

University of Pretoria Berry Programme

Inge Coetzee

Programme leader: Prof. Lise Korsten



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Plant Pathology Department



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Prof Lise Korsten
Project Leader



Dr Malick Bill
Postharvest
Blueberry field
Student guidance



Dr Willeke de Bruin
Industry connection
Student guidance



Dr Nazareth Siyom
Mycologist/ Biocontrol
Culture collection
Student guidance

Dr Jarishma Gokul
Microbiomes
PLG462

Dr David Nsibo
Plant Biotech

Dr Kumbuzile Bophela
Soilborne diseases

Dr Tshima Ramakuwela
Nematologist

Jane Fourie
Practical training
Student guidance

TuksBerry Projects



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Carl Schulenburg
MSc Agric



Lourens van der Vyver
MSc Agric



Inge Coetzee
MSc Agric

Final year BSc Agric Students 2022/ 2023:
Blueberry project from the soil to the plate



BSc Agric Plant Pathology Final Year Class of 2022



BSc Agric Plant Pathology Final Year Class of 2023



Namibia

Botswana

Windhoek

Rehoboth

Gobabis

Mariental

Gaborone

Polokwane

Kruger National Park

Pretoria

Mbombela

Maputo

Midrand

Mbabane

Eswatini

Kgalagadi Transfrontier Park

Keetmanshoop

Lebied

Pinah

Upington

Kimberley

Bloemfontein

Richards Bay

Port Nolloth

Aggeneys

Springbok

Pofadder

Kakamas

Maseru

Lesotho

Durban

South Africa

Vredendal

Queenstown

Mthatha

Beaufort West

East London

Cape Town

Worcester

Oudtshoorn

George

Gqeberha

Hermanus

Swellendam

Mossel Bay

Plettenberg Bay

Bredasdorp

Google

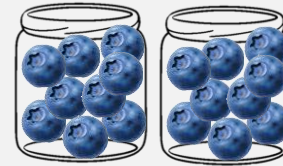
Blueberry Supply Chain



1. Production



2. Harvest



3. Post-harvest



4. Sales & Distribution

Nurseries

Commercial
production

1. Water quality
2. Soil health/prep
3. Overall plant health
4. Flower production
5. Optimal fruit production
6. Available/ alternative control methods

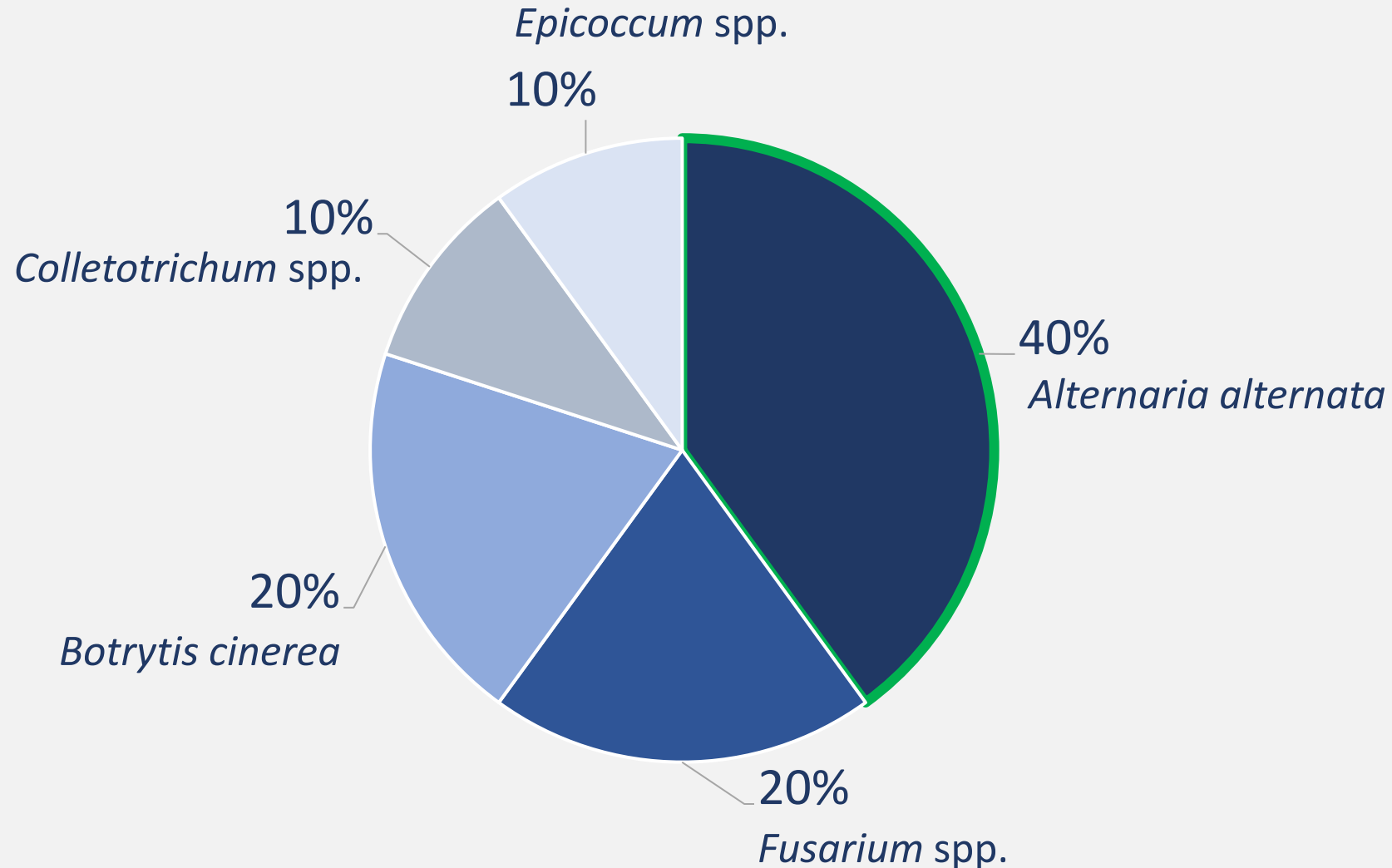
1. Packhouse sanitation
2. Storage conditions
3. Optimal nutrition & safety
4. Waste losses

Plant Pathology Final Years (2022)

Mini Research Projects on Blueberry

Sampled Sites:

1. Nurseries
2. Commercial production farms
3. In season & out of season packhouses



Questionnaire (2023)

1. General production practices

(row spacing/ irrigation/ soil substrate/ fertilizers etc.)

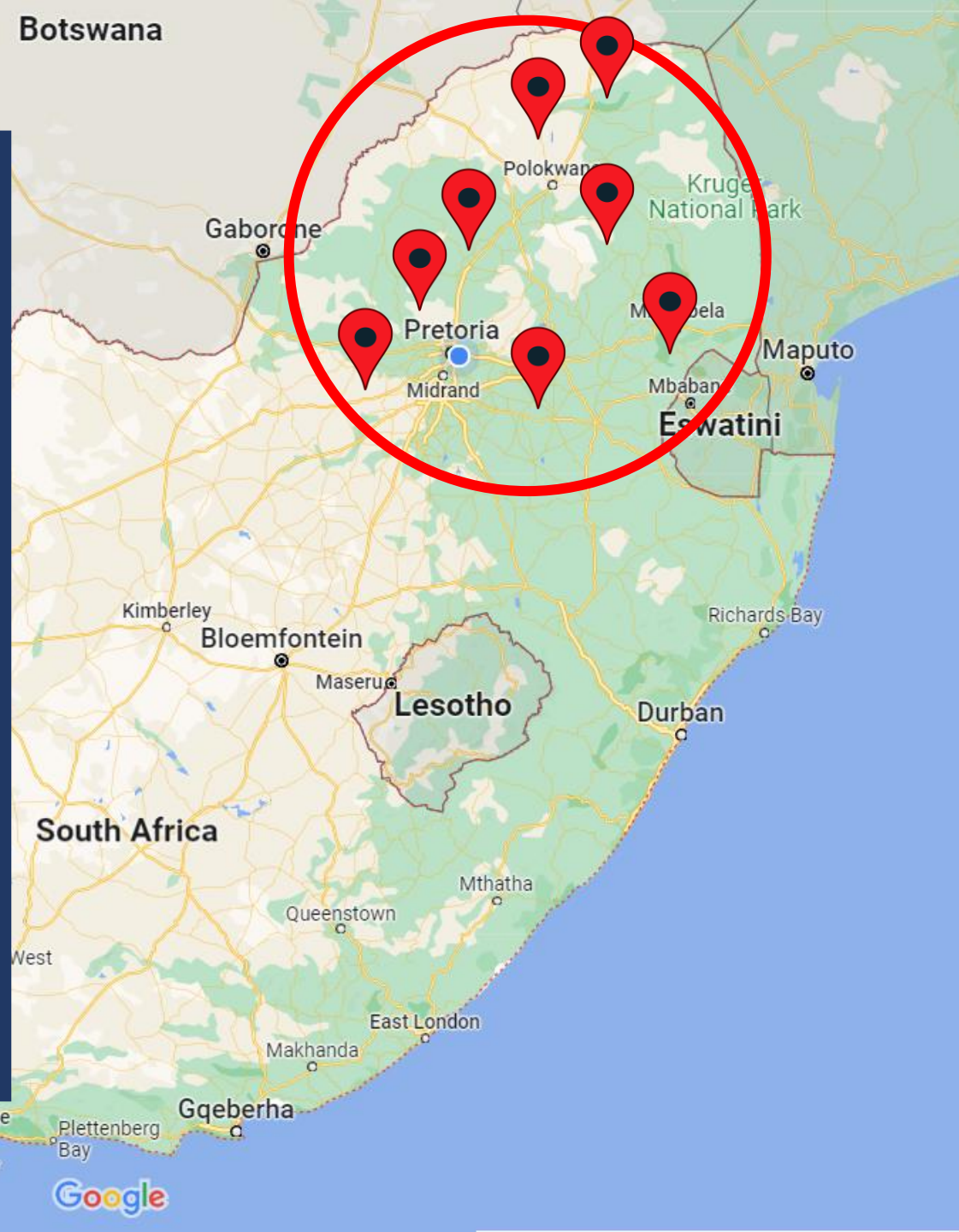
2. Most prevalent problems

(biotic & abiotic factors)

3. Control approaches

(biological/ chemical/ cultural control)

4. Phenological growth stages



Virulence and fungicide sensitivity of *Alternaria alternata* isolates from blueberry orchards in South Africa

By: Inge Coetzee
Supervisor: Prof L. Korsten
Co-supervisors: Dr. W. de Bruin & Dr. N. Siyoun
2023/24



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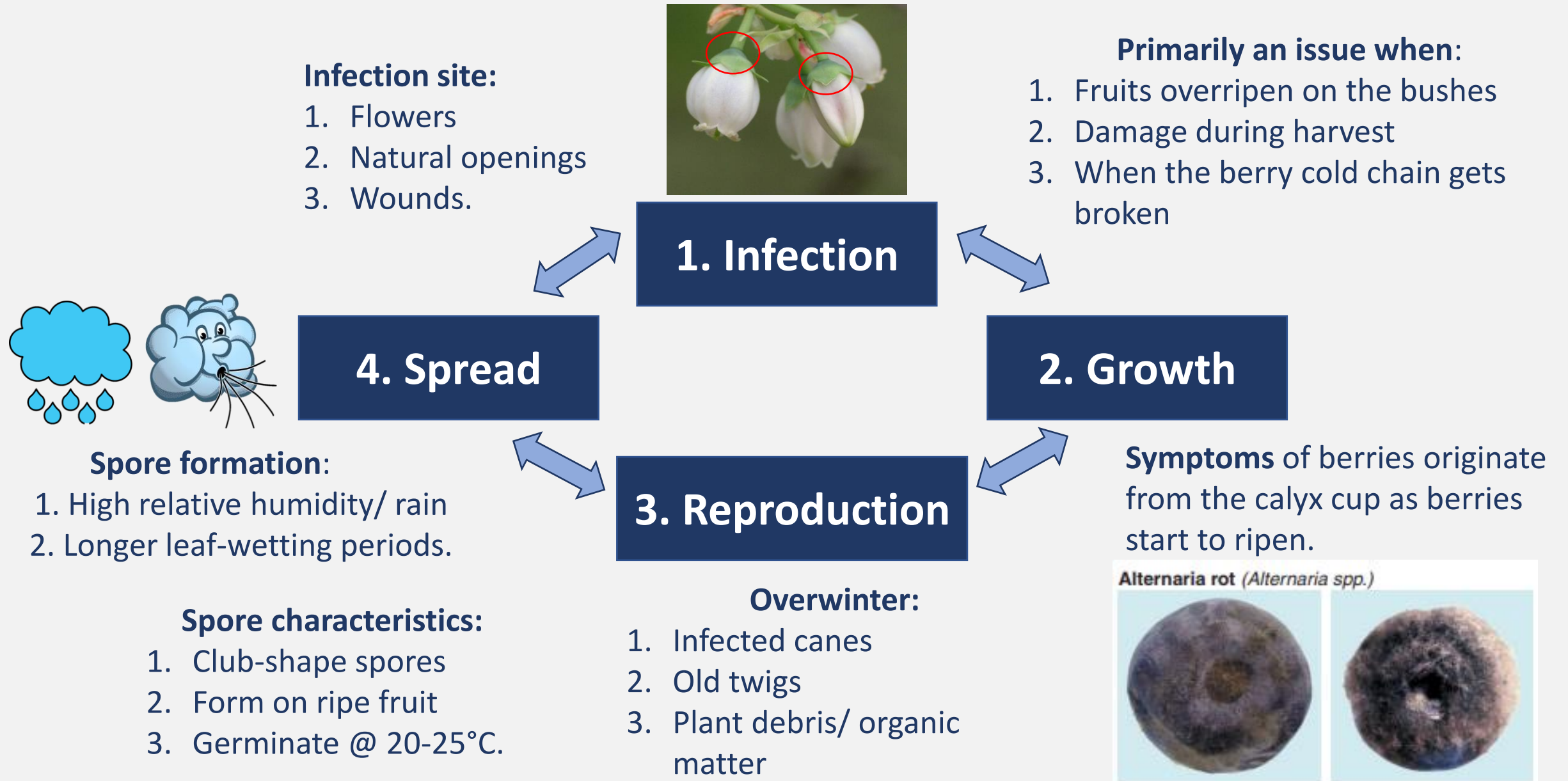
Aim

To assess the **disease profile** and the **aggressiveness** of *A. alternata* in northern blueberry production regions of SA and to **determine their sensitivity to fungicides** currently used by the industry.

Objectives

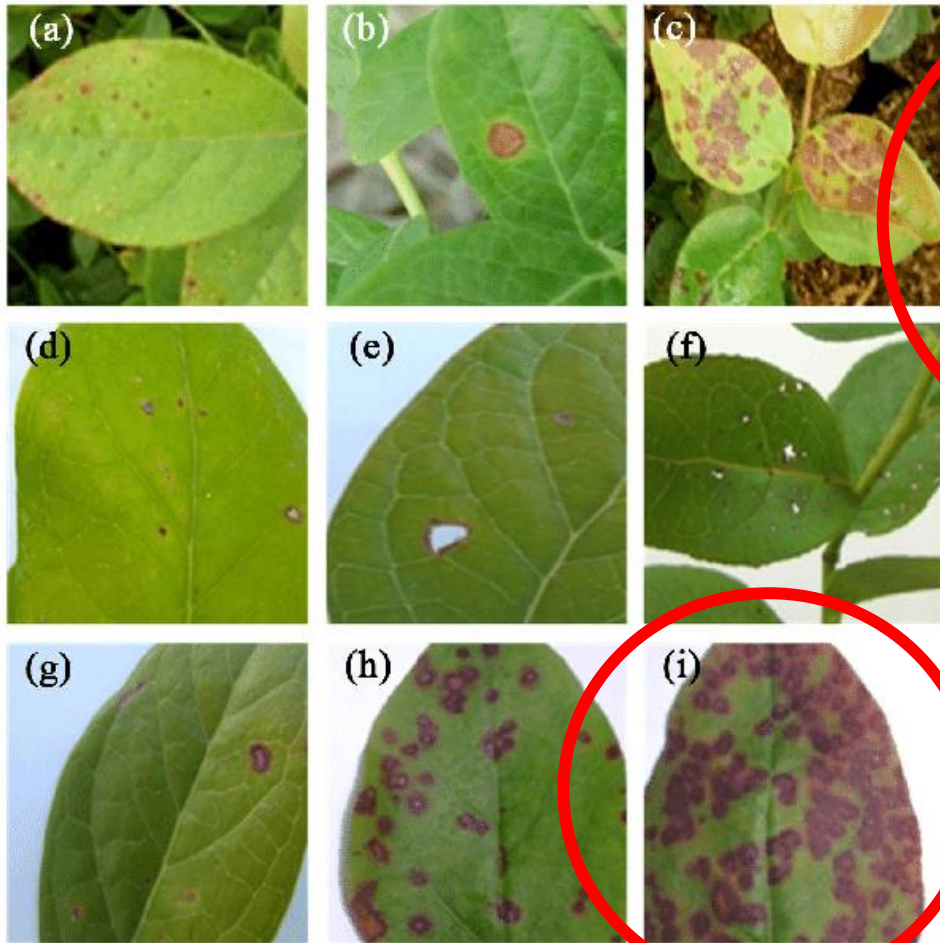
1. Evaluate the **incidence of *A. alternata*** in blueberry orchards
2. Determine the **distribution pattern** of latent *A. alternata* on **flowers and fruits** during the 2023 and 2024 growing seasons
3. Investigate the **aggressiveness** of *A. alternata* isolates on blueberries
4. Determine *A. alternata* **sensitivity** to the **registered fungicides**

Alternaria spp. Disease Cycle



Symptoms of *Alternaria alternata* on blueberries

Leaves



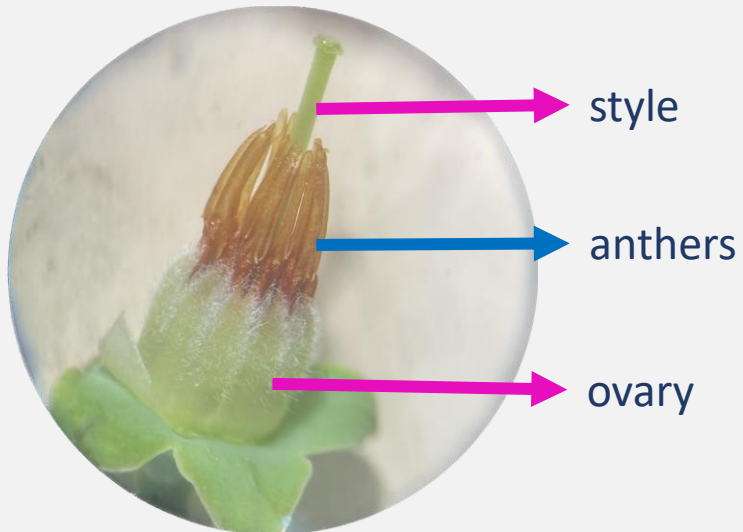
Fruits



Alternaria alternata isolation and identification

During flowering

1. Flowers
2. Twigs
3. Leaves



During harvest

1. Fruit
(healthy + diseased)
2. Twigs
3. Leaves



THANK YOU

For more information please contact us:

Dr. W. de Bruin

willeke.debruin@up.ac.za

072 241 6467



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