



Citrus Black Spot (CBS)

Strategic research objectives

Outcomes from CBS workshop, 7 August 2014, Johannesburg

RESEARCH STRATEGY – Strategic focus areas and topics for research

- **Inoculum management**
 - Evaluation of available leaf removal machinery
 - Investigate various leaf removal or decomposition options
 - Research on cover crops and effect on CBS inoculum reduction
 - Best practice options for management of pruning debris

- **Epidemiology**
 - Repeat EFSA modelling with positive and negative controls
 - Validation of existing CBS models
 - Determination of infection parameters
 - Validation and improvement of models for prediction of ascospore dispersal and infection
 - Duration of fruit susceptibility
 - Discern between *Phyllosticta citricarpa* or *P. capitalensis* ascospores and investigate the impact on our understanding of CBS epidemiology [ongoing project]
 - Options to improve throughput of spore trap reading
 - Study splash dispersal of pycnidiospores
 - Research outcomes that are relevant to fruit not being a pathway

- **Postharvest management**
 - Determination of the effects of current and novel postharvest treatments on viability, inhibition and reproductive ability of CBS in fruit
 - Detection of CBS infected fruit in packhouses
 - *Phyllosticta citricarpa* survival in waste
 - Optimisation of latent infection detection (promote symptom development to enable detection)

- **Chemical control**
 - Impact of uneven flowering on CBS control and management of flowering and/or timing of CBS sprays to limit impact

- **Risk management systems**
 - Development and validation of CBS risk management systems that will ensure compliance with zero-CBS regulation
 - Regional and Orchard risk profiling system based on inoculum potential and management systems
 - GIS systems which includes overlays of census, management systems and predictions/forecasts

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