/0,90

PR = 44 444 seed/hectare

Seed per metre of row required for planting: Convert the planting rate to reflect the row spacing in use. In this example, a 90 cm row spacing is used for the calculations. One hectare is 100 m wide x 100 m long, or 10 000 m^2.

To calculate the distance between the seeds:

1. Calculate the number of rows per 100 m. This is done by dividing 100 by the row within this example, 100 m/0,9 m = 111 rows.
2. Divide the planting rate (PR) by the number of rows – for example, 44 444 (PR)/111 (rows per 100 m) = 400 pips per 100 m row.
3. Divide 100 m row by the pips per 100 m to calculate the interplant spacing – for example, 100/400 = 0,25 m apart.
4. This means that in one metre, 4 pips must be planted – for example, 1/0,25 metres = 4 per metre.

With this known, the planter can be taken to the field to measure the plant density

CONCLUSION

By using these calibration sheets, farmers can ensure the right action is taken correctly. Remember, a mistake during planting cannot be corrected without replanting, so make sure everything is working correctly. Compare the number of bags of seed planted against the bags needed for the field on a regular basis. Also, check the planting distance regularly.

PIETMAN BOTHA, INDEPENDENT AGRICULTURAL CONSULTANT

Calibrate implements to...

1 *Calibration sheet for a sprayer and a fertiliser or lime spreader.*

	Line number (L)	How to calculate using the line numbers	Sprayer	Fertiliser or lime spreader
Tractor gear and RPM used			1 high 1 500 RPM	1 high 1 500 RPM
Tank capacity	1		400	8 000
Working width (m)	2		7	11
Number of nozzles or application points	3		21	
Length of test run 100 (m)	4		100	100
Time of test run 1 (seconds)	5		58	58
Time of test run 2 (seconds)	6		57	57
Time of test run 3 (seconds)	7		56	56
Time of test run 4 (seconds)	8		57	
Average time of test run	9	Sum (L5-L8) / 4	57	57
Area of test run	10	L2 x L4	700	1 100
% of hectare (10 000 m^2)	11	L10 / 10 000	0,07	0,11
Delivery to application points during the average time for the test run			ml	kg
Unit 1	12		700	150
Unit 2	13		700	
Unit 3	14		700	
Unit 4	15		700	
Unit 5	16		700	
Unit 6	17		700	
Unit 7	18		700	
Unit 8	19		700	
Unit 9	20		700	
Unit 10	21		700	
Unit 11	22		700	
Unit 12	23		700	
Unit 13	24		700	
Unit 14	**25**		**700**	
Unit 15	26		700	
Unit 16	27		700	
Unit 17	28		700	
Unit 18	29		700	
Unit 19	30		700	
Unit 20	31		700	
Unit 21	32		700	
Unit 22	33			
Unit 23	34			
Unit 24	35			
Unit 25	36			
Unit 26	37			
Unit 27	38			
Unit 28	39			
Total delivery for the average time of the test run	40	Sum (L12-L39)	14,7	150
Actual delivery rate per hectare	**41**	**L40 / L22**	**210**	**1 363,636364**
Delivery rate per hectare requested	**42**		**182,9**	**3 000**
Decrease or increase actual delivery by this litre or kg	43	L42 - L41	-27,1	1636,363636
Decrease or increase actual delivery by this percentage	44	L43 / L41	-12,90%	120,00%
Hectares that can be applied with delivery rate	45	L1 / L42	2,19	2,67
Make sure that your actual delivery rate equals the requested rate				
Dosage of chemical (litre/ha) applied according to label	**46**		**0,5**	**1,5**
Amount of chemical needed to add to the tank	47		1,09	4

2 *Calibration for a planter with the application of fertiliser on the planter.*

	Line number (L)	How to calculate using the line numbers	Planter	Fertiliser application on planter
Tractor gear and RPM used			1 high 1 500 RPM	1 high 1 500 RPM
Number of planting units	1		6	6
Row spacing	2		0,9	0,9
Working width (m)	3		5,4	5,4
Desired plant population per hectare	4		40 000	
Emergence percentage	5		90%	
Planting rate per hectare	6	L4 / L5	44 444,4	
Row spacing	7		0,9	
Number of rows per 100 m	8	100 / L7	111,1	
Number of seeds per row (100 m)	9	L6 / L8	400	
Pips per metre planted	10	L9 / 100	4	
Interplant spacing	11	1 / L10	0,25	
Number of pips per 10 m	12	L10 x 10	40	
Length of test run (m)	13		10	10
Area of test run m^2	14	L3 x L13		54
% of hectare (10 000 m^2)	15	L14 / 10 000		0,0054
Delivery to the units for the test run			pips	g
Unit 1 (pips or g)	16		5	300
Unit 2 (pips or g)	17		5	300
Unit 3 (pips or g)	18		6	300
Unit 4 (pips or g)	19		5	300
Unit 5 (pips or g)	20		7	300
Unit 6 (pips or g)	21		5	300
Unit 7 (pips or g)	22			
Unit 8 (pips or g)	23			
Average pips planted per planter unit for the length of the test run	24	Average for (L16 - L23)	5,5	
Total kg delivered for the test run	25	Sum (L16 - L23)/ 1 000		1,8
Actual pips per metre	26	L24/L13	0,55	
Actual interplant spacing per pip	27	1/L26	1,82	
Actual delivery rate per hectare (kg)	28	L24/L15		333,3
Requested delivery rate per metre or hectare	**29**		**0,25**	**250**
Decrease or increase actual delivery by this cm or kg	30	(L27 or L28) - L29	-1,57	-83,3
Decrease or increase actual delivery by this percentage	31	L30/(L27 or L28)	-86,25%	-25,00%
Make sure that your actual delivery rate equals the requested rate				

Be aware of purple fleck on soybeans

DURING THE HARVESTING SEASON, SOYBEAN FARMERS WERE URGED TO STAY ALERT WHEN REPORTS OF PURPLE STAIN, A DISEASE CAUSED BY CERCOSPORA KIKUCHII, SURFACED. THIS ARTICLE AIMS TO RAISE AWARENESS OF THE RISING INCIDENCE OF CERCOSPORA IN SOYBEANS, ITS SEEDBORNE NATURE, AND ITS IMPACT ON BOTH YIELD AND GRADING AT HARVEST.

In 2021, the University of Pretoria's Forestry and Agricultural Biotechnology Institute (FABI), with support from the Department of Science, Technology and Innovation, the Technology Innovation Agency, the Maize Trust and Grain SA, launched a disease clinic focussed on grains. The clinic provides critical disease diagnostics and science-based guidance to farmers.

Since its establishment, it has reported increasing occurrence and distribution of anthracnose, stem canker (*Diaporthe aspalathi*), and notably, purple stain in soybean fields. These diseases can reduce seed quality, lower yields and compromise future crops if unmanaged.

> Diseases can reduce seed quality, lower yields and compromise future crops if unmanaged

STEPS TO ENSURE SEED HEALTH AND QUALITY

Cercospora, along with anthracnose, has been observed more frequently in recent years, raising concerns for those planning to retain seed for the next planting season.

Cercospora and *Diaporthe* are seedborne pathogens that can trigger disease outbreaks if infected seed is planted. Whether farm-saved or certified, farmers are urged to use healthy, treated seed to protect yields and prevent epidemics. Seed health is essential for strong emergence and disease resistance.

Poor-quality seed increases vulnerability to fungal pathogens and diseases such as *Cercospora*, *Diaporthe* and *Sclerotinia*. Hence, seed treatments using chemical and/or biological agents can enhance vigour, germination and early growth by protecting against seed- and soilborne pathogens, while minimising chemical inputs.

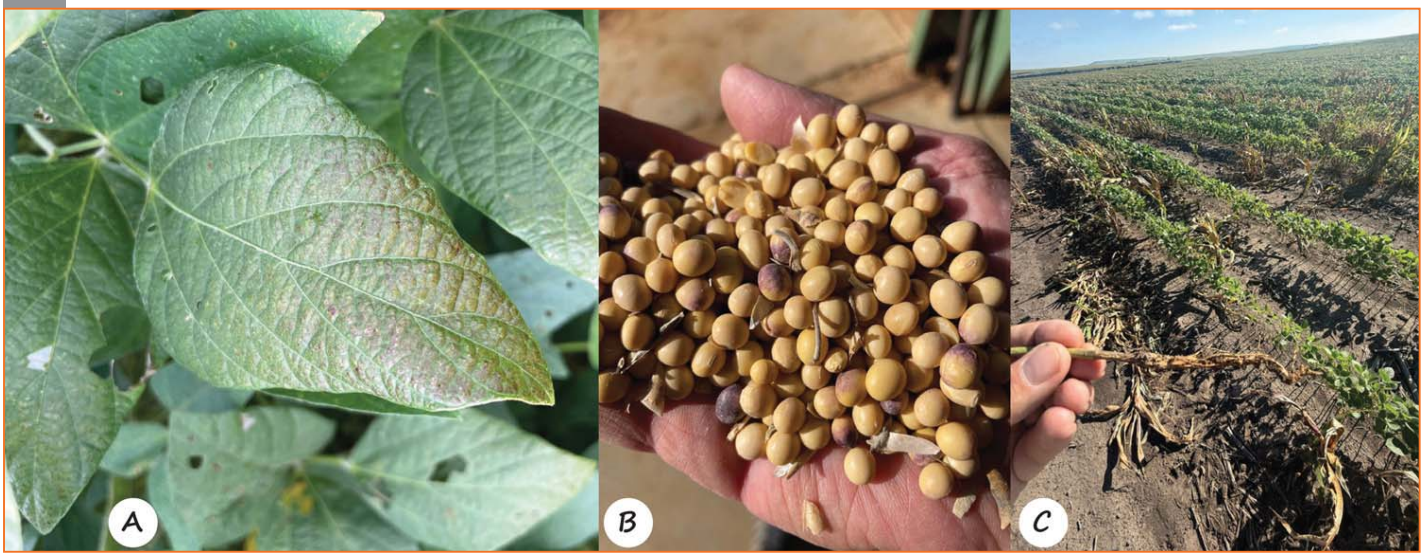
A glasshouse trial by Prof Sandra Lamprecht and Thabo Phasoana at ARC-Plant Health and Protection demonstrated the value of seed treatments in *Sclerotinia*-inoculated soil. Chemical treatments were more effective than biologicals alone, but the best results came from combining the two. These combinations effectively controlled diseases and eliminated viable sclerotia.

While benomyl fungicide improved good control of *Sclerotinia*, it did not address all damping-off pathogens. The trial confirmed that integrated seed treatment strategies, especially combining biocontrol and chemicals, significantly boost seedling health and establishment under disease pressure.

WHAT FARMERS SHOULD KNOW ABOUT SOYBEAN GRADING

- Your soybean crop must meet the minimum standards for seed quality as laid down in the *Agricultural Product Standards Act (Act No. 119 of 1990)*, with any relevant amendments up to 21 April 2017. These legal standards are used throughout the soybean value marketing chain to ensure that the product can be bought and sold with confidence by all parties and companies involved.
- Defective soybean seeds retained on the 4,75 mm round-hole screen are allowed up to a maximum of 10%. Exceeding this limit can result

1 **Cercospora *on soybeans causes three diseases: (A)* Cercospora *leaf blight, (B) purple seed stain (PSS) and (C) pod and stem blight.***



in the downgrade of the soybeans to Class Other Soybeans (COSB), negatively impacting their marketability, processing suitability and overall pricing.

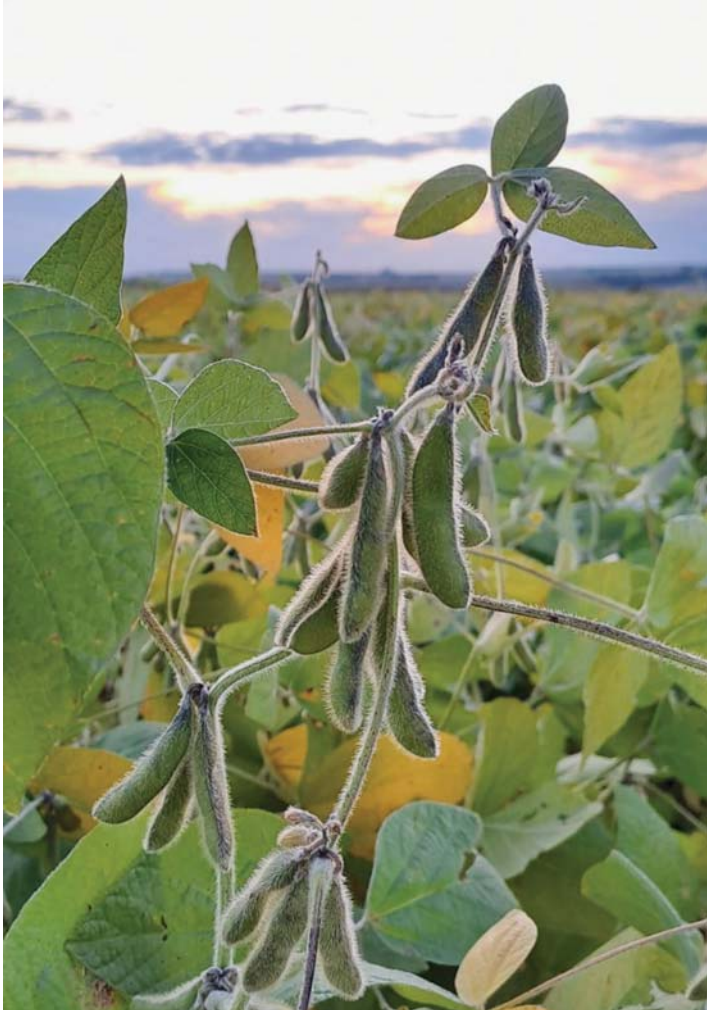
- Relating to *Cercospora*, a downgrade due to quality may not be the biggest risk, as you may be able to stay under the 10% deviation. However, continued planting of infected seed may lead to disease epidemics in your field, resulting in possible yield losses and further quality issues in subsequent seasons.

IMPACT OF *CERCOSPORA KIKUCHII* ON SOYBEANS IN THE FIELD

Cercospora causes three primary diseases in soybean fields: *Cercospora* leaf blight (CLB), purple seed stain (PSS) and pod and stem blight.

- CLB typically manifests on the upper canopy leaves late in the growing season, presenting as a reddish-purple to bronze discolouration with a leathery appearance (**Figure 1A**). This disease reduces the plant's photosynthetic capacity and can lead to premature defoliation, ultimately affecting the yield and plant health.
- The pathogen also causes purple stain, which is characterised by a distinctive purple discolouration on the seed coat (**Figure 1B**). While purple stain does not directly affect germination, it significantly reduces the seed quality and market acceptance (**Figure 1C**). Another common disease is Phomopsis Seed Syndrome, which affects seed development and can result in shrivelled, cracked or mouldy seeds.
- A third manifestation is pod and stem blight, where dark lesions develop on pods and stems, often leading to early pod drying and seed infections.

These diseases, whether occurring individually or together, can significantly reduce the quality and profitability of soybean crops.



CONCLUSION

With *Cercospora* rising in South African soybean fields, farmers must prioritise seed health to safeguard future yields. Early disease detection and the use of treated, certified seed can prevent outbreaks and improve crop resilience. Integrated seed treatment strategies offer adequate protection and should be part of every grower's disease management plan.

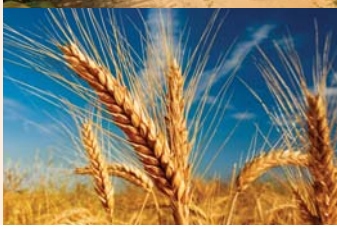
Please contact the Grain SA research team if you need assistance with pest and disease diagnostics. ■

DR GODFREY KGATLE,
RESEARCH COORDINATOR, GRAIN SA

WORDS OF WISDOM

Attention is a limited resource, so pay attention to where you pay attention.

~ HOWARD RHEINGOLD
American critic, writer and teacher



BIOSECURITY IN ACTION:
Managing risk on South African farms

EVERY DAY, FARMERS WORK HARD TO PROTECT THEIR CROPS FROM THREATS THEY CAN SEE – DROUGHT, PESTS, DISEASES, WEEDS. BUT SOME OF THE BIGGEST RISKS ARE THE ONES THAT ARRIVE QUIETLY, OFTEN UNNOTICED, UNTIL THE DAMAGE IS DONE.

On-farm biosecurity is about staying one step ahead by putting simple, smart measures in place to stop pests, diseases, and weeds from getting a foothold. In South Africa, where our farms feed communities and support vital export markets, strong biosecurity is not just good practice – it's good business. By taking action on your farm, you're not only protecting your own future, but also helping to secure the future of South African agriculture.

KEEPING A CLOSE EYE: CROP MONITORING AND EARLY ACTION

Good biosecurity starts with knowing what's happening in your fields. Regular crop monitoring is one of the simplest but most powerful tools a producer has. By walking systematically and regularly through your fields, keeping an eye out for pests, diseases, and unusual symptoms, you give yourself the best chance to catch a problem early before it spreads, affects your yields, or harms your business.

Make sure someone – whether it's you, a worker, or an agronomist – checks your crops regularly, especially in high-risk areas like field edges, public roads, flood-prone zones, and gateways. These are likely entry points for pests and diseases. Also, remember the 'green bridge' – weeds and leftover crops between seasons that can host pests – should be removed or treated.

When you monitor, record what you see. Keep clear notes and photos of pest sightings, symptoms, and crop conditions. These records are not only useful for your own management decisions but also help the wider industry maintain market access by proving pests are being looked for and found absent.

If you spot something unusual, especially in a variety that's meant to be resistant, don't wait. Quick action can make all the difference. Contact the Grain SA research team or the Diagnostic Clinic at FABI (see contact details at the end of the article). You can also contact your local extension officer, agronomist, or crop advisor for support.

If the issue is unfamiliar or uncertain, reporting it to Grain SA or FABI is especially important to ensure accurate identification and coordinated response. In the meantime, mark the affected area, restrict access, and avoid moving any plant material. Clean hands, clothes, footwear, and equipment after being in contact with the area.

Being alert, taking early action, and reporting strange symptoms are not just about protecting your farm, but about protecting your neighbours, your region, and South Africa's grain industry as a whole.

KEEPING IT CLEAN: MANAGING PEOPLE, VEHICLES AND EQUIPMENT MOVEMENT ON YOUR FARM

Stakeholders such as inspectors, field agents, or contractors and machinery such as tractors, planters, and combine harvesters are essential for crop production. However, their movement is a primary pathway for the spread of pests (e.g., insects or nematodes), diseases (e.g., fungal pathogens like Fusarium and Sclerotinia) and weed seeds.

Figure 1: An example of a farm biosecurity sign.
Source: Adapted from the Australian Biosecurity Manual for Grain Producers

This risk is amplified where contractors and shared equipment often service multiple producers across diverse farming regions. A well-defined, practical protocol for cleaning and managing movement is therefore not just recommended, it is a cornerstone of effective on-farm biosecurity.

Here are some tips for effective cleaning:

- Use high-pressure water for muddy areas; compressed air works best for radiators and dry parts.
- Clean from the top down to avoid recontaminating cleaned surfaces.
- Apply a detergent or disinfectant (e.g., Virkon™ S, NutroChem Agricultural Range, Kärcher Disinfectant Solutions) after removing soil and plant debris. Ask your supplier for the best option.
- Dismantle parts where possible to reach hidden areas.
- Leave covers off to let equipment dry fully and allow easier inspection.
- Get a second opinion – fresh eyes may spot missed contamination.

Set expectations at the farm gate: Visitors should check in on arrival and be made aware of any access restrictions. Signage at entry points and production zones reinforces your biosecurity measures. Encourage the use of clean clothes and footwear and provide options like footbaths or disposable boot covers when entering crop or storage areas.

Consider higher-risk visitors: Agri-advisors, inspectors, contractors, and others who visit multiple farms are more likely to carry contamination. Ask them to clean vehicles and equipment before arriving and provide a quick biosecurity briefing when they enter. Sampling must always follow proper hygiene practices to avoid spreading pests between sites.

Limit and log movement: Keep visitor movement to a minimum, particularly around crop or storage areas. Maintain a visitor register with names, dates, and points of contact. This helps trace movements quickly if an incursion occurs. Use designated parking areas to keep production zones protected.

Keep staff in the loop: Everyone working on the farm should be aware of potential biosecurity risks and the appropriate protocol and

By monitoring your maize crop regularly, you will notice pests like fall armyworm in time.

know how to report anything unusual. If you're hosting a field day or demo, be especially vigilant and inspect key areas afterwards for signs of new pests.

Key principles for vehicle and equipment biosecurity

- Come clean, go clean: Adopt this as a farm policy for all vehicles and equipment, whether farm-owned or external.
- Designated cleaning area: Establish a dedicated, well-drained wash-down area, ideally away from cropping fields and water sources, to contain contaminants. This area should ideally allow for the collection of debris and wastewater.
- Risk-based approach: The intensity and frequency of cleaning should be proportionate to the risk. Movement between different farms always warrants a full clean-down. Movement within a large farm or a defined region requires careful consideration.

PREVENTING CONTAMINATION AND DISEASE SPREAD

Managing contamination risks requires attention at every stage of production, from seed selection to storage and livestock practices.

1 Source-certified seed

Always buy certified, traceable seed from reputable suppliers. Certified seed comes with documentation verifying purity, germination rate, and absence of weed seeds or diseases. Keep records of certification and seed origin to support traceability and market access if issues arise.

2 Maintain stored seed and grain hygiene

On-farm storage is increasingly common but comes with biosecurity risks. To minimise pest infestations, the following should be done:

- Clean silos, grain-handling equipment, and surrounding areas before and after use.
- Avoid mixing old carry-over grain with newly harvested grain.
- Use aeration fans to cool grain – aim for temperatures under 23 °C in summer and under 15 °C in winter – to slow pest development and reduce moisture.
- Regularly monitor stored grain (at least monthly) for live insects and signs of damage. Act quickly if pests are detected.
- Fumigate only in well-sealed silos and follow label directions to avoid residue issues that can lead to rejected grain.

Come clean, go clean: Adopt this as a farm policy for all vehicles and equipment.

3 Buy clean feed and isolate new stock

Grain, fodder, and livestock can all bring in unwanted pests or weed seeds.

- Inspect feed for contaminants and, if possible, obtain a weed and pest status declaration from the seller.
- Avoid long-distance feed sources unless necessary. Local feed reduces the risk of introducing new pests.
- Isolate new livestock for ten to 14 days in a designated holding area to contain possible weeds or parasites. Monitor this area for emerging weeds after rainfall.
- Keep records of all feed purchases and livestock movements and ensure proper hygiene before and after handling animals.

BASIC VEHICLE BIOSECURITY KIT

- A stiff brush and scraper to remove soil, plant matter, and debris from boots and equipment.
- Detergent or disinfectant for cleaning and sanitising footwear, tools, and surfaces.
- A dustpan and brush to clean out the vehicle cabin, where seeds or soil may collect.
- Hand sanitiser or hand wash for personal hygiene after handling plant material or equipment.
- A spare pair of rubber boots, boot covers, or clean shoes to avoid cross-contamination between sites.
- Strong plastic bags for storing dirty boots, clothing, or other disposable items.
- A pair of disposable gloves for handling potentially contaminated items safely.
- At least 5 litres of water for rinsing or washing equipment and footwear.
- A plastic tray or bucket to be used as a footbath or for cleaning tools and boots on-site.

GET ADVICE HERE

Contact the Grain SA research team to get in touch with the research community for advice or diagnostic services:

- Mike Ellis (072 287 7496; *mike@grainsa.co.za*)
- Dr Godfrey Kgatle (079 489 5966; *godfrey@grainsa.co.za*)
- Dr Lavinia Kisten (083 273 0709, *lavinia@grainsa.co.za*)
- Pfano Musetsho (065 887 7946, *pfano@grainsa.co.za*).

Alternatively, please contact the Diagnostic Clinic at FABI (012 420 3939, *diagnostic.clinic@fabi.up.ac.za*). ■

DR LAVINIA KISTEN, RESEARCH COORDINATOR, AND MLIBO QOTOYI, AGRICULTURAL ECONOMIST INTERN, GRAIN SA. FIRST PUBLISHED IN SA GRAAN/GRAIN, JUNE 2025.

NEW CENTRE fights foot-and-mouth disease

IN RESPONSE TO THE CURRENT WIDESPREAD OUTBREAK OF FOOT-AND-MOUTH DISEASE (FMD), RED MEAT INDUSTRY SERVICES (RMIS) ACTIVATED A CENTRALISED OPERATIONAL CENTRE (OC) AT ITS HEADQUARTERS ON MONDAY, 9 JUNE 2025.

The OC will be led by a designated RMIS veterinarian and will oversee a team of veterinary professionals and industry representatives, along with a specialist public relations and public affairs agency, forming the FMD Working Group. The FMD Working Group will be mandated to develop and implement a structured, time-bound response to the outbreak, with medium- to long-term goals, including a focus on vaccination among other key areas.

The primary objective of this plan is to guide RMIS in addressing the current FMD situation in South Africa, with a strong focus on protecting red meat role-players to ensure the long-term sustainability and growth of the industry. This is critical not only for the red meat sector but also for South Africa's broader agricultural economy, as the outbreak impacts the entire red meat value chain and poses a serious threat to the dairy industry and other sectors connected to red meat production.

Another key aim is to establish public-private partnerships (PPPs) at various levels to support the understaffed public veterinary sector by leveraging the expertise and capacity of the private sector.

IMMEDIATE RESPONSIBILITIES OF THE OC

- Finalising a three-month response framework to address urgent risks and establish a platform for long-term management. The medium-term plan will include two key components:
  - o Expanding and supporting the capacity of veterinary services to enhance disease control.
  - o Establishing FMD-free livestock compartments supplying all South African red meat abattoirs.
- Coordinating with the Joint Operations Centre (JOC) to align with government and industry stakeholders.
- Evaluating and enhancing the Government Contingency Plan. The department has shared its contingency plan with the industry, which the FMD Working Group will review and provide feedback.
- Initiating a local vaccine production strategy, which includes assessing funding requirements, establishing an implementation timeline and developing a financing model supported by industry funding.
- Centralising stakeholder communication through the appointed veterinarian, who will report directly to RMIS chief executive officer, Dewald Olivier.
- Implementing an electronic movement permit system: A basic, structured electronic Farmer Declaration system will be developed, communicated and enforced.

RECEIVE FMD NEWS

To enable rapid information sharing during the FMD outbreak, RMIS has activated a real-time communication system through the RMIS Traceability Platform. Registered stakeholders, including farms, communal landholders, auction houses, feedlots, abattoirs, testing stations, meat processors and veterinary practices, will receive concise WhatsApp alerts as soon as new information becomes available.

These alerts include urgent disease notifications, regulatory changes, official statements and operational updates. While notifications are issued nationally, detailed context will also be provided at provincial and incident-specific levels to ensure relevance and clarity.

To receive real-time FMD notifications via WhatsApp, stakeholders must register their production unit on the RMIS Traceability Platform: *https://rmis.co.za/rmis-traceability-platform/*.

RMIS PRESS RELEASE, 6 JUNE 2025

Corner Post

BY LOUISE KUNZ, ASSISTANT EDITOR

BOY ZAKEW NZIMANDE (56), ONE OF THE 2025 NOMINEES IN THE POTENTIAL COMMERCIAL FARMER OF THE YEAR CATEGORY OF GRAIN SA'S FARMER OF THE YEAR COMPETITION, BELIEVES THAT FARMING IS BUILT ON FIVE PILLARS: SOIL, KNOWLEDGE, LABOUR, CAPITAL AND MARKETS.

This passionate farmer followed in his father's footsteps and became a farm worker at the same farm in the Piet Retief area where his father worked. When he exchanged rural life for city life, he worked in Johannesburg across several industries, including mining and health and safety. He later opened his own business, Nzimande Hygiene Maintenance Services. During these years, he also farmed on a part-time basis with cattle and crops.

When the livestock side of his farming operation began to grow and more food was needed, he decided to walk away from the business to be a hands-on farmer. Farming became his priority. He planted more and also increased his livestock.

Boy currently plants yellow and white maize on 80 ha of his 838 ha farm, Sterkfontein, in Mpumalanga. His target is to increase production from 200 t to 250 t, which he is currently realising, to 350 t and more. His livestock component consists of Nguni and Brahman cattle, which are sold at auctions. He also breeds goats and broilers, which are sold in the local community.

In the previous season, the variable climatic conditions subjected some of Boy's fields to waterlogging and leaching of nutrients. Another challenge he often faces, is the problems arising from the surrounding communal areas. These include crop theft and the invasion of stray livestock, with subsequent damage to his crops. However, none of these challenges will deter him from his goal of contributing to fighting poverty and hunger in the country by promoting food security. 'I won't give up, because farming controls stomachs!' he says.

CONSIDER BOY'S ADVICE IF YOU WANT TO FARM:

- If you want to make money quickly, farming is not for you.
- Farming is not easy, so you need passion to persevere. It is loving what you do, even in the difficult times.
- It is a wonderful way to expand your knowledge – there is always something new to learn.

BOY'S STORY

WHO CONTRIBUTED TO YOUR SUCCESS?

The Phahama Grain Phakama (PGP) team has helped me grow as a farmer since 2017 through study group sessions, training courses and farm visits. If I am unsure of what to do, the team is just a phone call away.

DO YOU BELONG TO A STUDY GROUP?

I am the chairperson of the Amsterdam Study Group, where I am responsible for providing fellow study group members with information about general agricultural practices. I also need to ensure they have all the information regarding the meetings and events within the Farmer Development Programme.

WHAT ARE YOUR FUTURE EXPECTATIONS?

I want to expand the current area under production, but my big dream is to have my farm fully operational as a family business. My wife, Bawinile Ntombenhle Sukazi, is my right hand on the farm. She can drive a tractor and even helps with the planting. I really hope to involve some or all of my five children in the farming business. One of my sons is studying farm management, which is a step in the right direction, and my daughter has also started her agricultural studies.

FARM FACTS

Farm: Sterkfontein
Nearest town: Amersfoort
Region: Mpumalanga
Size: 838 ha – plants 80 ha
Type of farming operation: Mixed – crops (white and yellow maize), livestock (Nguni and Brahman cattle and goats) and broilers

PGP'S CONTRIBUTION

- Joined Grain SA in 2017
- Chairperson of the Amsterdam Study Group

Training courses completed:
He has completed several courses, including:

- Introduction to maize production
- Introduction to dry bean production
- Introduction to groundnut production
- Tractor and farm implement maintenance
- Introduction to farm management and farm finance
- Planter and boom sprayer calibration
- Basic engine repair
- Workshop skills
- Resource assessment and farm planning
- Nutrition: Different food groups

A mentor's view:
Graeme Engelbrecht, regional development manager at PGP's Dundee office, says Boy has persevered through several challenges and has grown to be a hands-on, problem-solving farmer. 'His diversified operations enable him to sustain his livelihoods through crop off-seasons.'

Graeme Engelbrecht

A programme that is changing lives

Farmers' days: A platform to share farming ideas

THE PHAHAMA GRAIN PHAKAMA (PGP) FARMER DEVELOPMENT PROGRAMME (FDP) SCHEDULES REGULAR FARMERS' DAYS. THESE EVENTS ARE NOT ONLY A PLACE WHERE KNOWLEDGE CAN BE TRANSFERRED, BUT A GREAT PLATFORM FOR FARMERS TO COME TOGETHER, SHARE IDEAS AND FIND SOLUTIONS TO COMMON PROBLEMS. IT ALSO OFFERS A NETWORK BUILDING OPPORTUNITY FOR FARMERS AND ROLE-PLAYERS IN THE AGRICULTURAL AND SERVICES SECTOR.

FARMERS' DAYS FROM 10 MAY TO 10 JUNE

Four successful farmers' days were arranged by these PGP's regional offices during this period:

Dundee

More than 80 farmers attended the event in the Doornkop area near Dannhauser, which was attended by farmers from the Sleevedonald, Doornkop, Rutland and Newcastle study groups. The Osizweni Study Group, which includes the KwaMhlaba and Dicks study groups also grabbed the opportunity to expand their agricultural knowledge. Stakeholders from Pannar and the local Department of Agriculture and Rural Development (DARD) employees also attended the event.

From a PGP perspective, farmers were encouraged to join study groups. They were also advised to diversify – not only other grain crops but livestock as well, to spread the risk – in the light of the challenges presented by climatic conditions this season.

Phumzile Ngcobo from PGP discussed good agricultural practices, such as conserving the soil through the use of hand planters and minimum or no-till planters.

The trial plot planted comprised of 15 cm, 30 cm and 50 cm intra-row spacing, with inter-row spacing of 90 cm. The consensus between the farmers was that intra-row spacing of 30 cm realised better yields.

Eric Wiggill, regional development manager at PGP's Eastern Cape offices, focussed on the BA Programme and Grain SA membership.

Some of the other speakers were:

- Reggie Mchunu from Pannar, who looked at the importance of monitoring climatic patterns. He also discussed the importance of soil testing to ensure that the correct nutrients are added to the soil.
- Lamulile Ndlovu from the DARD's offices in Dannhauser stated that the department is willing to work with stakeholders to advance the farmers further. She also invited farmers to visit their offices to be included in the local office database and to log their various requests.
- Ludi Wichman, a mentor in the previous Jobs Fund Project, encouraged farmers to keep going amidst all the challenges they face.
- Lindiwe Kubheka, chairperson of the Doornkop Study Group, demonstrated the use of the jab planter and top-dressing applicator, and she also discussed the advantages of using the equipment. The main advantage is that crows cannot easily identify if the land has been worked.

Kokstad

This event was organised by the KwaZulu-Natal DARD in collaboration with the greater Kokstad Municipality. About 70 farmers attended this farmers' day. The stakeholders that attended the event were Kynoch, Kokstad Milling, CEDARA, Pannar and Grain SA.

Pannar was represented by Reggie Mchunu, who discussed the importance of soil analysis to determine what is required in the soil, the timing of planting and knowing what seed variety to plant. Ms Dawn Simangele (DARD) applauded the work being done in the area.

Mbombela (2)

Although not all the stakeholders could attend the two farmers' days in this region, 254 farmers who are eager to improve their agricultural knowledge, attended these two days. It was a wonderful opportunity for farmers who had a successful season to share with each other the production practices they followed to achieve a good yield.

Some of the farmers who attended one of the farmers' days in Mpumalanga.

Harvesting can bring joy and sorrow

OVER this period (10 May to 10 June), a total of 69 farm visits and 59 study group visits were done. Here are some of the highlights and difficulties farmers experienced.

A yield test was conducted on farmer TR Shelembe's maize. If the kernels contain a high moisture percentage, it could result in a slightly inflated estimate – however, it provides an approximate indication.

One of the finalists from the Free State, Jabu Matshini, delivered 74 t of maize after harvesting 9,6 ha. His soybean lands were very wet and had little time left before the seeds would start popping open, causing significant losses.

Harvesting was in full swing on the farm of farmer Jeff Hlela from the Kokstad region. Unfortunately a loss of 3 ha of maize was discovered as a result of theft.

Organ Serema, a farmer from North West, completed the threshing of his small white beans. The estimated 15 tons will be picked up by Schoeman Boerdery.

For the Uphuzane Study Group in the Dundee region, the season was characterised by difficult climatic conditions during the planting and growth stages. Excessive rainfall resulted in moulding and rotting of some varieties, while the alternating dry and wet spells in season have also given rise to maize weevils.

The harvested maize of Mkhombiseni Hlongwane from the Isandlwana Study Group – harvested from 1 ha in the Bergville area.

Farmers from the Mabhula Maize Project Study Group were advised to separate the damaged maize from the good maize to prevent contamination.

Apart from the 18 members who attended the Lower Tsistana Study Group, there were also past members who attended and some new faces who wanted to join. Climate, soil requirements of maize and harvesting and storage were discussed.

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