



**NEW ZEALAND
INTELLECTUAL
PROPERTY OFFICE**

COOPERATION WITH BREEDERS

DUS TESTING IN NEW ZEALAND

9 April 2025



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI

New Zealand Government



SOME STATISTICS FOR PERSPECTIVE

- 95 - 120 applications per year
- In the order of 360 varieties under examination at any time
- 30% - ornamental
- 25% - agricultural
- 12% - vegetable
- 33% - fruit

65% of varieties are bred by foreign breeders



PVR OFFICE - RESOURCES

- Small office - involved only with PVR
- Full time staff of 5 Four (4) examiners plus one (1) specialist
+ part time regional describers (5) (as needed)

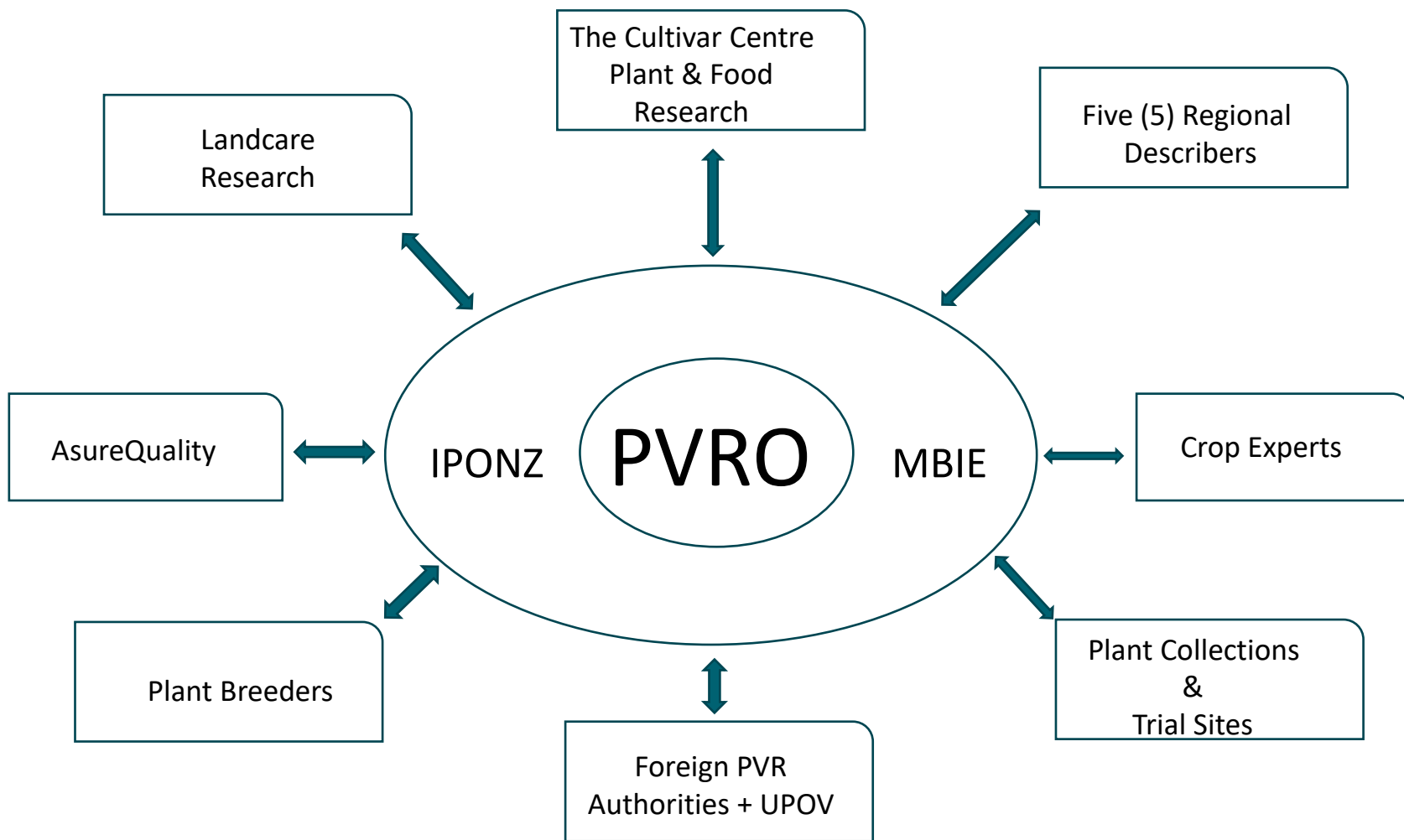
Does not own land, glasshouses, field equipment

Key elements

COOPERATION + COMMUNICATION



**Cooperation with
Breeders provides access
to knowledge and
resources the authority
does not have.**





Cooperation includes Engagement with industry and plant breeders

Annual Meetings

Technical Focus Group.

Technical Working Group for Pasture Species

Training and Education

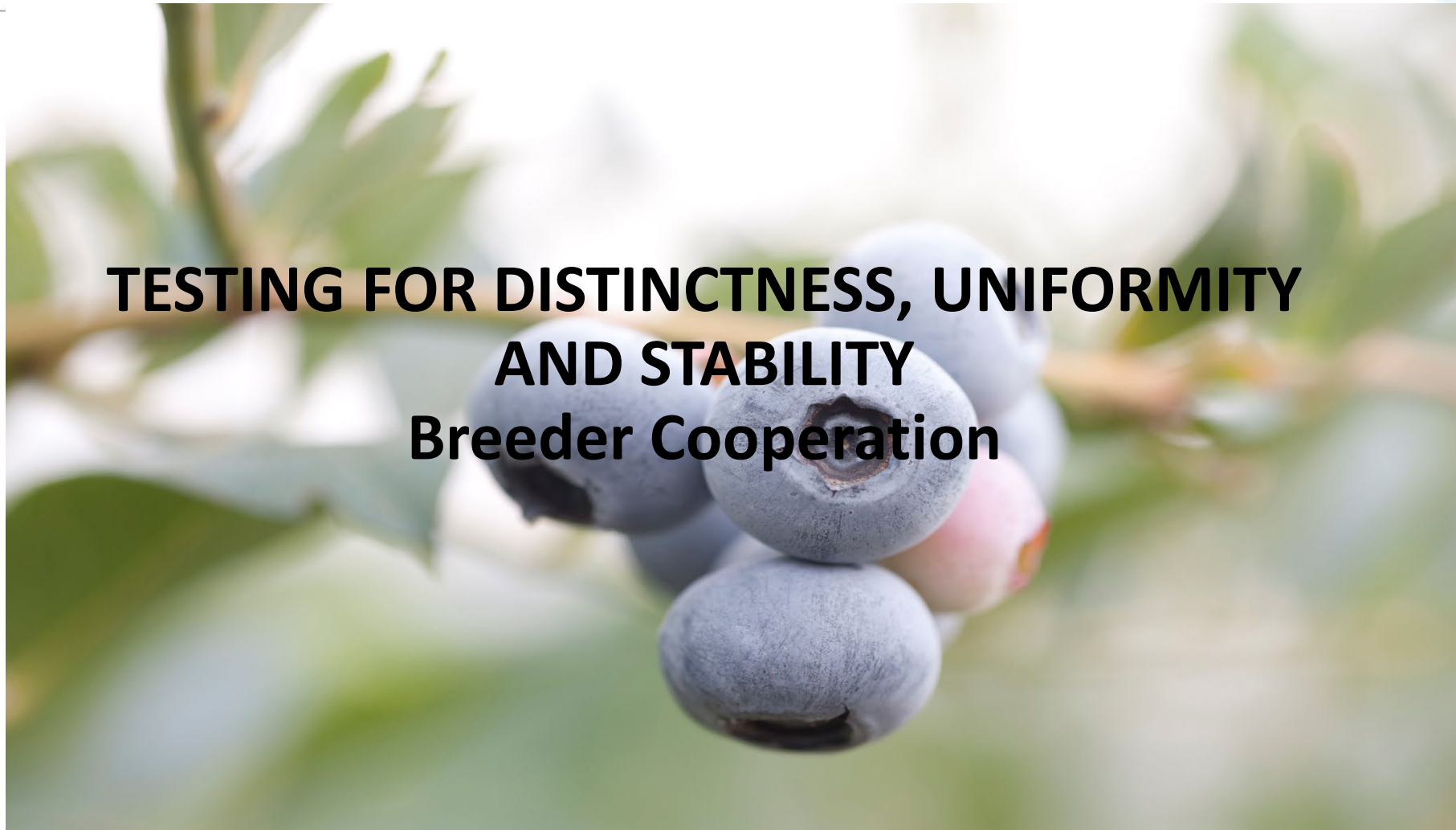
For DUS testing field evaluations and data collection

Routinely

Examiner and expert conversations

Identification of similar varieties

Advice regarding cultivation and agronomy



TESTING FOR DISTINCTNESS, UNIFORMITY AND STABILITY Breeder Cooperation



Testing Arrangements

1. Central testing by the authority
2. Central testing by research institute or industry organisation (**breeder cooperation**)
3. Testing on an applicant's property by the authority (**breeder cooperation**)
4. Breeder testing (**breeder cooperation**)
5. Use of foreign test reports

The arrangement is determined by plant species and the requirements for growing and evaluation.



Website Information

[Arrangements for growing trials for the testing of distinctness, uniformity and stability \(2022 Act\) | Intellectual Property Office of New Zealand](#)



Testing for Agricultural and Vegetable Varieties

Breeder testing

For most vegetables and minor pasture species

The examiner designs the trial and identifies any similar varieties to be included

The breeder is responsible for establishing and maintaining the trial and all evaluation and data collection.

The examiner provides direction and support to ensure that comparisons are correctly made and testing protocols are followed.



Testing for Fruit Varieties

- Central testing by research institute or industry organisation

Testing is contracted to research centre or industry organisation

The examiner provides direction and support to ensure that comparisons are correctly made and testing protocols are followed

- In cooperation with the breeder – testing on the applicant's or another property

The examiner designs the trial and identifies any similar varieties to be included

The breeder is responsible for establishing and maintaining the trial.

The examiner carries out the evaluation and data collection.



Testing for Ornamental Varieties

- In cooperation with the breeder/applicant - on the applicant's or another property

The **examiner** designs the trial and identifies any similar varieties to be included

The **breeder** is responsible for establishing and maintaining the trial.

The **examiner** carries out the evaluation and data collection.



NZ TESTING ARRANGEMENTS

- Are pragmatic
- Are based on “who has the best skills and knowledge to do what”
 - Provide flexibility
 - Encourage efficiency

But there are challenges



CHALLENGES

1. Availability of plant material for testing site providers
2. The willingness or ability of applicants to be involved
3. Multiple testing sites for the same genus requires management



Examination and Recommendation

For all testing arrangements, the Examiner is responsible for all elements of the final examination:

data analysis and observation records

the variety description

quality check

PLUS the Final DUS Recommendation



Breeder Cooperation requires

Partnerships and Collaboration

For cooperation in testing and plant collections

- Breeders
- Applicants
- Research Institutes and Universities
- Industry organisations

Maintaining relationships is an ongoing challenge



Cooperation



Communication



THANK YOU



**Plant & Food
Research**
Rangahau Ahumāra Kai

UPOV Webinar on cooperation with breeders in DUS examination

– a New Zealand
breeder perspective

Emma Brown, GM Plant Varieties

9 April 2025





Agenda

- Introduction to Plant & Food Research
- Breeder involvement in DUS testing
 - Advantages
 - Disadvantages
- UPOV's opportunity



About us

- Government owned Crown Research Institute
- Work in many different crops in breeding
 - Arable, perennial fruit crops, ornamentals
- Engage with the PVRO in a range of crops and DUS testing methods



975

People

14

New Zealand sites
(plus representatives
in Australia & the USA)





We operate and invest
in breeding programmes
alone and with partners both
in **Aotearoa New Zealand**
and offshore



How Plant & Food Research engages with DUS evaluation

- Central testing
 - Operator
 - Breeder applicant
- Breeder run

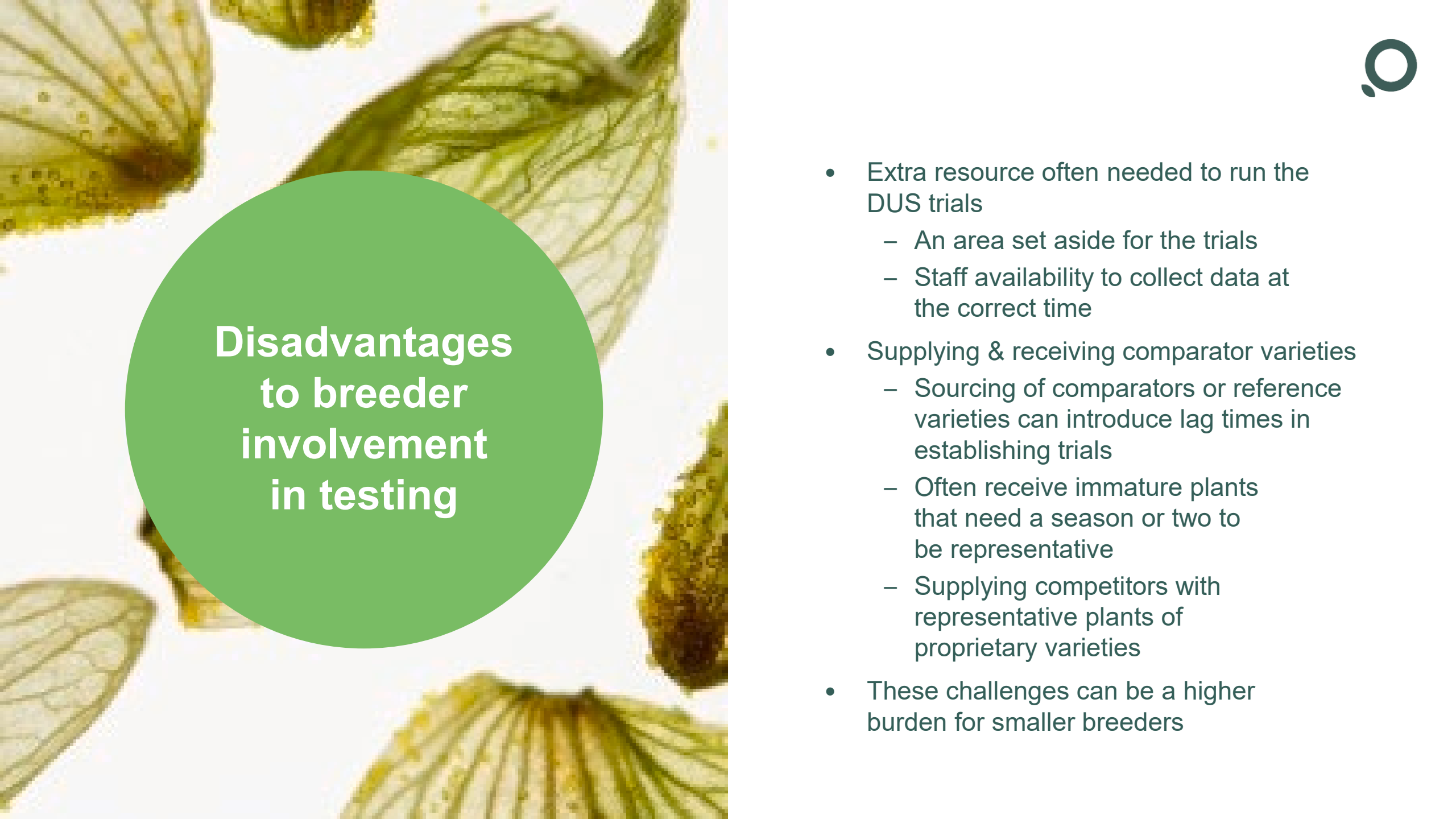


Advantages to breeder involvement in testing



- Breeders know the variety intimately
 - Can provide extra info (growing, morphology) on the variety
 - Can aid if there are issues with trials (disease, pests, etc.)
- Have access to a large repository of reference and comparator varieties and know these varieties well
- Quite often the breeder will have established plants of the candidate variety and possibly comparator varieties, so can start DUS trials immediately





Disadvantages to breeder involvement in testing

- Extra resource often needed to run the DUS trials
 - An area set aside for the trials
 - Staff availability to collect data at the correct time
- Supplying & receiving comparator varieties
 - Sourcing of comparators or reference varieties can introduce lag times in establishing trials
 - Often receive immature plants that need a season or two to be representative
 - Supplying competitors with representative plants of proprietary varieties
- These challenges can be a higher burden for smaller breeders

Support from PVRO



- The system works well in New Zealand as Plant & Food Research work collaboratively with the Office when running breeder run DUS trials
- We work with the PVRO on suitable comparator varieties. The PVRO has a large database and can suggest varieties that the breeders are not aware of. Conversely the breeders can inform the PVRO when varieties are no longer available
- The PVRO are very supportive in offering training and upskilling for running DUS trials



UPOV's opportunity

- Continue to support and champion:
 - flexibility in model – unlikely to be one size fits all, breeders need the right model by crop and country
 - National Office's to support breeders – through training and supply & use of competitor varieties
 - National Office's to purchase and utilise overseas test reports





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Thank you

A smart
green
future.
Together.

plantandfood.co.nz    

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