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Editorial

The appearance of Goss's wilt and leaf blight of maize in South Africa is making the headlines in the popular press online and in print. The Government officially announced its occurrence in January 2025 (<https://www.gov.za/news/media-statements/agriculture-land-reform-and-rural-development-issues-alert-detection-goss%E2%80%99s>) and there has subsequently been a first report published in Plant Disease (<https://apsjournals.apsnet.org/doi/10.1094/PDIS-01-25-0164-PDN>). This bacterial disease is and will continue to significantly impact on maize production in the country and is thus a serious threat to our food security.

I was in a fortunate position to observe the spread of Goss's wilt and leaf blight in the maize fields near Bapsfontein. I watched with sheer amazement as the disease developed over the season. This area, as did most of Gauteng, experienced unseasonably high levels of rainfall and this contributed to disease outbreaks. Entire fields were destroyed. I had an opportunity to meet with a grower in the area and was disappointed to hear the misinformation on the disease they had been provided with by experts in our community. If asked to provide information, especially if you are unfamiliar with the disease and especially the causal agent, it is highly recommended that you conduct a thorough literature search. In this case, there is an excellent review published in Molecular Plant Pathology (<https://doi.org/10.1111/mpp.13268>).



Advanced symptoms of
Goss's disease

As a phytobacteriologist, I feel that it is important that I address some issues related to the causal agent that were incorreced related to the growers. *Clavibacter nebraskensis* is seedborne occurring within and on the seed coat. Whether or not the pathogen is seed transmitted is a subject of some conflict in the literature. Transmission rates are believed to be as low as 0.04%. This does not mean that seed transmission is unlikely and it is highly probably that contaminated grain was the source of the first outbreak in South Africa as Goss's wilt and leaf blight has only been reported in North America. Interestingly, due to the drought, South African began importing maize grain into the country from the USA in 2017. Although plant pathogenic bacteria do not produce spores, they can be spread by wind and rain. At high relative humidity the bacteria exude in strands from natural openings and wounds (this occurs in all bacterial plant diseases). These strands are then spread within and to neighbouring fields by wind-driven rain. Overhead irrigation is not recommended as free water, similar to rainfall, creates ideal opportunities for bacterial infection (again this is true for all bacterial diseases). The only option to manage this disease is to deep plough the debris into the soil at the end of season, decontaminate equipment used, use resistant planting material and crop rotation. Goss's wilt and leaf blight is considered a "debris" disease as the pathogen is able to overwinter in the maize residues and the pathogen will infect seedlings in the next season. Weed control is also recommended as a number of hosts other than maize can become infected. Symptoms of Goss's wilt and leaf blight can be confused with other diseases such as Northern Corn leaf blight, Diplodia leaf streak and Stewart's wilt. So be absolutely sure that you are giving advice on the correct disease. Lecture over!

In consultations with growers, honesty is the best policy. If you do not know the answers to their numerous questions rather go back to them at a later date with the correct information. Misinformation leads to panic and stress!

Teresa Coutinho, University of Pretoria; teresa.coutinho@up.ac.za

Message from the President

Do awards by the SASPP matter?

Similar to many international and national societies, the SASPP presents a number of awards during the biennial congresses. In this message I would like to reflect on why we as a Plant Pathology Society presents these awards, and why we consider them important to the Plant Pathology community and our discipline.



In the first instance, these awards recognise outstanding contributions to Plant Pathology and related fields, often inspiring researchers to strive for excellence and innovative discoveries. These awards bring visibility and recognition for groundbreaking research and dedication to a research field of particular significance to Southern Africa. At the congress award ceremony, the specific contributions made by the awardees to the discipline are highlighted, thus increasing the exposure of the researcher and the research. For the younger SASPP members, these awards can often enhance their careers in Plant Pathology, and importantly inspire them to choose Plant Pathology as a long-term career path. Students competing for the best oral and poster presentations are challenged to meet exacting international standards, with the awardees being recognized for their scientific contributions as Plant Pathologists. The John and Petakin Mildenhall award for the best PhD dissertation is the highest recognition given to a recently graduated PhD student in the field of Plant Pathology, ensuring the future of the discipline. Importantly, recognition is also given to honour achievements beyond research, including applied plant pathology and publicity.

In my opinion the awards made by the SASPP help keep our society and discipline vibrant and relevant, and certainly do matter. I strongly encourage all of our SASPP members to familiarize themselves with the awards made by the society and nominate fellow members and students for appropriate awards in preparation for the SASPP 2026 Congress. In particular, I would like to see a number of nominations for the John and Petakin Mildenhall award for the best PhD dissertation submitted in the period 2024 to 2026.

Below is a short description of each of the awards made by the SASPP:

1. Christiaan Hendrik Persoon Medal

This is the highest accolade bestowed by the SASPP, awarded to individuals who have demonstrated exceptional scientific achievement and service to the society. Notably, it has been awarded only seven times since its inception in 1979.

- Prof. James E. Vanderplank (1979)
- Prof. W.F.O. Marasas (1987)
- Prof. Mike Wingfield (1999)
- Prof. Pedro W. Crous (2005)
- Prof. Z.A. Pretorius (2009)
- Prof. Brenda Wingfield (2015), the first female recipient
- Prof. Bernard Slippers (2022)

2. J.E. Vanderplank Award

Named after the renowned plant pathologist, this award recognizes significant contributions to plant disease epidemiology.

3. Applied Plant Pathology Award

This award honors individuals who have made notable advancements in the practical application of plant pathology, leading to improved disease management strategies.

4. Publicity Award of the SASPP Society

Granted to members who have effectively promoted plant pathology to the public, enhancing awareness and understanding of the discipline.

5. Fellow and Honorary Memberships

These distinctions are conferred upon members who have provided outstanding service to the society and have significantly advanced the field of plant pathology.

6. Biennial John and Petakin Mildenhall Best PhD Award

This award recognizes the best PhD dissertation in plant pathology submitted during the biennial period.

Biennial Conference Awards

During the biennial conferences, the SASPP presents several awards to encourage and recognize excellence among students:

- Pannar Floating Trophy for Best Oral Presentation by a Student: Awarded to the student delivering the best oral presentation.
- Pannar Award for Best Poster Presentation by a Student: Granted for the best student poster presentation.
- SASPP Plant Health Products Floating Trophy for Best Oral Presentation on Biological Control: Recognizes outstanding oral presentations focusing on biological control methods in plant pathology
- Inqaba award for the Best Oral Presentation by a student in molecular biology

These awards not only celebrate individual achievements but also foster a culture of excellence and innovation within the plant pathology community in Southern Africa.

Dr Cheryl Lennox, April 2025

SASPP Western Cape Branch 2025 PhD day

On Wednesday, 2 April 2025, the Western Cape branch of Southern African Society for Plant Pathology hosted a conference, to showcase PhD candidates. The event was hosted at the Agrohubs, at the Welgevallen Experimental farm, in Stellenbosch, the venue was kindly sponsored by Hortgro. There were 40 attendees, 13 of which were PhD candidates, that presented parts of their work. Dr Cheryl Lennox, the president of SASPP gave a welcome address, followed by Dr Julia Meitz-Hopkins, chairperson of the SASPP Western Cape branch committee, who welcomed everyone and began the proceedings.

The keynote speaker of the day was Dr Lindy Rose, who shared her story of the evolution of mycotoxins research in South Africa and shared knowledge on managing mycotoxins in grain crops in South Africa.

The day consisted of five different sessions, namely “*Fusarium* toxins and management”, “Pathogen detection and imaging”, “Biocontrol and Microbiome”, “Fungicide resistance” and “Post-harvest pathology”. Each session was chaired by two people, with piqued interest in the relevant fields.

The speakers were well-prepared, and kept the audience engaged, and after each presentation there were questions from the audience. Three speakers were acknowledged for their excellent presentations during a short prize giving at the end of the day. Martin-John Richard was awarded third place for his presentation on the various methods for in vitro fungicide sensitivity testing. Danae Stoltz’s presentation, on the detection of a fungicide-resistance-causing mutation of powdery mildew, won second place in the oral presentations. The first place position, as well as a R500 voucher to Van Schaik bookshop, was awarded to Ayesha Shaikh, for her presentation on maize resistance to multiple ear rot fungi.



The chairpersons of the 2025 PhD day

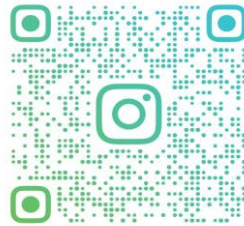


The co-chairs and organizers of the PhD day

Throughout the day there were lovely snacks for the attendees to enjoy, with coffee, and mingling. There was also a surprise of chocolates, from the generous sponsor of the day, Anatech, who also provided all the attendees with notebooks and pens.

This event was extremely well-received by all who attended and was a great opportunity for PhD students to practice their presentation skills, network with peers and share their interesting work with fellow Plant Pathologists.

Megan Farquhar and Dr Julia Meitz-Hopkins



SASPP_WC



The top three PhD candidates, (left to right): Dane Stoltz (second place), Ayesha Shaikh (first place), Martin-John Richard (third place)

FABI-SASPP Northern Branch joint special seminars by distinguished international researchers

On 11 March 2025, Prof Bart Thomma presented a talk on “How fungal pathogens manipulate host microbiota to establish infection.” Key point from his presentation was the discovery of the occurrence of effectors with antimicrobial activity across the fungal kingdom, many of which are highly conserved (ancient), and others have evolved new functions, for example, in host immunity suppression. Prof Thomma also provided an in-depth discussion based on his research on the fungal pathogen, *Verticillium dahliae*,

a soilborne vascular wilt fungus, which has subsequently led to his group’s discovery of effectors possessing selective antimicrobial activity that can either be antifungal or antibacterial. Possession of these effectors gives the pathogen to breach the plant immune defence system as well as the “additional layer of defence” provided by the host microbiota recruited by the plant host, and whose architecture is shaped by secreted root exudates.

Prof Bart Thomma is an Alexander von Humboldt Professor of Evolutionary Microbiology at the Cluster of Excellence on Plant Science Institute at the University of Cologne in Germany. His research focusses on gaining fundamental knowledge to understand how fungal plant pathogens cause disease on their hosts, i.e., studying the mechanisms of pathogenicity and virulence, particularly of *V. dahliae*.

On 3 April 2025, Prof Dan Bebbler presented a seminar on “Potential Impacts of plant pests and diseases on trees and forests in the UK.” His talk was based on a theoretical framework used in climate change prediction models. He introduced a UK climate change initiative, “Net Zero”, which is a UK government-led plan to increase forest cover for biodiversity and carbon purposes; the overall objective of this initiative is to have a “non-exacerbated impact on climate.” He also spoke about the ADD-TREES (AI-elevated Decision-support via Digital Twins for Restoring and Enhancing Ecosystem Services) project funded by the EPSRC (Engineering and Physical Sciences Research Council). According to Prof Bebbler, the aims of ADD-TREES are “to i) downscale climate projections to field scale, ii) statically emulate model outputs, and iii) provide landowners with decision support tools for tree planting.”



Prof Dan Bebber is a Professor in the Department of Biosciences at the University of Exeter. His research focus is on global distribution of crop pests and pathogens and the impact of climate change on crop production. He is particularly interested in abiotic and biotic threats to tropical crops, e.g., coffee and banana, and he works closely with CABI on pest and pathogen impacts.

Recordings of both presentations can be viewed on the FABI YouTube channel:

<https://www.youtube.com/watch?v=lyWSbnGUSNM> (Prof Bart Thomma, University of Cologne – “How fungal pathogens manipulate host microbiota to establish infection”) – 11 March 2025

<https://www.youtube.com/watch?v=p8u9xDeC8gQ> (Prof Dan Bebber, University of Exeter – “Implications of multiple pest invasions for tree health”) – 3 April 2025

Drs Khumbuzile Bophela-Dimpe and David Nsibo

SASPP/BSPP award:

Grace Waterhouse Fellowship

The Grace Waterhouse Fellowship has been set up to encourage links between the SASPP and the British Society for Plant Pathology (BSPP), with a particular focus on plant pathologists in the early stages of their careers.

The fellowship will be awarded competitively no more than once a year to a junior plant pathologist with high potential.

Members of the SASPP in the early stages of their career, studying in a southern African country, may apply for the Grace Waterhouse Fellowship to support a working visit of between one and three months to a laboratory in the UK. The aim is to encourage collaboration and interdisciplinary research, to enable students to acquire new techniques, and to make new contacts.

Criteria:

- Any applicant must have been a member of SASPP for at least one year and must be registered for an MSc by research or PhD at the time the Fellowship award is taken up.
- No member may be awarded a Grace Waterhouse Fellowship more than once. The host must have been a member of the BSPP for at least two years.
- The Grace Waterhouse fellowship is intended to support
 - a) travel, accommodation and other personal costs that are not covered by the student's stipend and
 - b) a contribution to any consumables which are essential for the applicant's proposed research in the host laboratory. In view of the travel costs and the UK being a relatively expensive country to live in, the maximum value of any award would be £5000, although members are encouraged to be economical.

The closing date each year for the fellowship will be the 31st October, and it is expected that the placement will take place during the following year.

Applications cannot be submitted for both the BSPP travel fund and for a fellowship in the same year.

Introducing the South African Bioproducts Organisation (SABO)



SABO is a non-profit organisation dedicated to advancing the development and responsible use of agricultural biological remedies and biostimulants in South Africa. Through collaboration, research, and education, we aim to empower growers, enhance public awareness, and drive the development of cutting-edge biological technologies that benefit society as a whole. The SABO platform brings together students, researchers, policy makers, manufacturers, distributors, grower associations, retailers and users of biological inputs to assist integrated pest management, driving crop yield but improving consumer safety and conservation of South Africa's unique ecosystems and

species. By supporting cutting-edge bioproduct solutions, SABO is playing a vital role in shaping a more sustainable and biodiverse agricultural future for our region. At SABO, we are dedicated to upholding the highest international standards whilst ensuring full compliance with national regulations. Our mission is to foster a culture of professionalism, integrity, and excellence among our members and all stakeholders in this growing industry.

Join SABO today and benefit from:

- Connecting with like-minded organizations, professionals, and experts from various sectors. Through engaging workshops, webinars, and events, you'll have opportunities to collaborate, exchange knowledge, and grow your network.
- Access to discounted training events and workshops lead by industry experts to facilitate growth in this expanding and evolving industry.
- A platform for navigating regulatory challenges associated with registering and developing novel bioproducts
- The opportunity to showcase research ideas and contributions to industry professionals through various communication channels and events

Visit our website for more information: www.sabo.org.za. Contact us at admin@sabo.org.za or chair@sabo.org.za



Theme: "Ukuqinisekisa Ikusasa Elisimeme Ngempilo Yezitshalo" (English translation "Ensuring a Sustainable Future through Plant Health")

The organizing committee of 54th SASPP Biennial Congress is thrilled to invite you to the upcoming Congress with the theme: "Ukuqinisekisa Ikusasa Elisimeme Ngempilo Yezitshalo" (English translation "Ensuring a Sustainable Future through Plant Health"). The congress is a premier gathering of leading experts, researchers, students and industry in the field of plant pathology. This congress will be a platform for sharing ground-breaking research, innovative ideas, and fostering collaborations that will shape the future of our discipline.

The 54th SASPP Congress will be held from 18 – 21 January 2026 at the Premier Hotel Umhlanga, which forms part of the eThekweni Metropolitan area. Umhlanga is a fast-developing area located along the Indian Ocean coast, north of the city of eThekweni and is well-known for its beautiful pier and promenade. The congress venue is about 20 min drive from King Shaka International airport.



Key dates:

Abstract submissions open – 7 January 2025

Online registration opens – 2 May 2025

Submission deadline for oral and poster abstracts – 30 June 2025

Notification of acceptance/rejection – 31 July 2025

Provisional Programme available – 8 September 2025

Early bird registration closes – 30 September 2025

Online registration closes – 11 December 2025

Congress dates 18 – 22 January 2026

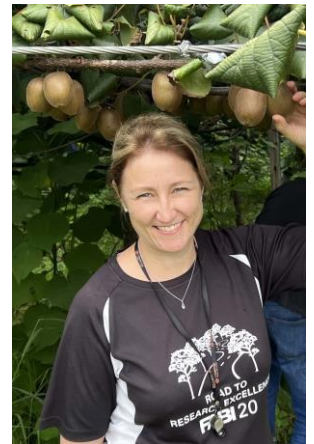
Profile of a Plant Pathologist: Prof Irene Barnes

Current position:

Professor in the Department of Biochemistry, Genetics and Microbiology (BGM), and the Forestry and Agricultural Biotechnology Institute (FABI), at the University of Pretoria, South Africa.

Tell me about your research:

I work on plant pathogens that cause diseases on trees of importance to the forestry industry such as *Eucalyptus*, pines and *Acacia* species. My research focuses mainly on the taxonomy, phylogenetics and population biology of these fungal pathogens. This work includes determining the biodiversity of fungi in plantations and describing new fungal species, tracing the global pathways of movement of some of the most serious forest pathogens through population genetic studies, and investigating pathogenicity and host specificity.



A large portion of my research goes into developing molecular tools, such as microsatellite markers and mating type markers in order to conduct the population genetic analyses, and for diagnostic purposes.

Recently I have expanded my research to working on pathogens affecting kiwifruit. This is a relatively new industry and almost nothing is known about the diseases affecting this crop in South Africa.

Why is your research important?

Accurate species identification and quick diagnostics is crucial for biosecurity purposes and preventing the movement of new pathogens, or novel and potentially more aggressive strains of the same pathogen, into new areas. Using population genetics, one can now implement a precision pest management approach for disease control, or proactively, determine pathogen risks to our plantations. For example, knowledge on the genetic diversity of the population can help one select the best isolate to use for disease resistance screening of plants. In addition, knowing which lineages/biotypes or haplotypes are present in an area, and understanding their different levels of aggressiveness, can help one determine which approach for control is feasible and most practical.

For example, planting a sentinel trial of South African pine material in a hot-spot of disease where we have characterised the population and know there are new and more aggressive

haplotypes of *Dothistroma septosporum*, has been a proactive approach to determine future risks for our industry. The resistance of our material to these haplotypes has appeased the Industry's concern with knowledge that at least there is low risk to our genetic material if these particular haplotypes were to be introduced into the country.

What is your favourite aspect of your research?

That every day is different and the work is never boring. You can be in the field collecting samples one day, then in the laboratory doing complex genetic experiments the next, and then the third day be presenting at a workshop or writing a manuscript. I love the fact that I get to travel to many different places and countries as a forest pathologist working on pests and pathogens of global concern.

Working with enthusiastic students who share your passion for the research.

What excites you about your research?

I love the new discoveries, finding species that are new to science, and figuring out solutions to disease problems that help industry. I love piecing together the puzzle that tells the story of the historic migration patterns of the pathogens, their lineages and where they originate from.

Tell me about what you like to do when you aren't working

To keep fit for field work I like to go hiking, mountain biking and doing rebound exercises. Recently I have also joined the latest craze of playing padel. For downtime – I am an avid novel reader.