

PROGRAMME 2025

24 - 26 November • Protea Hotel, Technopark, Stellenbosch



“

Navigating the challenges of sustainability in the face of climate change, precision farming, AI and consumer demands.

For more information:

 sasev@sasev.org

 www.sasev.org



PROGRAMME



► Monday 24 November 2025

• Protea Hotel, Technopark, Stellenbosch

07:30

REGISTRATION

08:30

OPENING

08:50

KEYNOTE: YVETTE VAN DER MERWE, OIV PRESIDENT

The economics of wine: Supply and demand trends in the context of sustainability and innovation.



**SCIENTIFIC PRESENTATIONS:
Irrigation and disease control**

09:40

Demonstrating the effect of plant water potential-based deficit irrigation on grapevine (cv. Shiraz) in an arid climatic region.
J-M. Visser & E.L. Lategan

10:00

Assessing the drought tolerance of selected grapevine scion cultivars under dryland conditions in the Swartland region of South Africa.
C.L. Howell, A.R. Mulidzi & K. Freitag

10:20

Epidemiology and post-harvest management of the sexual state of *Erysiphe necator*.
K. Janse v. Rensburg, F. Halleen, L. Mostert & M. Havenga

10:40

QUESTIONS



**SCIENTIFIC PRESENTATIONS:
General wine science**

The changing landscape of South Africa wine grape age distribution.
P. de Beer

Studying the effect of wine type, temperature and carbon dioxide on the volumetric mass transfer coefficient (KLa) during nitrogen-induced oxygen removal in wine.
S. Shoba, R. Pott & W. du Toit

Unveiling the potential of wine yeasts as lipid supplements.
J. Pietersen, S. Rollero & B. Divol

QUESTIONS

10:50

COFFEE/TEA

**SCIENTIFIC PRESENTATIONS:
Disease control & cover crops**

11:30

Incidence of the G143A mutation for QoI resistance in grapevine powdery mildew populations.
D. Stoltz, L. Mostert, F. Halleen & M. Havenga

11:50

Exploring gamma irradiation as a tool for intravarietal improvement towards climate resilience: Effects on cluster, canopy, and grape traits in a Pinotage mutant population.
A. Bald, P. Burger & M.A. Vivier

12:10

Can the incorporation of disinfectants or fungicides to the hot water treatment regime have an improved efficacy against Petri disease pathogens in nursery vines?
M. Webber, L. Engelbrecht, F. Halleen, L. Mostert, D. Gramaje & M. Havenga

12:30

The role of cover crops in sustainable nematode suppression.
R. Knoetze

12:50

QUESTIONS

**SCIENTIFIC PRESENTATIONS:
Fermentation biology & flash presentations**

WINEPLUS: A data-driven approach to precision fermentation.
R. Nogueira & L. Bilro; presented by R. Kok

Beyond sugar: Yeast vitamin requirements in wine fermentation.
M. Zuerina, C. Camarasa, F. Bauer & B. Divol

Lachancea thermotolerans: Shaping the future of fruit-forward and balanced wines.
T.R. Jacobs, S. Rollero, M.E. Setati & B. Divol

FLASH PRESENTATIONS 1*

QUESTIONS

13:00

LUNCH

14:00 -
17:00

WORKSHOP 1*

How to choose the right cover crop for your vineyard.
Coordinator: H. van Schalkwyk

WORKSHOP 2*

Wine consumers, culture, language, tech and food pairing.
Coordinator: J. Brand

WORKSHOP 3*

Accurately monitor your critical winemaking parameters.
Coordinator: S. Rautenbach

*See more details on next page

PROGRAMME



► **Monday 24 November 2025**

• Protea Hotel, Technopark, Stellenbosch

FLASH PRESENTATIONS 1

Exploring the understanding of the terminology used to describe taste and mouthfeel perception: A case study on South African Pinotage.
W.R. Janse van Rensburg, S. Fairbairn & J. Brand

Developing wine aroma descriptors in an African language/cultural context to create multicultural consumer education tools.
N.M. Masinga, I. Nyenye, S. Fairbairn & J. Brand

Investigating the relationships between wine sensory attributes and climatic parameters of single vineyard blocks.
C. Clarke, A. Strever & J. Brand

Training detection dogs to identify 2,4,6-Trichloroanisole (TCA) in wine environments: A preliminary investigation.
T. Pantony & J. Brand

WORKSHOP 1

How to choose the right cover crop for your vineyard.
Coordinator: H. van Schalkwyk (Vinpro)

This workshop will discuss the key factors to consider when choosing a cover crop, such as the purpose of the cover crop, soil type and availability of water, dominant weed species in the vineyard, type of nematodes in the soil and host status of cover crop species for the different nematodes, presence of pests like weevils and snails that feed on weeds and cover crops, soil-borne pathogens, using cover crops to improve soil fertility, effect of cover crops on soil temperature which can improve grape and wine quality. The aim of the workshop is to develop a list of questions or a road map to guide growers and advisors in selecting the appropriate cover crop/s for a specific vineyard. Additionally, knowledge gaps such as a nematode host status of a particular cover species will be identified that can be presented to the wine, table and raisin grape industries as research priorities.

WORKSHOP 2

Wine consumers, culture, language, tech and food pairing.
Coordinator: J. Brand (Stellenbosch University)

The purpose of the workshop is to provide an overview of some of the latest research done on the perception of South African wines by South African consumers and initiate a discussion on the work done with industry members, academics and students. In this workshop a general overview of wine consumers will be given from a global wine marketing perspective as a starting point. Online purchasing consumer behaviour in general will be covered from a scientific business management viewpoint. The preferences of wine consumers from different South African languages, focussing on isiXhosa, isiZulu and Sotho, and what was learnt from focus group sessions with these groups will be discussed. An application (app) that was developed to educate and involve people living in townships in wine appreciation, taking sensory and consumer research into account, will be presented from a small business perspective. Lastly the findings of a study done on wine and food pairing, where traditional food was served will be shared with grape industries as research priorities.

14:00 General Introduction and Welcoming. *Dr Jeanne Brand*

14:05 Global wine consumers and marketing: An industry overview and perspective. *Melissa van der Merwe*

14:25 Online wine marketing and purchases. *L. De Villiers (Nelson's Creek, SU)*

14:45 Cross-cultural perception of Wine: What do Xhosa, Zulu and Sotho people like and think
A. Vlok van Zyl (Heineken Beverages & SU): four wines will be set out for tasting.

15:05 Communicating wine style to consumers crossing language and culture barriers:
aroma wheels and style indicators. *Dr Jeanne Brand*

15:20 Tea break 20 min

15:40 Tech and Wine Education in Townships. *T. Xaba*

16:00 Do Wine and Food Pairing Rules Still Rule? Food for Thought, Wine for Debate:
The Relevance of Pairing Rules Today. *Z. Trollip (SU)*

16:20 Closing remarks. *Dr S. Oelofse (Heineken beverages) & Dr M. van der Merwe (SU)*

PROGRAMME



► Monday 24 November 2025

• Protea Hotel, Technopark, Stellenbosch

WORKSHOP 3

Accurately monitor your critical winemaking parameters.

Coordinator: S. Rautenbach (Glasschem)

We are excited to invite you to a hands-on workshop focused on enzymatic testing for wine and grape juice, with a special emphasis on improving analytical accuracy and efficiency for key parameters critical to winemaking and juice production. The workshop will be led by Salva Lopez, specialist from Biosystems Spain, and Sarel Rautenbach from Glasschem. This is a valuable opportunity to see firsthand how the Y15 system can streamline testing workflows while delivering precise, reproducible, and fast results—perfect for laboratories, wineries, and juice producers looking to enhance quality control.

Live demonstration of the Y15 Auto Analyzer to show enzymatic testing methods for:

- Glucose/Fructose
- Glucose/Fructose/Sucrose
 - Acetic Acid
 - L-Malic Acid
 - L-Lactic Acid
- YAN (Yeast Assimilable Nitrogen)
- Sulphites (Free and Total SO₂)
 - Phenolic profile
- Ions like Calcium, Potassium and Iron

PROGRAMME

► Tuesday 25 November 2025

• Protea Hotel, Technopark, Stellenbosch

07:30

REGISTRATION



SCIENTIFIC PRESENTATIONS: Digital agriculture

08:30

Keynote: **Carlos Poblete-Echeverria**

Digital transformation in Viticulture: Sensor-based and AI-driven innovations for Agriculture 4.0

09:00

Development of novel spectral indices for estimating anthocyanins and colour index in water-stressed *Vitis vinifera* L. (cv. Cabernet Sauvignon). *M.I. González, S. Ortega-Farias & C. Poblete-Echeverria (pre-recorded)*

09:20

A deep learning approach to identifying GLRaV-3 symptomatic leaves in red and white grapevine cultivars using smartphone captured images. *E. van Stavel, B. Coetzee, C. Poblete-Echeverria, G. Pietersen, E. Fouché, A. van der Merwe & L. Mostert*

09:40

Enhancing grapevine phenological monitoring with AI and low-cost imaging: A study on automated classification and climatic data integration. *C. Poblete-Echeverria, R. Íñiguez, F. Wolela, M.I. Gonzalez Pavez, I. Barrio, J. Tardáguila & T. Venter (pre-recorded)*

10:00

Non-destructive evaluation of grape quality: Insights from VNIR spectroscopy and chemometric modelling insights. *F. Wolela, T. Venter & C. Poblete-Echeverria*

10:20

Image analysis in viticulture: Techniques, applications, and future directions. *T. Venter, F. Wolela & C. Poblete-Echeverria*

10:40

QUESTIONS

10:50

COFFEE/TEA

SCIENTIFIC PRESENTATIONS: Grapevine trunk disease

11:30

Mechanically pruning vs hand-pruning: the effect on incidence and severity of grapevine trunk-disease pathogens. *M. Havenga, M. Webber, L. Mostert & F. Halleen*

11:50

Deleterious effects of grapevine trunk diseases on canes sourced from infected rootstock mother vines. *W.J. van Jaarsveld, L. Mostert, J.J. Hunter, M. Havenga, M. van der Rijst & F. Halleen*

12:10

QUESTIONS

12:15

SASEV AGM

13:00

LUNCH

14:00 -

WORKSHOP 4*

17:00

Artificial Intelligence (AI) in Viticulture: Opportunities and applications. *Coordinators: C. Poblete-Echeverria & T. Venter (Stellenbosch University)*



SCIENTIFIC PRESENTATIONS: General wine science

Keynote: **Pietro Russo, Master of Wine**

The future of NoLO: Opportunities and challenges for winemakers

Evaluating the effectiveness of fractional distillation and stable $\delta^{13}\text{C}$ Isotope Ratio Mass Spectrometry (IRMS) as tool for the geographical and botanical authentication of South African wines. *C. Small, M. Makatini, C. Sheridan, J. Colling & F. van Jaarsveld*

Critical analyses for monitoring authenticity - investigating ATR-FT-IR as a tool for the authentication of South African wines. *D. Plaatjes, K. Freitag, V. van Breda, C. Paulsen, M. Newman, W. du Toit & F. van Jaarsveld*

Harnessing non-*Saccharomyces* yeast to combat smoke taint in red wine. *D. Zieff, M. du Toit, R. Schneider & B. Divol*

Evaluating lactic acid bacteria for volatile phenol release in smoke-tainted Pinotage must. *L. Witbooi, M. du Toit & B. Divol*

FLASH PRESENTATIONS 2*

QUESTIONS

SCIENTIFIC PRESENTATIONS: General wine science

FLASH PRESENTATIONS 3*

QUESTIONS

WORKSHOP 5*

Understanding and advancing de-alcoholised wines: Composition, quality and stability. *Coordinator: K. O'Kennedy*

17:30

SASEV COCKTAIL FUNCTION

PROGRAMME

► Tuesday 25 November 2025



• Protea Hotel, Technopark, Stellenbosch

FLASH PRESENTATIONS 2

Metabolic and transcriptomic responses of *Oenococcus oeni* in co-culture fermentations when in direct or indirect contact with *Saccharomyces cerevisiae*. *D. van der Watt, L. Engelbrecht & M. du Toit*

The reduction of protein haze in Sauvignon Blanc by *Saccharomyces cerevisiae* high chitin strains.
L.T. Chuene, D. Rossouw, R.K. Naidoo-Blassoples & F.F. Bauer

Application of yeast cell walls to combat protein haze in white wine.
N.A. Henecke, L.T. Chuene, R. K. Naidoo-Blassoples & F.F. Bauer

FLASH PRESENTATIONS 3

Characterizing functional traits of microbial communities in the root zone soil of grapevine under different irrigation levels.
N. Simali, M. Vivier & M.E. Setati

Developing a wood ageing protocol to mimic a barrel in experimental winemaking. *A. Myburgh & W. du Toit*

An alternative to carbocation of sparkling wine. *A. Lamprecht, R. Pott & W. du Toit*

Calcium tartrate instability in South African wines. *T.L. van der Westhuizen, M. Vivier & W. du Toit*

WORKSHOP 4

Artificial Intelligence (AI) in Viticulture: Opportunities and applications.
Coordinators: C. Poblete-Echeverria & T. Venter (Stellenbosch University)

This workshop will present practical insights into how AI technologies can support vineyard decision-making. The focus is on real-world applications, cost-effective tools, and how viticulturists can begin adopting AI-based solutions in their daily operations. Key topics to be covered include yield estimation using image-based AI models, such as bunch counting and berry sizing. The workshop will also explore disease and pest detection through machine learning and remote sensing technologies. Another important area is irrigation optimization, which involves the use of predictive models and the integration of sensor data to enhance water management. Participants will gain an understanding of how AI can be applied to canopy and vigour monitoring through the classification of drone and satellite imagery, offering clearer insights into vine health and growth patterns. Additionally, the session will include a discussion on the needs and opportunities that AI presents for improving viticultural practices.

14:00 – 14:05 Welcome. *Prof. Carlos Poblete-Echeverria, Stellenbosch University*

14:10 – 14:20 South Africa Wine perspectives on the use of Artificial Intelligence. *Gerard Martin, SA Wine*

14:20 – 14:30 Data intelligence and AI in research, industry and teaching. *Dr. Albert Strever, Stellenbosch University*

14:30 – 14:40 The Future of Farming Data: Terra Box Intelligence and Nvrosense Insights. *Peter van Zyl, EUCA*

14:40 – 14:50 Remote Sensing Systems for Zonal Crop Management. *Jacobus Els, Revolte Systems*

14:50 – 15:00 Layering information for improved insight: IMPI use case. *Annaline Smith, IMPI*

15:00 – 15:10 How AIOT platforms enable curated viticulture data access. *Maruis Conradie, AlZatron*

15:15 – 15:45 Coffee/Tea break

15:10 – 15:20 TrueFruit: Computer-vision solutions for fruit measurement. *Liaan Janse van Vuuren, Aerobotics*

15:20 – 15:30 Our Industry Data: What Is and What Can Be. *Pieter Brune, Stellenbosch University*

15:20 – 15:30 Aggregated Data Platforms for Practical AI Adoption. *Danie Maritz, Green Everest*

15:40 – 16:40 Discussion Session. *Moderators: Talitha Venter and CA Poblete-Echeverria*

16:40 – 17:00 Final Q&A and Closing Discussion

WORKSHOP 5

Understanding and advancing de-alcoholised wines: Composition, quality and stability.

Coordinator: K. O'Kennedy (Laffort)

This workshop will address current market trends and opportunities, legislation, and key scientific and practical questions related to producing de-alcoholised (de-alc) wines. Interim findings from two current research projects will be presented. The first project investigates the chemical and sensorial composition of South African de-alc wines compared to international examples, with particular attention given to the role of the full-strength base wine, spinning cone column essence fraction, and post-de-alcoholisation mouthfeel-improving additions.

The second project focuses on microbial stability, prompted by increasing reports of spoilage by *Zygosaccharomyces* yeasts in de-alc wines. The project explores current preservation methods and the effect of the wine matrix on their efficacy and proposes new approaches to improve shelf life and quality assurance. The workshop combines scientific presentations, wine tastings, and industry-led discussions.

14:00 – 14:10 Welcome. *Karien O'Kennedy*

14:10 – 14:30 Overview. *Adriaan Oelofse*

14:30 – 14:45 Enhancing mouthfeel aspects of dealcolized wines. *I. Heroldt*

14:45 – 15:00 Aroma compounds in dealcolized wines and their sensory effects. *S. Malherbe*

15:00 - 15:15 *Zygosaccharomyces*: is there a crisis looming in low alcohol wines? *L. Pulford*

15:15 – 15:30 Tea break

15:30 – 15:50 De-alc wines in Italy. *Pietro Russo*

15:50 – 16:50 Tasting and panel discussion

16:50 Acknowledgements. *K. O'Kennedy*

17:00 End of workshop

PROGRAMME

► **Wednesday 26 November 2025**

• Protea Hotel, Technopark, Stellenbosch

07:30

REGISTRATION



SCIENTIFIC PRESENTATIONS: Biostimulants and biocontrol

- 08:30** Plant biostimulants evidence for protection against both biotic and abiotic stress in wine grapes – a role for the microbiome?
M. Moroke, E. Setati, P. Hills & J.P. Moore
- 08:50** Responses of Merlot Noir to biostimulant application: grapevine performance and fruit quality.
N. Mthlane, E. Terblanche, M. Rienth & E. Blancquaert
- 09:10** Evaluating plant growth promotion potential of biocontrol microbial consortia applied as soil inoculants in potted grapevine (*Vitis vinifera*).
A.J. Africa, J.F. Salles, E.H. Blancquaert & M.E. Setati
- 09:30** The quest to find biological control agents as pruning wound protectants against Grapevine Trunk Disease pathogens in rootstock mother blocks. *Z. Daniels, M. Webber, L. Mostert, Y. Petersen, F. Halleen & M. Havenga*



SCIENTIFIC PRESENTATIONS: Chenin blanc project

- Premium and profitable Chenin blanc: do we start with the the consumer, the vineyard, or both?
M. Vivier
- Lessons learnt about the adaptability of Chenin blanc from a trellis-system experiment.
L.J. Samuels, E. Terblanche, C. Poblete-Echeverría & M. Vivier
- Evaluating the impacts of different trellis systems and yeast strains on fermentation kinetics and wine quality impact factors of Chenin blanc.
G. Smook, M. du Tout & M.A. Vivier
- Commercial South African Chenin blanc wines profile and its distinctiveness. *S. Bubberman, J. Brand & M.A. Vivier.*

09:50

QUESTIONS

QUESTIONS

10:00

COFFEE/TEA

SCIENTIFIC PRESENTATIONS: Biocontrol & viticulture

- 10:30** Evaluation of biocontrol agents through isolation, characterization and fermentation trials for sustainable wine production.
E. Maluleke, et al.
- 10:50** Evaluation of non-*Saccharomyces* yeasts as biocontrol agents against *Botrytis cinerea*.
Z. Gomomo, M. Fanadzo, M. Mewa-Ngongang, B. Chidi, J. Hoff, M. van der Rijst, L. Mokwena, M. Setati & H. du Plessis
- 11:10** Grapevine bio-factories: Hairy roots for specialised metabolite and antimicrobial compound production.
S.M Tietz, P.R Young & M.A. Vivier

SCIENTIFIC PRESENTATIONS: Chenin blanc project

- Evolving sensory profiles: A comparative study of spontaneous and inoculated fermentations in Chenin blanc and Merlot.
S. Fairbairn, J. Brand & F. Bauer

FLASH PRESENTATIONS 5*

SASEV PRIZEWINNER REPORT

N. Jolly

11:30

FLASH PRESENTATION 4*

QUESTIONS

11:50

QUESTIONS

12:00

BRUNCH

13:30

DEPART FOR FIELD EXCURSION AT WELGEVALLEN RESEARCH FARM

14:00 -
17:00

FIELD EXCURSION AT WELGEVALLEN RESEARCH FARM*

*See more details on next page

FLASH PRESENTATIONS 4

The impact of regenerative practices on grapevine performance, fruit and wine quality.

D. Endeacott, C. Clarke & E. Blancquaert

Nutrient deficiencies resembling disease: Inducing and differentiating leafroll-like symptoms.

E. Fouché, B. Coetzee, E. Blancquaert & L. Mostert

Screening table grape cultivars using rapid cell wall profiling tools for berry quality parameters.

T-L Naidoo & J.P. Moore

Response of *Vitis vinifera* L. cv. Pinotage to irrigation strategy and trellis system in the Breede River Valley region (South Africa):
Vegetative growth, yield and wine quality.

C.L. Howell

FLASH PRESENTATIONS 5

Characterising the microbiome of spontaneously fermented Chenin blanc grape juice from six different trellis systems.

P. van Zijl, M.E. Setati & F.F. Bauer

Optimising yeast nutrition strategies to enhance the premiumisation of South African Chenin blanc wines.

A. Ntoyakhe, M. du Toit & B. Divol

FIELD EXCURSION: WELGEVALLEN RESEARCH FARM

The field excursion to Stellenbosch University's Welgevallen Experiment Farm is viewed as a follow-on for the workshops on cover crops and AI in viticulture, as well as the session on the Chenin blanc project. Attendees will have the opportunity to engage with researchers and view experimental vineyards where much of the research reported on during the conference and discussed in the workshops is being done. This includes trial sites for the Chenin blanc project, research on the application of AI technologies in viticulture and the GenZ cover crop demonstration.