

Research Portfolio

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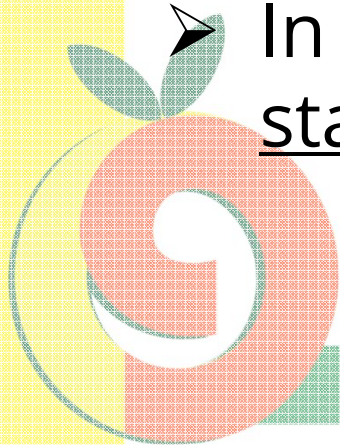


CGA CITRUS SUMMIT

Research

Why You Need to Invest in Citrus Research

- To retain access to existing markets
- To overcome sanitary & phytosanitary barriers to new & existing markets
- To reduce pre- and postharvest losses
- To maximise the production of high quality fruit/ha
- To enable informed decisions on attractive cultivar options for all regions
- In short: To remain globally competitive & stay in the citrus business



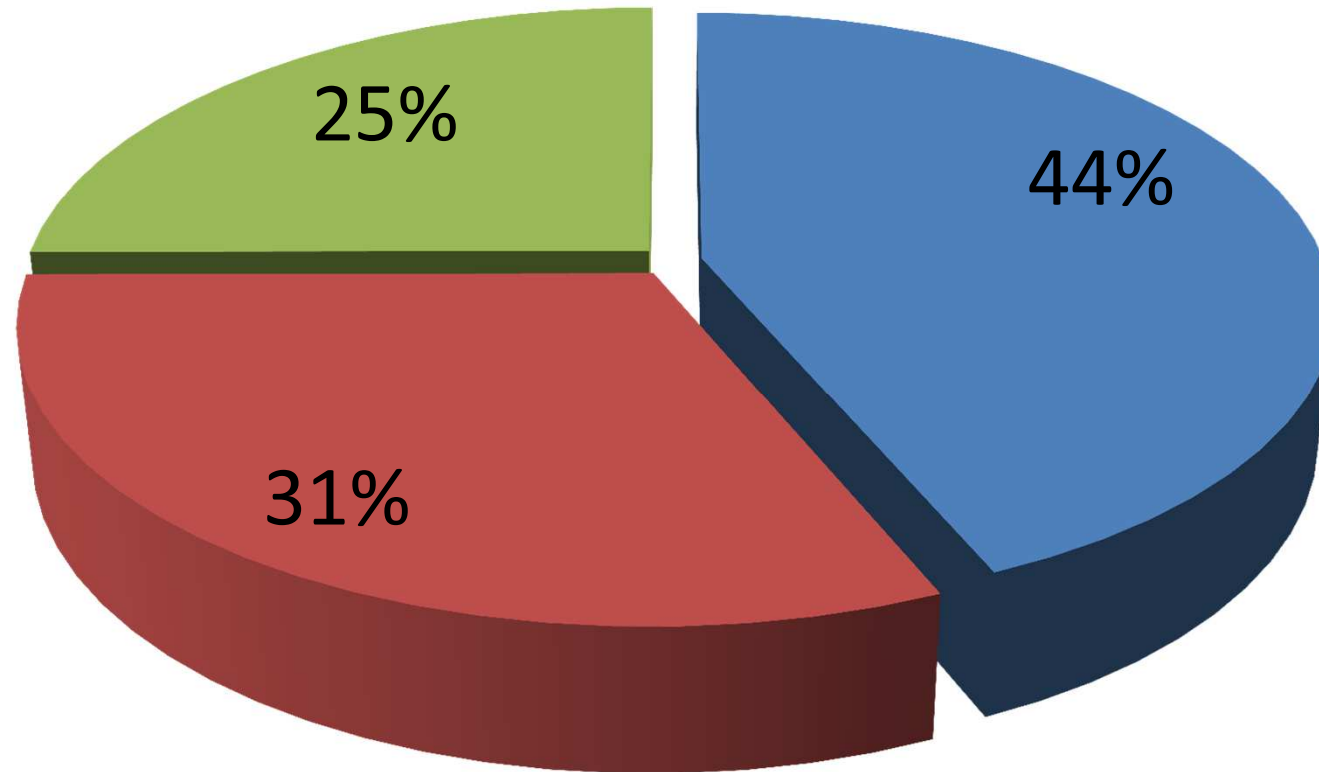
Citrus Research Scope

- Research is divided into 3 Portfolios:
 - Disease management
 - Horticulture
 - Integrated pest management
- Major partners within the CRI Group include the ARC, Stellenbosch University, Rhodes University and University of Pretoria (plus many other smaller collaborators)
- Research is focused on the highest ranked priorities for the short, medium and long term, because there is insufficient capacity to address all requests



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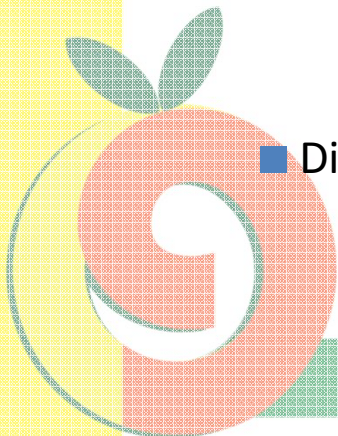
2015/16 Relative Cost of Portfolios



■ Disease management

■ Integrated pest management

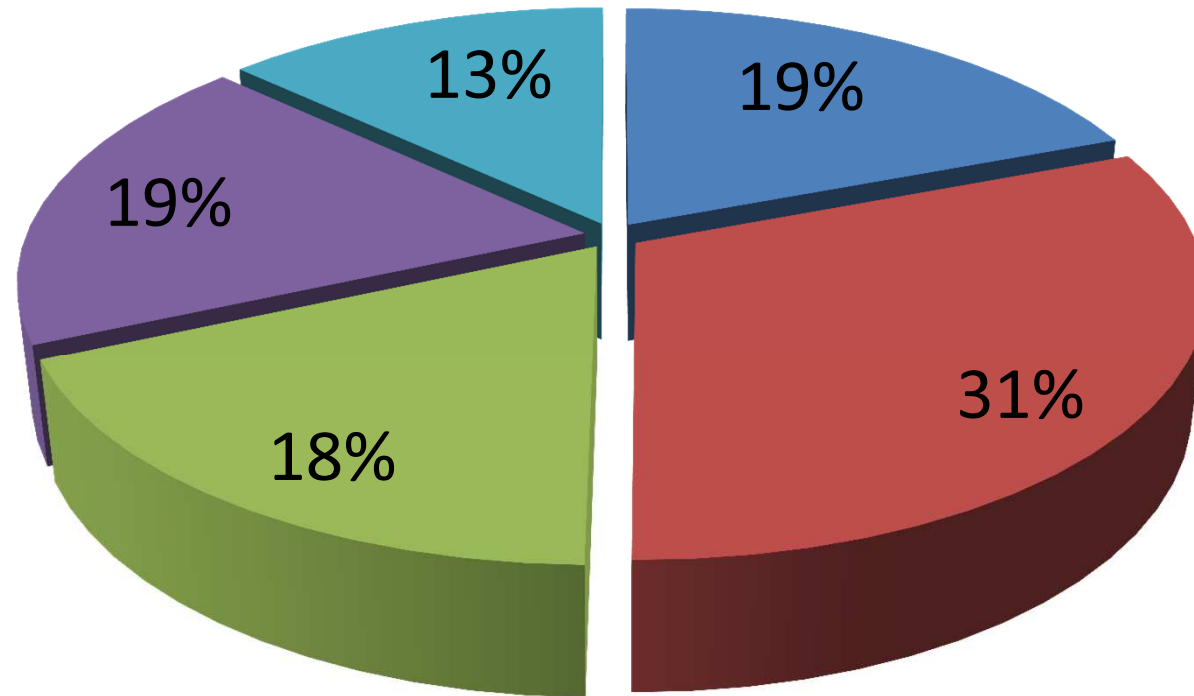
■ Horticulture



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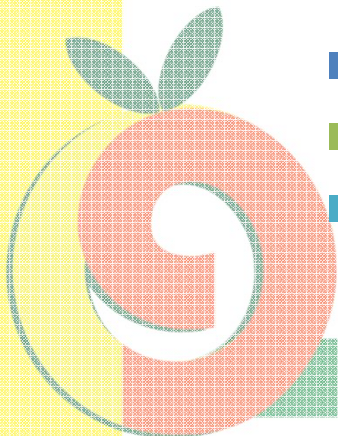
2015/16 Disease Management Portfolio

Proportional Cost



■ Postharvest diseases
■ Soilborne diseases
■ Fruit and foliar diseases

■ Graft transmissible diseases
■ Citrus black spot



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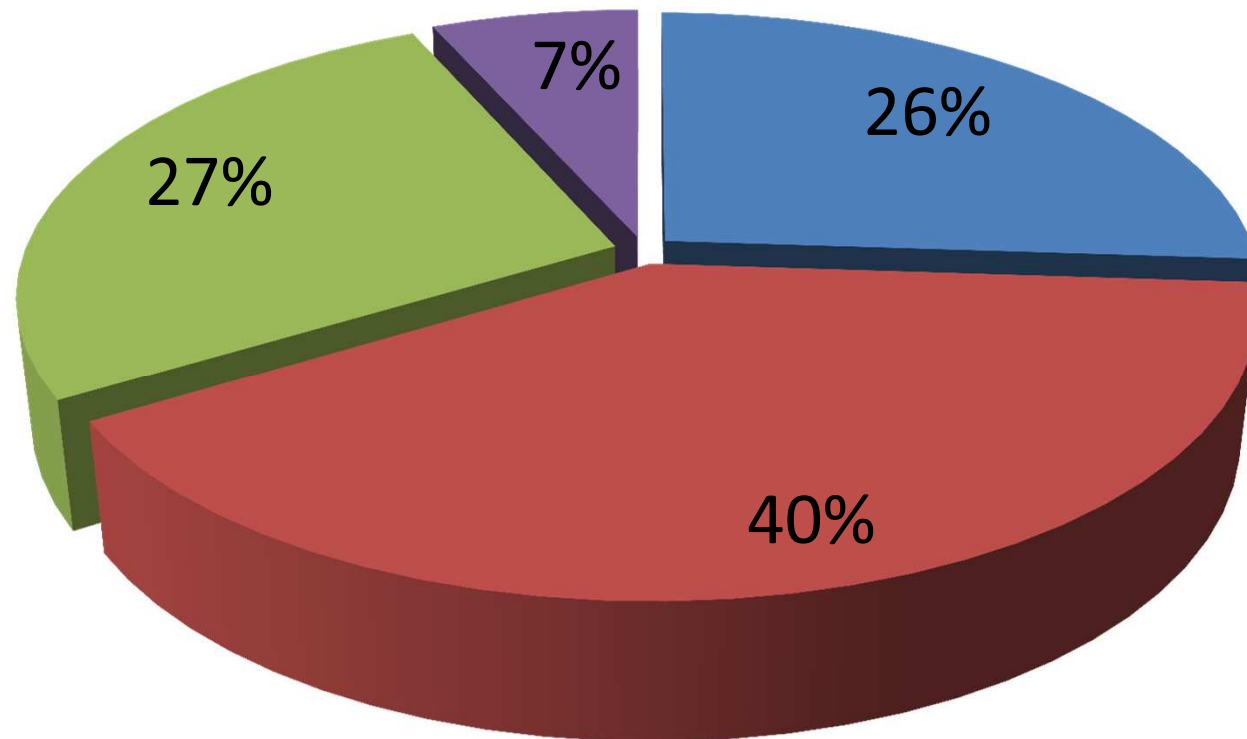
2015/16 Disease Management Portfolio

Market Access (CBS)

Project	Op. Cost
Effect of postharvest treatments on the viability of CBS	148 634
New spray programmes against CBS	61 174
Identifying other fungi that may be confused with CBS	34 082
Earliest application of ethephon for CBS detection	64 861
Epidemiology, inoculum potential in diff. geographic areas	121 134
Detection and spread of the CBS pathogen	96 632
Improved management through web-based systems & modelling	272 766
Reduced volume sprays for the control of CBS	52 516

Total number of projects funded in portfolio: 29

2015/16 Horticulture Portfolio Proportional Cost

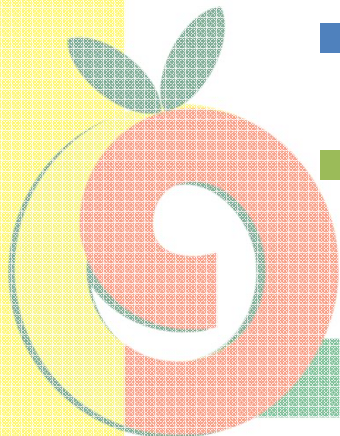


■ Cultivar evaluation

■ Fruit production & quality

■ Rind condition

■ Cold chain & packaging



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2015/16 Horticulture Portfolio Market Access & Major Losses

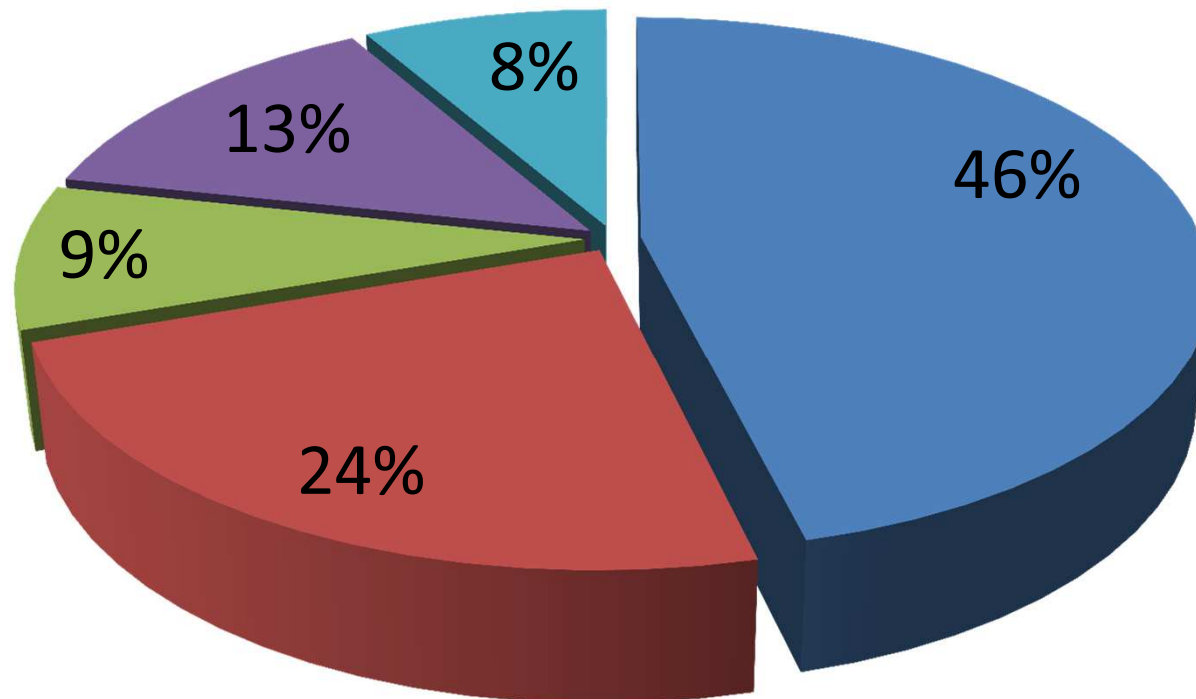
Project	Op. Cost
Effect of irradiation levels on internal & external citrus quality	482 921
Ambient loading of citrus fruit for a cold steri market	148 928
Effect of chemicals on the development of Peteca	98 587
Studies on rind pitting	266 979
Non-destructive prediction of rind quality	73 117
Shade nets to improve set, size and prevent sunburn	193 822
Cold storage potential of new mandarin varieties	37 250
Reproductive development and pruning of Nadorcott	316 213

Total number of projects funded in portfolio: 55



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2015/16 IPM Portfolio Proportional Cost



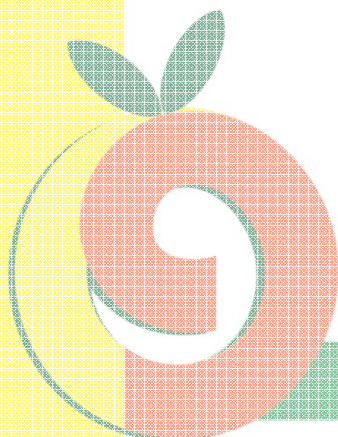
■ False codling moth

■ Mealybug & other phyto pests

■ Minor pests & mites

■ Fruit fly

■ Non-phyto key pests



Research

2015/16 IPM Portfolio

Market Access (FCM & FF)

Project	Op. Cost
System approach and shortening of cold treatment for FCM	38 839
Vapour heat postharvest treatment against FCM & FF	34 643
EPNs and EPF to control FCM pupae in the soil	187 536
Novel approaches to mating disruption of FCM	43 224
Volatile emissions and other FCM detection methods	179 323
Developing sorting equipment to detect FCM-infested fruit	38 529
Comparison of male annihilation treatments for OFF	157 334
Utilisation of citrus and other fruit by OFF	104 725

Total number of projects funded in portfolio: 27



Thank you

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