



Independent Cultivar Evaluation – Separating the wheat from the chaff

Hortgro Technical Symposium 2024

Iwan Labuschagne

PRODUCT DEVELOPMENT - VALUE CHAIN

- Breeding and selection
- Acquisition – building relationships
- Importation and Quarantine
- Planting and tree management
- First phase evaluation
- Semi-Commercial evaluation
- Commercialization
- IP / New Cultivar Management

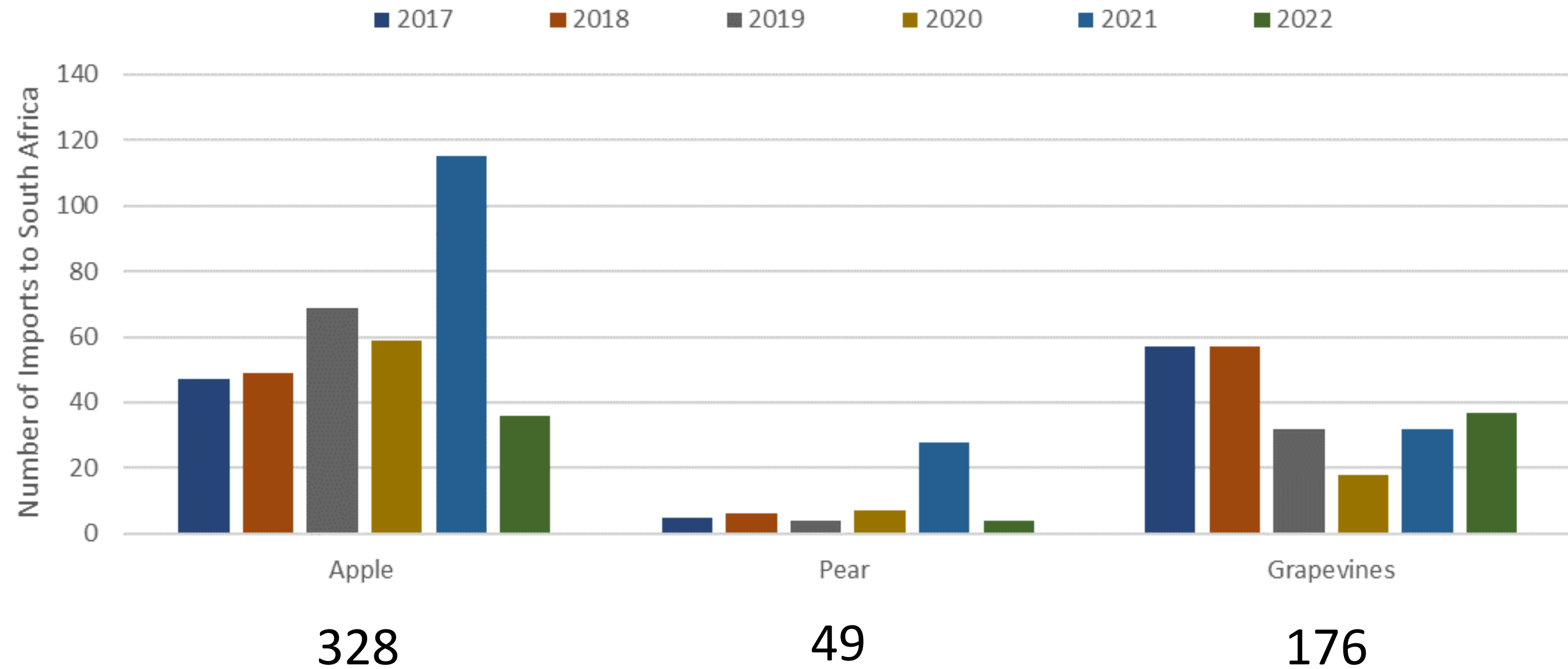


*Aiming towards a systematic
process - **data driven** and
science based*



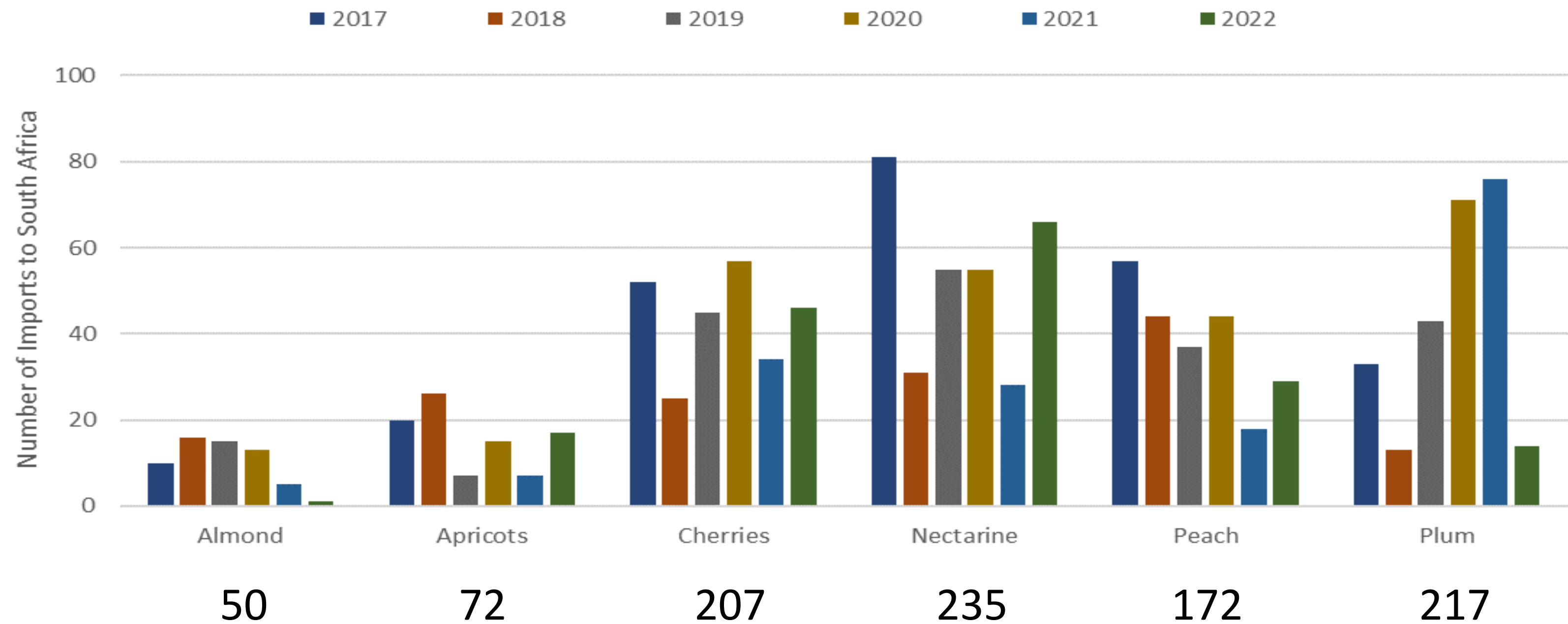
POME FRUIT AND GRAPE IMPORTS

Continuous Stream of new cultivars to SA



Continuous importation to SA

STONE FRUIT IMPORTS



Eufrin “Variety Judgement Exchange” - 2023

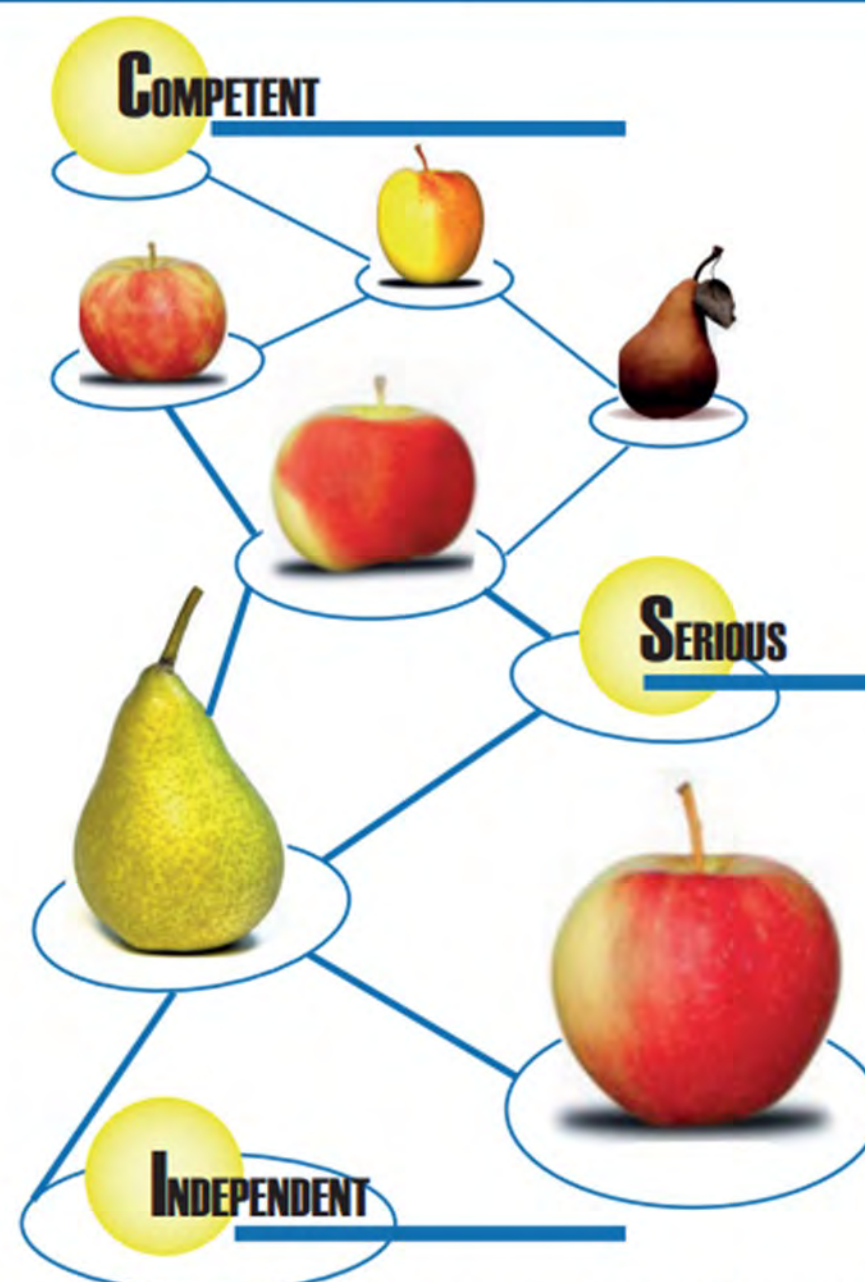
Apple and pear variety and rootstock evaluation at many different sites in the world

- 15 Institutions (10 countries)
- Feedback on 206 Pear cultivars
Representing 29 Pear Breeders / Cultivar owners
- Feedback on 515 Apple cultivars
Representing 72 Apple Breeders / Cultivar owners



eufrin

European Fruit Research
Institutes Network



Apple & Pear Variety & Rootstock Testing

Continuous Improvement

New Apples

1. Luiza Samboa® D. Nari (Agrion, Italy)
2. Inogo Lory® J. Lordan (IRTA, Spain)
3. Delcored Delbardivine® S. Codarin (Ctifl, France)
4. Wurtwinning Bloss® U. Mayr (KOB Bavendorf, Germany)
5. ZIN P 186 & ZIN P 168 H. Holthusen (OVR Jork, Germany)
6. I3D7-123 CIVM123 J. Vercammen (pcfruit, Belgium)
7. A569R05 T133 L. Klophaus (DLR Rheinpfalz, Germany)
8. Regal 10-45 Wild Twist® R. Stocker (RC Laimburg, Italy)
9. Pia 41 S. Metzner (LfULG Dresden Pillnitz)
10. Bonita M. Friedli (FiBL, Switzerland)
11. SQ 159 Natyra®/Magic Star® R. Gregori (UNIBO, Italy)
12. Sissi & Vanessa T. Rühmer (Haidegg, Austria)
13. KK 5-16 'Kelin' L. Ikase (LSIFG, Latvia)
14. Dalinsweet A. Cebulj (KIS Ljubljana, Slovenia)
15. WA38 Cosmic Crisp® S. Cia (Agroscope, Switzerland)

New Pears

1. Harovin Sundown G. Caracciolo (CREA, Italy)
2. Cordula B01 RNA 1404 (P3123) T. Rühmer (Haidegg, Austria)



Without continual introduction of new cultivars to any fruit industry, growth, progress, improvement and success is not possible

Choosing the best Cultivar?

Investigate target market - market demand and profitability

Consider the long-term viability and sustainability of a cultivar

Consider consumer preferences regarding taste, texture and appearance

Resistance to diseases to minimise the need for pesticides and ensure better crop yields

Evaluate the expected yield, productivity and alternative bearing

Adaptability to different climates – suitability to certain climates or soil types - resilience to climate change

Rootstock choice / best performing rootstock x scion combinations

Access to trial plantings and evaluation information

Mostly a combination of the above

RISK MITIGATION

"What gets measured gets improved."

PETER DRUCKER



About

New Cultivar Commercialisation



Introducing a new cultivar in a crowded market

- Marketing challenges - marketer presenting new cultivar to retailers
- Naming the new release - make sure that it's interesting and valuable for retailers
- 'Newness' is commoditised - add other elements that appeal to retail - Chris Sandwick, director of marketing with Hess Bros. Fruit Co – new apple cultivar 'WildTwist' - 2024
- Working with retailers on a more customised level to help create return customers
- Profitable product for the growers and profitable for retail
- One cannot exist without the other – A Process needed in support of total Value Chain
- Interaction and communication between role players



Focus on independent, objective and scientific evaluation and data management

- *Provar was Established in 2013 as a private independent service delivering providing R&D company in the fruit sector*
- *Ensure complete independence and facilitating buy-in of clients*
- *Serving private commercial fruit entities, fruit breeders, licensees, IP owners and managers and SA Fruit Industry*

Independent Evaluation



VALUE PROPOSITION

- Independent data through live reports
- Information supportive of advance insights and decision-making
- Anonymous benchmarking
- Access to evaluation sites in diverse environments
- Expanding choices for area-specific adapted cultivars
- Eliminating maladapted cultivars
- Building capacity and increasing potential income



**INDEPENDENT DATA to
REDUCE RISK**



Provar

OUR SERVICES



Tree Evaluation



Fruit Evaluation



Storage Evaluation



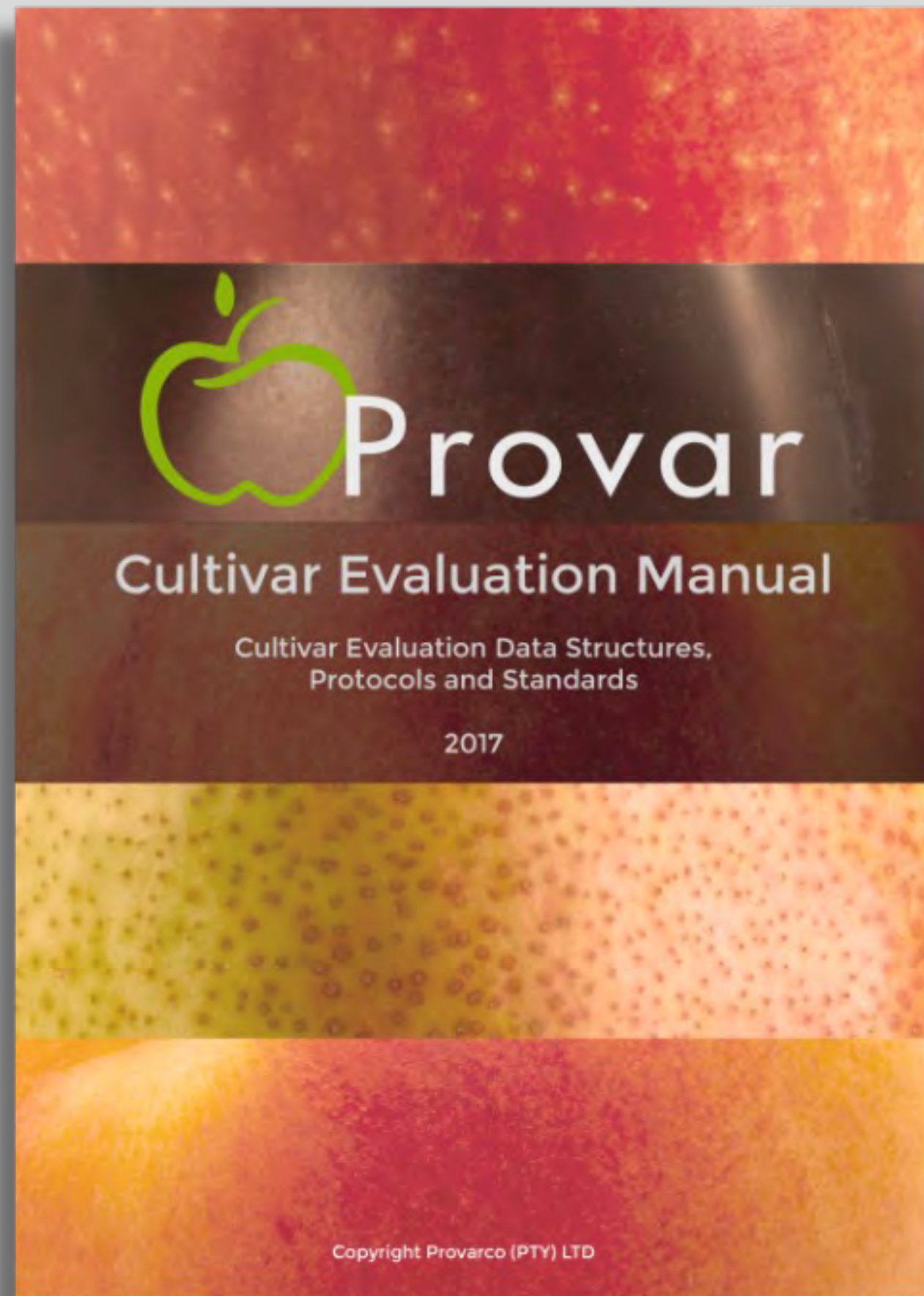
Other Services

We also provide specialised services.

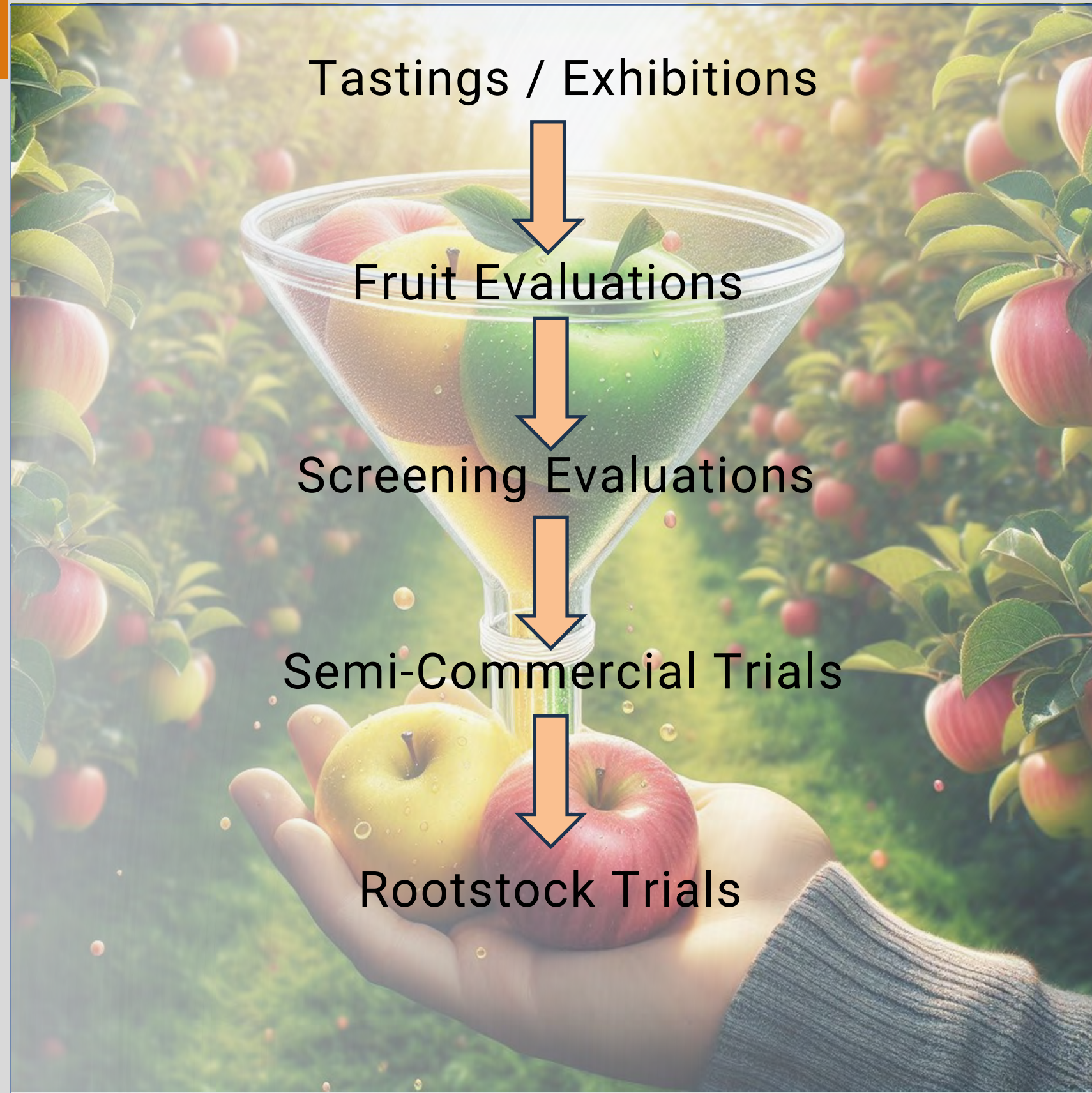


STANDARDISED EVALUATION

- Standardised protocols **ensure** accurate and **comparable** data across evaluation sites and even different countries
- Every **procedure, recordable-characteristic** and **measurement** is documented according to the Provar Evaluation Manual
- **Continuously improve**, curate and amend standards and best practices
- Easily **accessible** data base to all stakeholders



Evaluation Process



INDUSTRY FRUIT EXHIBITIONS

Host industry tastings as an important step of the evaluation process

FRUIT EVALUATION

- Four stages visual and sensory fruit evaluation
- Storage and shelf life potential

ADVANCED SCREENING EVALUATIONS

- Phenology
- Tree characteristics
- Four stages visual and sensory fruit evaluation
- Storage and shelf life potential



SEMI-COMMERCIAL EVALUATIONS

- Phenology
- Tree characteristics
- Harvest / Yield indexing
- Four stages visual and sensory fruit evaluation
- Storage and shelf life potential

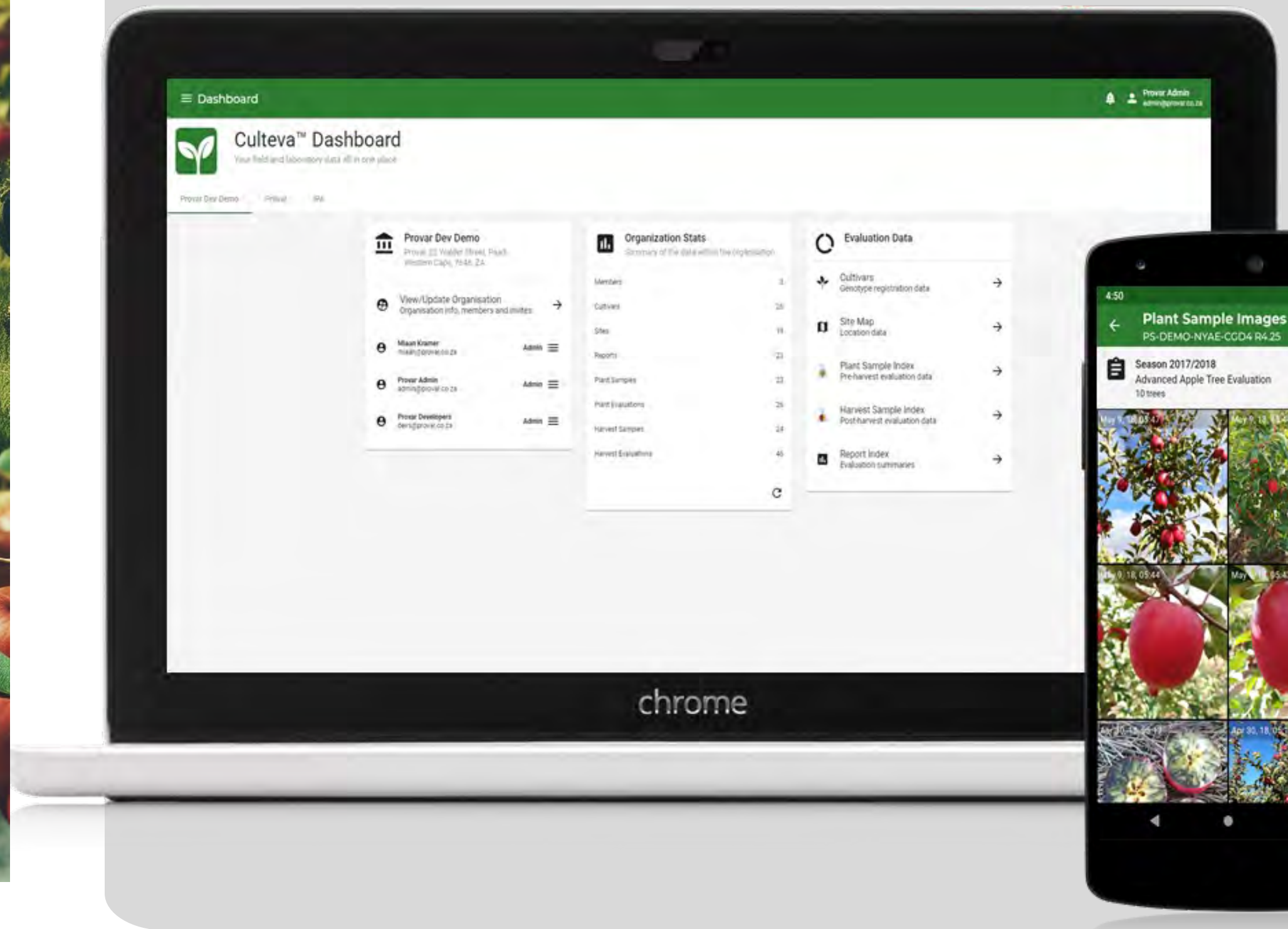
ROOTSTOCK EVALUATION

- Rootstock screening trials
- Industry funded rootstock trials



CULTEVA™

CULTIVAR DATA COLLECTION AND DATA MANAGEMENT SOFTWARE



STANDARDISED REPORTING



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Regalyou Full Trial Evaluation Report 2022 - SAPO

Provar Full Trial Evaluation is performed to characterise the adaptability and commercial potential of fruit selections or cultivars on at least 10 full-bearing trees per evaluation site. Evaluation includes all the phenological stages, monitoring of tree characteristics and harvesting all fruit from the 10 trees at an optimal harvest date to estimate the production potential for that specific year. A random sample of 75 fruit per tree is then extracted from the full harvest for a four stage visual and sensory evaluation to characterise fruit quality and keeping ability over a specified storage period. Information gathered includes harvest and maturity indexing and shelf life potential. For early cultivars, a storage period of 42 days @ -0.5°C applies, where fruits are extracted at 14 day intervals and each stage is followed by shelf life of 7 days @ 20° C, respectively. For mid to late cultivars harvested post January, 84 days @ -0.5°C applies and extracted at 28 day intervals where each stage is followed by shelf life of 7 days @ 20° C, respectively.



Harvest Sample **HS-BVPS-AQZE-4T5I**
Graymead 2022
Full Trial Trial

Date Harvested Week 10, Mar 8, 2023

Scion Cultivar Regalyou TM

Location Graymead, Block 3, Control,

Sample Size 75

K **Pre-Storage**, Week 10, 2023, 9 Mar

L **Mid-Storage**, Week 18, 2023, 4 May

- 28d @ -0.5°C
- 7d @ 20°C

M **Post-Storage**, Week 19, 2023, 11 May

- 56d @ -0.5°C
- 7d @ 20°C

N **Post-Shelflife**, Week 23, 2023, 8 Jun

- 84d @ -0.5°C
- 7d @ 20°C

Fruit Tree - Adaptability

Prolonged Dormancy

Descriptor Score	
A Bokveldskloof 2019 Bokveldskloof	High 68
B Bokveldskloof 2020 Bokveldskloof	Intermediate 52
C Bokveldskloof 2021 Bokveldskloof	Low 35
D Bokveldskloof 2021 Bokveldskloof	Low 32
E Graymead 2020 2020 Evaluation	High 67
F Graymead 2021 2020 Evaluation	Intermediate 51
G Graymead 2022 2020 Evaluation	High 72
H Wakkerstroom 2020 Wakkerstroom	Intermediate 49
I Wakkerstroom 2021 Wakkerstroom	Low 37
J Wakkerstroom 2022 Wakkerstroom	Low 37

Flower Burst Span

Descriptor Score	
A Bokveldskloof 2019 Bokveldskloof	Extended 83
B Bokveldskloof 2020 Bokveldskloof	Prolonged 52
C Bokveldskloof 2021 Bokveldskloof	Brief 26
D Bokveldskloof 2021 Bokveldskloof	Brief 27
E Graymead 2020 2020 Evaluation	Extended 81
F Graymead 2021 2020 Evaluation	Prolonged 51
G Graymead 2022 2020 Evaluation	Extended 80
H Wakkerstroom 2020 Wakkerstroom	Extended 82
I Wakkerstroom 2021 Wakkerstroom	Brief 30
J Wakkerstroom 2022 Wakkerstroom	Prolonged 34

Uniform Ripening

Descriptor Score	
A Bokveldskloof 2019 Bokveldskloof	Even 70
B Bokveldskloof 2020 Bokveldskloof	Intermediate 48
C Bokveldskloof 2021 Bokveldskloof	Intermediate 50
D Bokveldskloof 2021 Bokveldskloof	Uneven 27
E Graymead 2020 2020 Evaluation	Intermediate 51
F Graymead 2021 2020 Evaluation	Intermediate 49
G Graymead 2022 2020 Evaluation	Intermediate 49
H Wakkerstroom 2020 Wakkerstroom	Even 71
I Wakkerstroom 2021 Wakkerstroom	Even 60
J Wakkerstroom 2022 Wakkerstroom	Intermediate 41

Productivity

Descriptor Score	
A Bokveldskloof 2019 Bokveldskloof	Strong 70
B Bokveldskloof 2020 Bokveldskloof	Intermediate 51
C Bokveldskloof 2021 Bokveldskloof	Strong 69
D Bokveldskloof 2021 Bokveldskloof	Weak 29
E Graymead 2020 2020 Evaluation	Weak 27
F Graymead 2021 2020 Evaluation	Strong 73
G Graymead 2022 2020 Evaluation	Strong 71
H Wakkerstroom 2020 Wakkerstroom	Strong 61
I Wakkerstroom 2021 Wakkerstroom	Very Strong 88
J Wakkerstroom 2022 Wakkerstroom	Strong 60

Fruit - Eating Quality

Sugar

Descriptor Score	
K Pre-Storage Graymead 2022	Sweet 72
L Mid-Storage Graymead 2022	Sweet 72
M Post-Storage Graymead 2022	Sweet 72
N Post-Shelflife Graymead 2022	Sweet 74
O Pre-Storage Wakkerstroom 2022	Sweet 67
P Mid-Storage Wakkerstroom 2022	Sweet 73
Q Post-Storage Wakkerstroom 2022	Sweet 70
R Post-Shelflife Wakkerstroom 2022	Sweet 71
S Pre-Storage Bokveldskloof 2022	Sweet 70
T Post-Storage Bokveldskloof 2022	Sweet 71
U Mid-Storage Bokveldskloof 2022	Sweet 71
V Post-Shelflife Bokveldskloof 2022	Sweet 72

Acid

Descriptor Score	
K Pre-Storage Graymead 2022	Intermediate 40
L Mid-Storage Graymead 2022	Low Acid 29
M Post-Storage Graymead 2022	Low Acid 32
N Post-Shelflife Graymead 2022	Intermediate 44
O Pre-Storage Wakkerstroom 2022	Intermediate 59
P Mid-Storage Wakkerstroom 2022	Low Acid 37
Q Post-Storage Wakkerstroom 2022	Low Acid 38
R Post-Shelflife Wakkerstroom 2022	Low Acid 33
S Pre-Storage Bokveldskloof 2022	Tart 63
T Post-Storage Bokveldskloof 2022	Low Acid 37
U Mid-Storage Bokveldskloof 2022	Low Acid 30
V Post-Shelflife Bokveldskloof 2022	Low Acid 31

Sugar Acid Balance

Descriptor Score	
K Pre-Storage Graymead 2022	Sweet 64
L Mid-Storage Graymead 2022	Sweet 72
M Post-Storage Graymead 2022	Sweet 72
N Post-Shelflife Graymead 2022	Sweet 67
O Pre-Storage Wakkerstroom 2022	Balanced 54
P Mid-Storage Wakkerstroom 2022	Sweet 71
Q Post-Storage Wakkerstroom 2022	Sweet 71
R Post-Shelflife Wakkerstroom 2022	Sweet 71
S Pre-Storage Bokveldskloof 2022	Sweet 62
T Post-Storage Bokveldskloof 2022	Sweet 69
U Mid-Storage Bokveldskloof 2022	Sweet 69
V Post-Shelflife Bokveldskloof 2022	Sweet 70

Aroma

Descriptor Score	
K Pre-Storage Graymead 2022	Flavoursome 71
L Mid-Storage Graymead 2022	Flavoursome 71
M Post-Storage Graymead 2022	Flavoursome 67
N Post-Shelflife Graymead 2022	Flavoursome 66
O Pre-Storage Wakkerstroom 2022	Intermediate 51
P Mid-Storage Wakkerstroom 2022	Flavoursome 72
Q Post-Storage Wakkerstroom 2022	Intermediate 54
R Post-Shelflife Wakkerstroom 2022	Flavoursome 72
S Pre-Storage Bokveldskloof 2022	Intermediate 56
T Post-Storage Bokveldskloof 2022	Intermediate 53
U Mid-Storage Bokveldskloof 2022	Flavoursome 65
V Post-Shelflife Bokveldskloof 2022	Intermediate 50

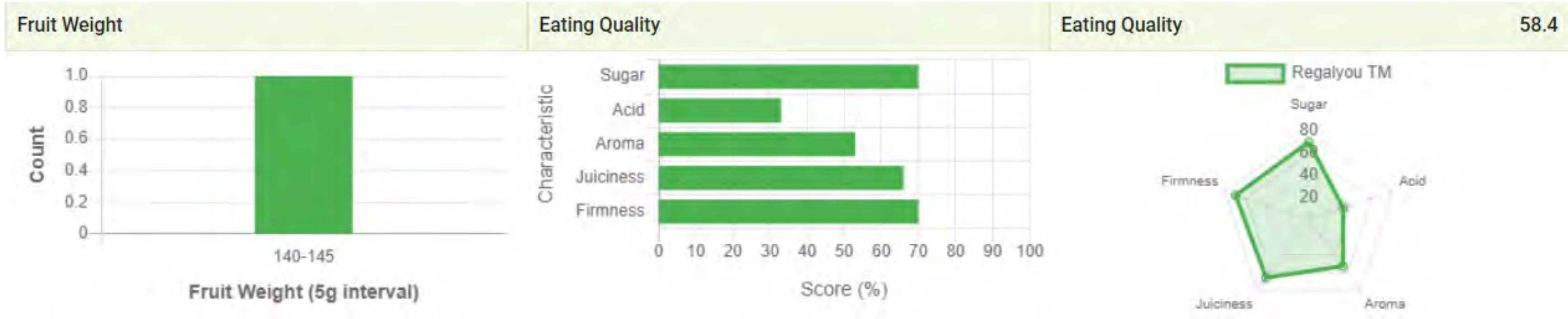
Tree Adaptability to Evaluation area Aggregated

Location, Prolonged Dormancy, Flower Burst Span, Uniform Ripening, Sunburn Presence, Adaptability, Productivity, Pome Tree Adaptability Index

Location		Prolonged Dormancy	Flower Burst Span	Uniform Ripening	Sunburn Presence	Adaptability	Productivity	Pome Tree Adaptability Index
A	Bokveldskloof, 53 (Trial Block)	High 68	Extended 83	Even 70	Inconspicuous 26	Intermediate 45	Strong 70	51.17
B	Bokveldskloof, 53 (Trial Block)	Intermediate 52	Prolonged 52	Intermediate 48	Inconspicuous 23	Intermediate 55	Intermediate 51	54.5
C	Bokveldskloof, 53 (Trial Block)	Low 35	Brief 26	Intermediate 50	Inconspicuous 33	Well Adapted 76	Strong 69	66.83
D	Bokveldskloof, 53 (Trial Block)	Low 32	Brief 27	Uneven 27	Inconspicuous 30	Well Adapted 75	Weak 29	56.83
E	Graymead, Trial Block	High 67	Extended 81	Intermediate 51	Inconspicuous 30	Intermediate 38	Weak 27	39.33
F	Graymead, Trial Block	Intermediate 51	Prolonged 51	Intermediate 49	Intermediate 52	Intermediate 52	Strong 73	53.33
G	Graymead, Trial Block	High 72	Extended 80	Intermediate 49	Intermediate 41	Poorly Adapted 20	Strong 71	41.0
H	Wakkerstroom, Trial Block	Intermediate 49	Extended 82	Even 71	Inconspicuous 27	Intermediate 36	Strong 61	51.67
I	Wakkerstroom, Trial Block	Low 37	Brief 30	Even 60	Intermediate 52	Well Adapted 68	Very Strong 88	66.17
J	Wakkerstroom, Trial Block	Low 37	Prolonged 34	Intermediate 41	Inconspicuous 26	Well Adapted 70	Strong 60	62.17

CHARACTERISTICS AND DESCRIPTORS LIST

✦ Cultivar	Regalyou TM	Over Colour Area	Mostly Covered 68
	I 15114	Shape Symmetry	Symmetrical 73
Description	Regalyou TM	Shape Consistency	Uniform 67
Licensee	SAPO	Abrasions	Negligible 10
Initial Reproductive Budbreak	W40, 1 Oct	Blemishes	Negligible 11
Initial Vegetative Budbreak	W40, 1 Oct	Sugar	Sweet 70
Harvest Start	W11, 11 Mar	Acid	Low Acid 33
Branching Habit	Spreading	Sugar Acid Balance	Sweet 68
Growth Form	Basitonic, Mesotonic	Aroma	Intermediate 53
Growth Potential	Strong 72	Juiciness	Juicy 66
Flower Density	Intermediate 41	Skin Thickness	Thick / Crisp 62
Flower Distribution	Intermediate 59	Firmness	Firm 70
Secondary Flowering	Little 31	Texture Crispness	Crisp 71
Bearing Position	Terminal Bearing, Lateral Bearing	Texture Crunchiness	Crunchy 74
Fruit Set Potential	Optimal 58	Grain	Fine 39
Colour Potential Inside Tree	Average 49	External Disorders Detected	None
Prolonged Dormancy	Low 33	Internal Disorders Detected	None
Flower Burst Span	Brief 26	Internal & External Disorders Detected	None
Uniform Ripening	Uneven 38	Keeping Quality	Good 66
Sunburn Presence	Inconspicuous 31	Appearance	Average 55
Adaptability	Well Adapted 75	Colour Potential	Average 55
Productivity	Intermediate 49	Taste & Aroma	Good 63
Ripening Uniformity	Intermediate 55	Eating Quality	Good 66
Fruit Size	Average 56	Interest	Average 55
Over Colour	Intermediate, Medium Red		
Over Colour Uniformity	Intermediate 56		



CHARACTERISTIC INDICES CULTIVAR RANKING



W40, Oct 5, 2022



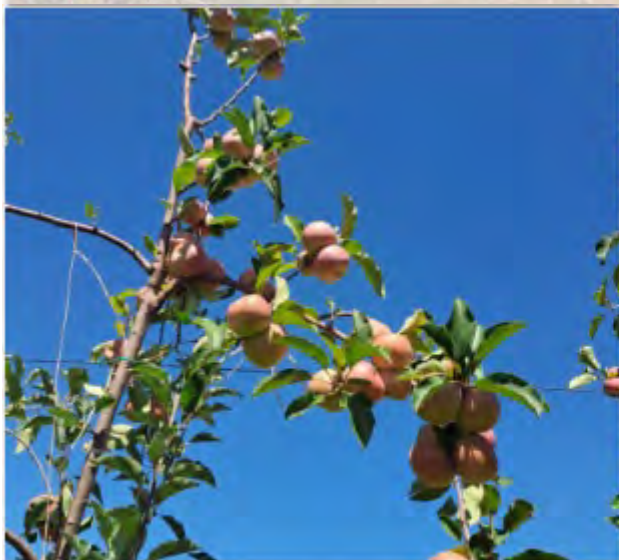
W40, Oct 5, 2022



W40, Oct 5, 2022



W42, Oct 19, 2022



W6, Feb 10, 2023



W6, Feb 10, 2023



W8, Feb 21, 2023



W8, Feb 21, 2023



W20, May 18, 2023



W20, May 18, 2023



W20, May 18, 2023



W20, May 18, 2023

Cultivar Adaptability



“Genotypic Adaptability”

- Performance & stability
- Phenology (dormancy and chilling requirements)
- Tree growth & architecture
- Fruit Quality
- Yield

V-18-PRO-CP05 - Adaptability indexing of new pome (apple & pear) and stone fruit (plum) cultivars in diverse South African growing areas

“Commercial Viability”

- Establishment cost
- Production cost
- Royalties
- Opportunity cost
- Accumulated Income / Loss

NP44-2021 - An economic analysis focused on income or loss to the fruit producer related to new deciduous fruit cultivar choice



Scientific footprint

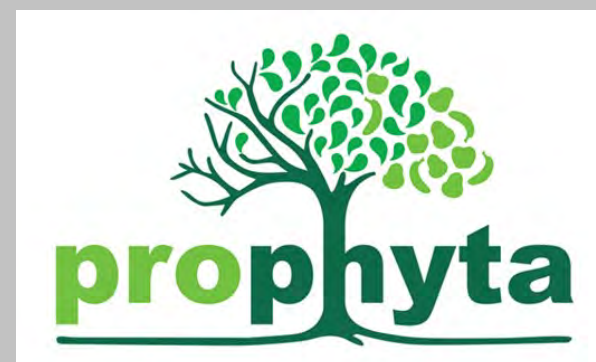
Adding Value to Independent Evaluation

- Presently 9 MSc students in training
- 4 Cum Laude MSc studies delivered to industry
- Internship / Mentorship programme
- Host international interns
- Foster collaboration

Science Projects



OTHER



ADDED VALUE

Evaluation of stone and pome fruit rootstocks



Evaluation tolerance against apple replant disease



Growth synchronisation of rootstocks and scions
with different chilling requirements



Economic analysis focused on profit or loss to the fruit producer
related to new deciduous fruit cultivar choice



Evaluation of table and raisin grape rootstocks in
different production areas



Tree training trials



Evaluation of red flesh apples for cider production



Evaluation of apple and pear breeding families



Adaptability and stability indexing of pome and stone fruit cultivars in
different growing areas (apples, pears, cherries and Japanese plums)



Study on rest-breaking agents and applications



Pro-Hort Project



Pro-Hort site development

Fruit evaluations based on tasting results

24 pome and 24 stone fruit screening evaluations

Hortgro tree management in Pro-Hort sites

Pro-Hort Eco-physiology Platform (PHEPP)
management

Hortgro, as industry and producers'
representative, supports independent evaluation

Industry funded evaluation sites

- 11 Decentralised sites
- Diverse production areas
- Selected site managers
- Formal agreements
- Industry consultants

Trial Site	Location	First Planting year	Commodities				
Lushof	Warm Bokkeveld, Western Cape	2019	Plums	Peaches/ Nectarines	Apricots	High Chill Cherries	
Cape Dry	Montagu, Western Cape	2018	Plums	Peaches/ Nectarines	Apricots		
Klipboschlaagte	Ashton, Western Cape	2018	Plums	Peaches/ Nectarines	Apricots	Low Chill Cherries	Low-Chill Apples
Rouzelle	Breërivier, Western Cape	2019	Plums	Peaches/ Nectarines	Apricots		Low-Chill Apples
Boland Agricultural High School	Paarl, Western Cape	2019	Plums	Peaches/ Nectarines	Apricots		Low-Chill Apples
Ginger Gypsy	Mookgophong, Limpopo	2020		Peaches/ Nectarines		Low Chill Cherries	Low-Chill Apples
Nooitgedacht	Koue Bokkeveld, Western Cape	2019	Apples		Pears	High Chill Cherries	
Oak Valley	Grabouw, Western Cape	2019	Apples		Pears	Low Chill Cherries	
Kanja	Vyeboom, Western Cape	2019	Apples		Pears		
Die Nek	Langkloof, Eastern Cape	2019	Apples		Pears	High Chill Cherries	
Mostertshoek	Wolseley, Western Cape	2020		Pears			

Industry funded evaluation sites

SUPPORTING INDEPENDENT EVALUATION

Total number of Trees and Cultivars within Pro-Hort Sites 2023																	
	Apple		Pear		Plum		Peach		Apricot		Nectarine		Cherry		Prune		Total
	Trees	Cultivars	Trees	Cultivars	Trees	Cultivars	Trees	Cultivars	Trees	Cultivars	Trees	Cultivars	Trees	Cultivars	Trees	Cultivars	Trees per
Boland Landbou	0	0	0	0	210	20	141	20	0	0	93	16	0	0	0	0	444
Cape Dry	0	0	0	0	62	12	38	19	35	12	40	8	0	0	46	6	221
Die Nek	169	29	132	13	0	0	0	0	0	0	0	0	0	0	0	0	301
Ginger Gypsy	0	0	0	0	0	0	239	24	0	0	88	11	0	0	0	0	327
Kanja	113	19	320	35	0	0	0	0	0	0	0	0	0	0	0	0	433
Klipboschlaagte	146	19	141	13	314	35	157	67	53	30	130	43	130	10	0	0	1071
Lushof	0	0	125	19	154	25	47	10	16	2	247	26	176	22	43	6	808
Mostertshoek	0	0	471	46	0	0	0	0	0	0	0	0	0	0	0	0	471
Nooitgedacht	835	84	164	17	125	10	0	0	19	11	56	7	163	22	0	0	1362
Oak Valley	521	78	169	29	0	0	0	0	0	0	0	0	0	0	0	0	690
Rouzelle	0	0	0	0	91	12	43	21	12	3	151	33	0	0	46	6	343
Total	1784	229	1522	172	956	114	665	161	135	58	805	144	469	54	135	18	6471



Industry Tasting Events



Culteva Tastings
Taste the Cultivars of Tomorrow



	Valentine by Stargrow Week 05 Average Score 7.3 Your Score -- Total Tasters 13		Kinolea by Buffat Week 04 Average Score 7.1 Your Score -- Total Tasters 17
	Q 655 by ZaigerSA Week 03 Average Score 7.1 Your Score -- Total Tasters 17		PR 15-433 by Stargrow Week 05 Average Score 6.9 Your Score -- Total Tasters 8
	Polar Snow by Zaiger Week 04 Average Score 6.9 Your Score -- Total Tasters 18		Starplum 6 by Stargrow Week 05 Average Score 6.8 Your Score -- Total Tasters 13
	I-7 by Anonymous Week 05 Average Score 6.7 Your Score -- Total Tasters 13		Sassy™ by Topfruit Week 03 Average Score 6.7 Your Score -- Total Tasters 24

Inspect and taste new cultivars



Engage and connect



Experience variation throughout the season



Receive automated tastings reports



Opportunity to engage with new products, breeders, IP owners and managers.

Tastings 2024

- 8 Pome fruit Tastings (Week 2 to week 18)
- 38 Apple Cultivars and Selections
- 17 Pear Cultivars and Selections
- 1607 Individual Scores
- Descriptors



Expected Keeping Quality	Attractiveness	Colour Potential	Texture	Taste & Aroma	Overall Eating Quality	Overall Interest
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2024 Tasting

Ranking Results : Apples

- Magic Star® (SAPO) – 72%
- NY1/SnapDragon® (TopFruit) – 67%
- Inored / Story® (TopFruit) – 63%
- Desy (Stargrow) – 62%
- Fengapi / Tessa™ (Stargrow) – 61%
- Sunrise Magic® (TopFruit) – 61%
- Apple 102A / R8/19/89 (SAPO) – 60%



Stone Evaluation - 2024 Season

- 10 Apricot Cultivars – 1 Evaluation Site – 2 IP Managers
- 34 Peaches – 7 Sites – 4 IP Managers
- 50 Nectarines – 9 Sites – 6 IP Managers
- 88 Plums – 10 Sites – 6 IP Managers
- Results to be presented at Provar Info Day



Pome Fruit Evaluation - 2024 Season

- 90 Pear Cultivars – 8 Evaluation Sites – 6 IP Managers
- 109 Apple Cultivars – 13 Evaluation Sites – 11 IP Managers
- Results presented at Provar Info Day



Elimination of Maladapted Cultivars : 2021 - 2023

Total number of evaluations, cultivars and selections according to the source of samples for the 2020, 2021 & 2022 seasons' independent evaluation services							
	Evaluations	Cultivars	Advanced Cultivars*	% of Total advanced cultivars*	Culled Cultivars	% of Total culled cultivars	Evaluation Plots
Apple	674	233	21	9,0	212	91,0	28
Pear	353	189	32	16,9	157	83,1	18
Nectarine	571	294	25	8,5	269	91,5	12
Plums	633	274	49	17,9	225	82,1	10
Peaches	256	157	11	7,0	146	93,0	11
Apricots	80	38	6	15,8	32	84,2	5
Total	2567	1185	144	12,2	1041	87,8	84
* Ready for Full Trial / semi-commercial evaluation							

12.2 % of all cultivars to an advanced level of testing

Eliminating 87.8% of all cultivars evaluated



INDEPENDENT EVALUATION

WIN – WIN FOR ALL



BREEDER – Enhancing and expanding new cultivars

NURSERY – Supporting income potential and mitigating reputational risks

IP MANAGER / OWNER – Empowering decision-making process, enhancing income and mitigating reputational risks

PRODUCER - Lowering risks associated with opportunity and income losses

PACKHOUSE / EXPORTER – Completing a viable fruit basket, lowering claims

INDUSTRY – Securing growth and future, opening new markets

Adding value to the industry with a robust value proposition for all stakeholders



Provar

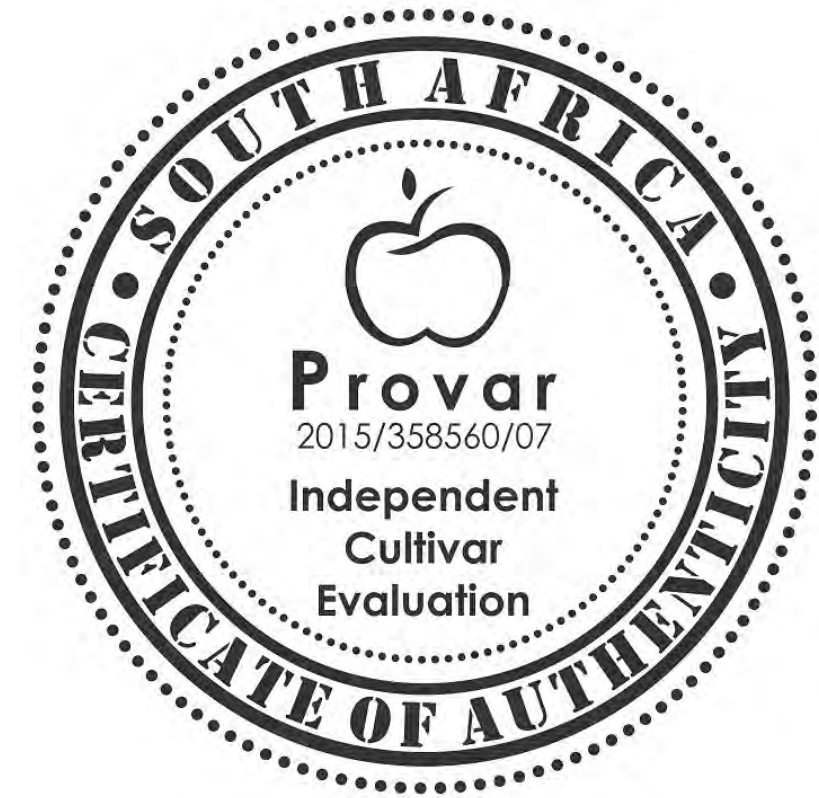


INFORMATION DAY 2024

THURSDAY, 5 SEPTEMBER 2024

📍 Slanghoek Mountain Resort

*Independent evaluation -
a systematic process, data
driven and science based
to transform cultivar data into
information and information
into planting insight*





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- Each and Every Producer
- Hortgro
- HortgroScience
- Evaluation site Owners and Managers
- Industry Consultants
- IP Owners and Managers
- All other Clients
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- Hugh Campbell
- Dr. Esmé Louw (SU, Hort Dept)
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