



Research Symposium



in
Pursuit
of the
Perfect
Potato

PROGRAMME

TUESDAY, 19 JULY 2022		
09:15	Bus 1 departures from Cape Town International Airport to Club Mykonos	
09:45	Bus 2 departures from Cape Town International Airport to Club Mykonos	
09:00 – 11:30	Registration	~ <i>Athene Conference venue</i>
11:30 – 11:45	OPENING	~ <i>Athene Conference venue</i>
Welcoming	André Coetzee (Chairperson: Potatoes SA Research Committee)	
Scriptures and prayer	Albert de Villiers	
11:45 – 12:50	SESSION 1 Potato Potential	~ <i>Session leader: PJ Nell</i>
Future Trends	Dirk Uys	
Main Sponsor: Leading progression in agriculture	Cullen Botes WINFIELD UNITED South Africa	
Potato cultivar identification in South Africa using a custom SNP panel	Dr Inge Gazendam	p.1
Effect of fungicide application on potato cultivars at Cedara	James Arathoon	p.2
12:50 – 13:50	LUNCH	~ <i>Cape Town Fish Market</i>

13:50 – 15:30		
SESSION 2		
~ Session leader: Damien da Cal		
Risk management: Soilborne diseases		
Keynote speaker: A quarter century of research: How have you benefitted?	Prof Jacque van der Waals	p.3
A survey to investigate the casual organisms involved with potato early dying in the Limpopo Province	Dr Estianne Retief	p.4
Control strategies for potato early dying in the Limpopo Province	Dr René Sutherland	p.5
Eastern Free State cultivar trial under dryland conditions at Reitz under dryland	Enrike Verster	p.6
Western Free State cultivar trial under irrigation at Bultfontein	Fanus van Zyl	p.14
Power session: Evaluation of biological control agents to suppress <i>Spongospora subterranea</i> f. sp. <i>subterranea</i> root galling: Preliminary results	Erika Botha	P.21
Power session: Studies on the antagonistic and inhibitory effects of yeast species and melatonin on <i>Alternaria solani</i> and <i>Fusarium oxysporum</i> of potato	Londeka Mbatha	p.22
15:30 – 16:00		
Refreshments		
~ Athene Conference venue		
Network sessions by		
 information technology redefined		
16:00 – 17:40		
SESSION 3		
~ Session leader: Ané Aucamp		
Yield limitations		
Evaluation of the water and energy use efficiencies of different irrigation systems used for potato	Prof Martin Steyn	pp.23 &24
Facilitating the implementation of irrigation scheduling		
Development of region-specific crop rotation programmes for the Eastern Free State: An outlook, a five-year review	Mandla Sibiyi	p.25
The importance of groundwater monitoring for potato cultivation in the Sandveld Region	Julian Conrad	P.26
KwaZulu-Natal cultivar trial under irrigation at Greytown	Louis Pretorius	p.27
Power session: Effect of water stress and soil texture on growth, yield, and quality attributes of potatoes (<i>Solanum tuberosum</i> L.): Preliminary results	Cypriel Hlatshwayo	p.34
Gold Sponsor: Corteva Novel new fungicide for the control of late blight in potatoes	Stephan Marais 	
Take-home message day 1	Dirk Uys	
17:40 – 18:30		
Research Committee Meeting		
~ Athene Conference venue		

Corteva Kartoffel Fest

Place: Kapstadt Brauhaus

Time: 18:30 for 19:00



WEDNESDAY, 20 JULY 2022

06:30 – 07:30 BREAKFAST ~ *Kapstadt Brauhaus*



07:30 – 09:30 SESSION 4 ~ *Session leader: Soreen Gouws*
OPTIMISING POTATO POTENTIAL


Keynote speaker: Water and nutrient use efficiencies of potato	Prof Martin Steyn and Alex Mukiibi	p.35
Power session: Potato production sustainability in the Western Free State: A study on water and nutrient use efficiencies on sandy soils	Stefan Steenekamp	p.36
Potato (<i>Solanum tuberosum</i>) responses to elevated carbon dioxide and temperature	Simon Kiongo	p.37
Conservation farming practices for potato production in the Sandveld	Dr Jacques van Zyl	p.38
Succession of nematodes in an Eastern Free State potato rotation	Dr Marriette Marais	p.39
South Western Free State cultivar trial under irrigation at Petrusburg	Johan Odendal	p.40
Eastern Free State cultivar trial under irrigation at Oranjeville	Enrike Verster	p.48
Power session: Using a superabsorbent biopolymer (Zeba™) to improve the water use efficiency of potatoes in the Sandveld	Lomé Smit	p.55

09:30 – 10:00 Refreshments ~ *Athene Conference venue*

Network sessions by





10:00 – 12:40		
SESSION 5		
~ Session leader: Anje Erasmus		
Risk management: Diseases		
Gold Sponsor: Adama Nimitz, revolutionary nematode control	Schalk van der Merwe 	
Panel discussion: Suitability of covercrops and crop rotation in managing nematodes in potatoes	Prof Kgabo Pofu Dr Mieke Daneel Prof Driekie Fourie	pp.56 & 57
A new perspective on the <i>Fusarium</i> population causing dry rot of potato in the Free State	Dr Mariette Truter	p.58
Diversity of the black dot pathogen and plant-parasitic nematodes in the Limpopo Province	Dr Mariette Truter	p.59
Developing rapid screening techniques to evaluate the impact of bacterial soft rot and <i>Fusarium</i> dry rot on potato quality post harvest	Dr Reinette Gouws-Meyer	p.60
Limpopo cultivar trial under irrigation at Tom Burke	Schalk Grobbelaar	p.61
Limpopo cultivar trial under irrigation at Dendron	Chantel du Raan	p.69
Disentangling shifts in the soil microbiome of potatoes infected with <i>Rhizoctonia solani</i> in the KwaZulu-Natal region of South Africa	Sasha-Lee Gush	p.76
Power session: The effect of different crop rotation sequences on the suppression of important soil-borne fungal pathogens of potatoes: A case study in the Eastern Free State	Angelique de Wet	p.77
Power session: Integrated control of postharvest <i>Fusarium solani</i> of potato using melatonin, ozone and edible coatings	Gcinokuhle Buthelezi	p.78
Take-home message: Yield Potential	Dirk Uys	
12:40– 13:30		
LUNCH		
~ Cape Town Fish Market		
13:30 – 15:10		
SESSION 6		
~ Session leader: Santa Bronkhorst		
Risk management: Insects		
Gold Sponsor: Network alliance	Raymond Wright 	
Susceptibility evaluation of <i>Phthorimaea operculella</i> (Zeller) (Lepidoptera: Gelechiidae) to selected insecticides in South Africa	Prof Hannalene du Plessis	p.79
Power session: Susceptibility evaluation of <i>Phthorimaea operculella</i> (Zeller) (Lepidoptera: Gelechiidae) to selected insecticides in South Africa	Tayla Swanepoel	p.80
Investigation into control strategies of the potato leafminer through tillage	Dr Diedrich Visser	p.81
Northern Cape cultivar trial under irrigation at Douglas	André Prins	p.82

Ceres cultivar trial under irrigation in the Koue Bokkeveld	Gerard Mostert	p.89
Take-home message: insects	Dirk Uys	
15:10 – 15:40 REFRESHMENTS ~ Athene's Conference venue		
15:40 – 18:00 SESSION 7 ~ Session leader: FP Coetzee		
RISK MANAGEMENT: DISEASES		
Gold Sponsor: Burika	Regardt Joubert 	
Large scale testing of a rapid classification method for potatoes	Dr Carmen Muller	p.97
Power session: Validation of a rapid classification method of potato texture	Danae Bezuidenhout	p.98
Power session: Native fungal bio-control agents to control <i>Meloidogyne</i> nematodes on potato	Ndivhuwo Ramatsitsi	p.99
Power session: The use of antagonistic bacteria and hot-water treatment in controlling postharvest bacterial soft rot of potato caused by <i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i>	Nokuthula Gamede	P.100
Survival of the bacterial wilt pathogen	Dr René Sutherland	p.101
Eastern Free State plant population trial under supplementary irrigation at Reitz	Enrike Verster	p.102
Sandveld cultivar trial under irrigation at Aurora	Piet Brink	p.117
Establishing the host status of various cover crop species to the soilborne pathogen, <i>Spongopora subterranean</i> f. sp. <i>Subterranean</i> , in South africa	Rudolph Strydom	P.127
Sensitivity of <i>Alternaria</i> species from potatoes in South Africa to different fungicides	Dr Elsie Cruywagen	P.128
FRAC recommendation to prevent resistance	Stephan Marais	
Summary and Conclusion	Willie Jacobs André Coetzee	


**19:00 vir 19:30 WinField United South Africa prize giving evening
(Boesmanland Plaaskombuis)**

**WinField United South Africa
Prize giving evening**

 WinField United South Africa
trophy for best presentation: Workgroup

 WinField United South Africa
trophy for best presentation: Researcher

 PIDT pryze for best presentation: Post graduate student

 Potatoes South africa pryze for best poster presentation

 Potatoes South Africa prize
for best Workgroup

**WINFIELD[®]
UNITED**
South Africa


potatoes
aartappels SA



**in Pursuit of the
Perfect Potato**

THURSDAY, 21 JULY 2022

06:30 – 08:00

BREAKFAST

~ Kapstadt Brauhaus

08:00

Bus departs to Cape Town International Airport

08:00

Bus departs to WinField United Experimental farm