

Plant & Food
RESEARCH

RANGAHAU AHUMĀRA KAI



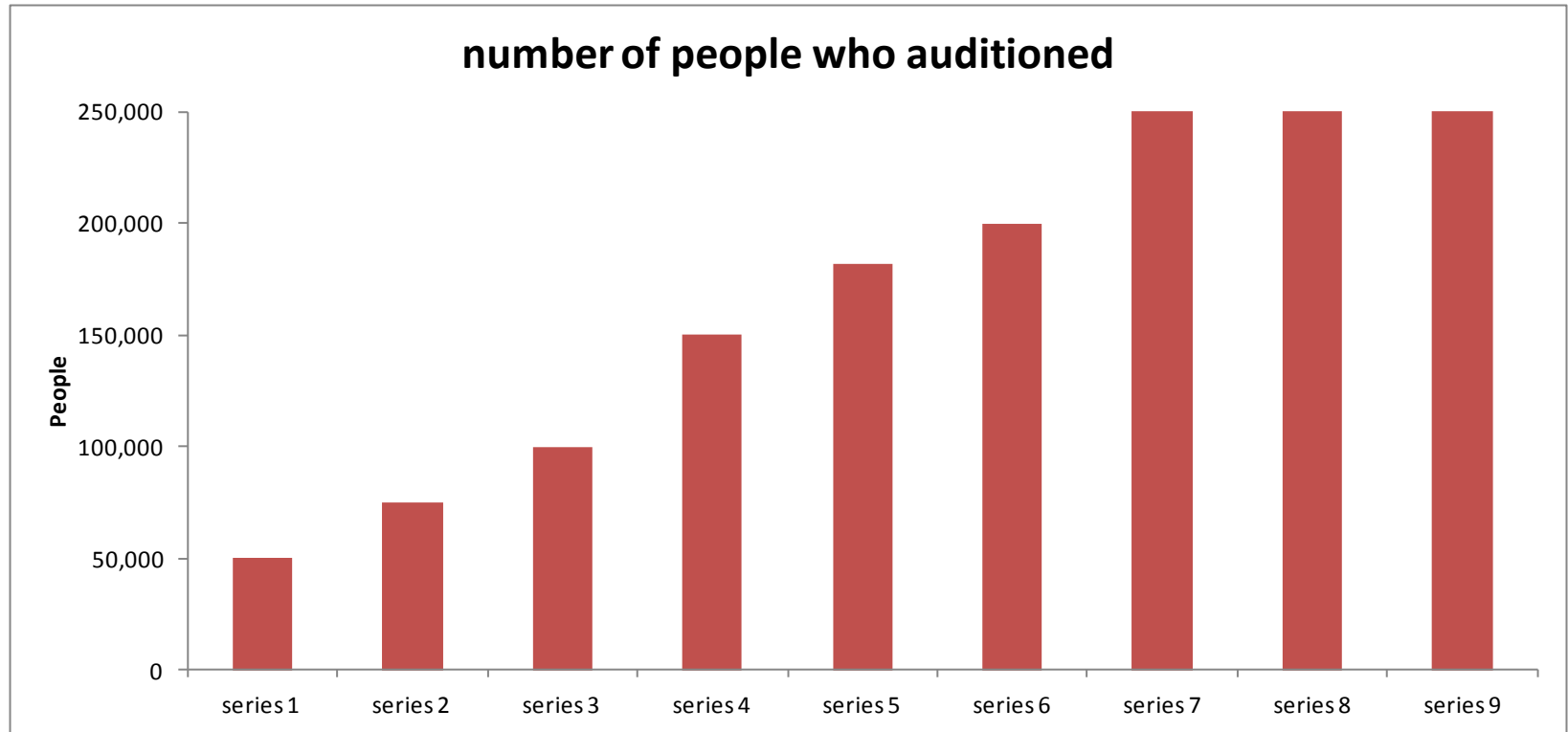
The New Zealand Institute for Plant & Food Research Limited

development/breeding/resistance

Roger P. Hellens – Science Leader, Kiwifruit



The Auditions



The selection process pt 1

There are five stages to the competition:

- Stage 1: Producers' auditions (decide who will sing in front of the judges)**
- Stage 2: Judges' auditions**
- Stage 3: Bootcamp**
- Stage 4: Judges' houses**
- Stage 5: Live shows (finals)**



The selection process pt 2

There are five stages to the competition:

Stage 1: Producers' auditions (decide who will sing in front of the judges)

Stage 2: Judges' auditions

Stage 3: Bootcamp

Stage 4: Judges' houses

Stage 5: Live shows (finals)



A bit like the breeding programme



The selection process Stage 1

There are five stages to the competition:

Stage 1: Producers' auditions – seed germination

Stage 2: Judges' auditions – seedling populations

Stage 3: Bootcamp – clonal trials

Stage 4: Judges' houses – grower trials

Stage 5: Live shows (finals) - commercialisations



Peggy Kashuba



Peter Sutton



Ed Morgan

The selection process Stage 2

There are five stages to the competition:

Stage 1: Producers' auditions – seed germination

Stage 2: Judges' auditions – seedling populations

Stage 3: Bootcamp – clonal trials

Stage 4: Judges' houses – grower trials

Stage 5: Live shows (finals) - commercialisations



Luis Gea



Russell Lowe



Alan Seal



Liz Popowski

The selection process Stage 3

There are five stages to the competition:

Stage 1: Producers' auditions – seed germination

Stage 2: Judges' auditions – seedling populations

Stage 3: Bootcamp – clonal trials

Stage 4: Judges' houses – grower trials

Stage 5: Live shows (finals) - commercialisations



Mike Currie



Mark Astill

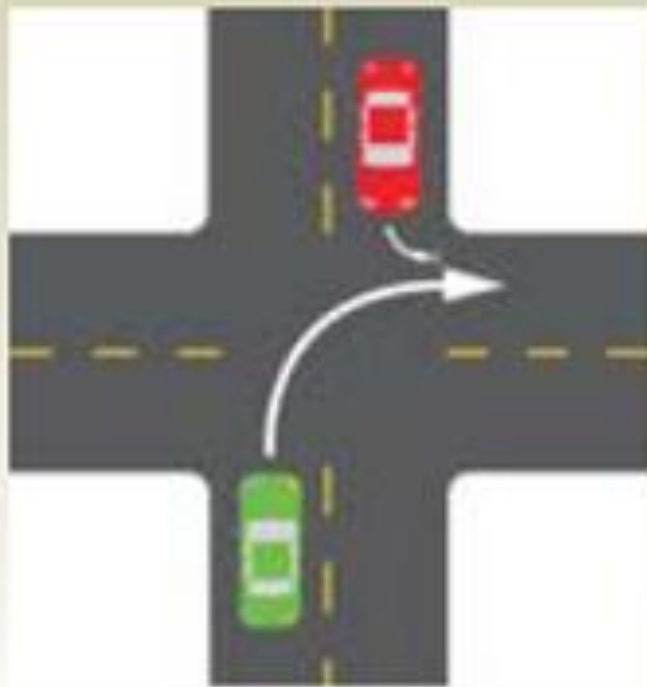


Ella Maxwell

...and then the rules change

Left turn traffic giving way to right turn

Current rules



Proposed rules



PSA



100's of plants screened with Woody Stem Bioassay



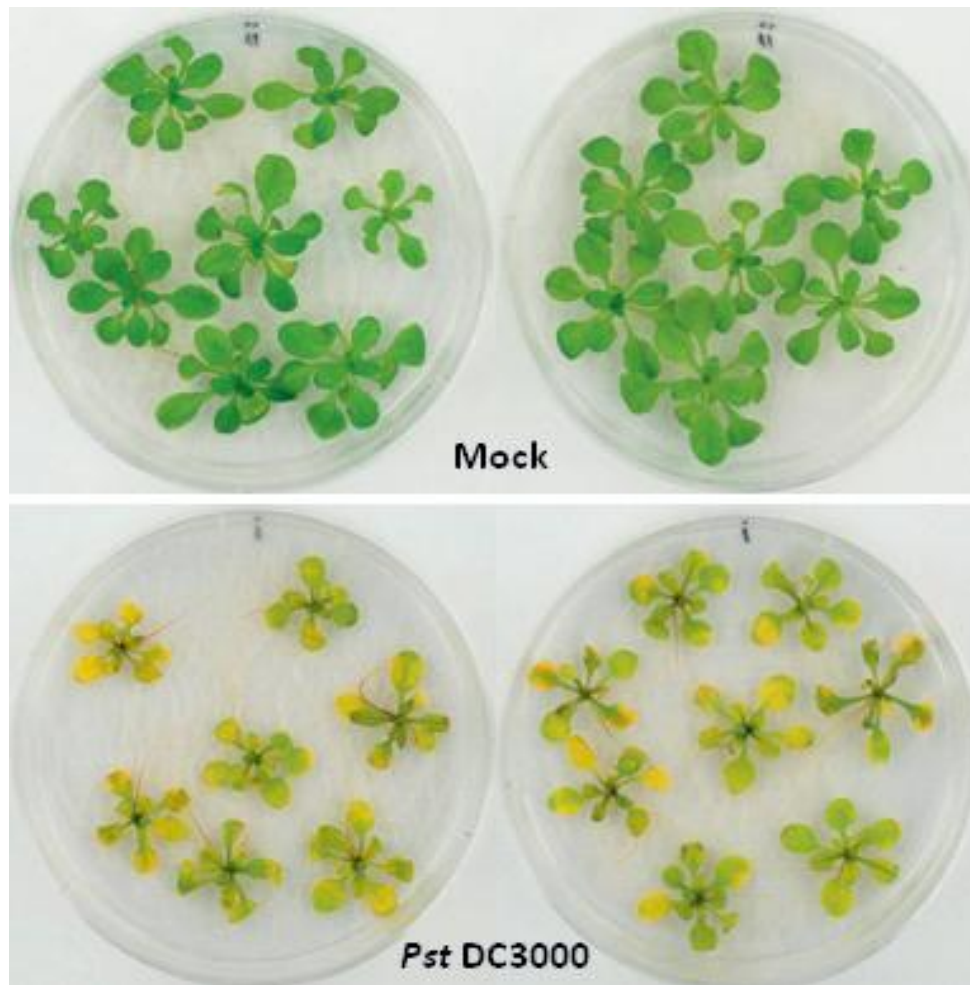
+ Psa

No Psa

1,000's of plants screened with Stab Wound assay



10,000's of plants screened with seedling?



Arabidopsis infected with *Pseudomonades*

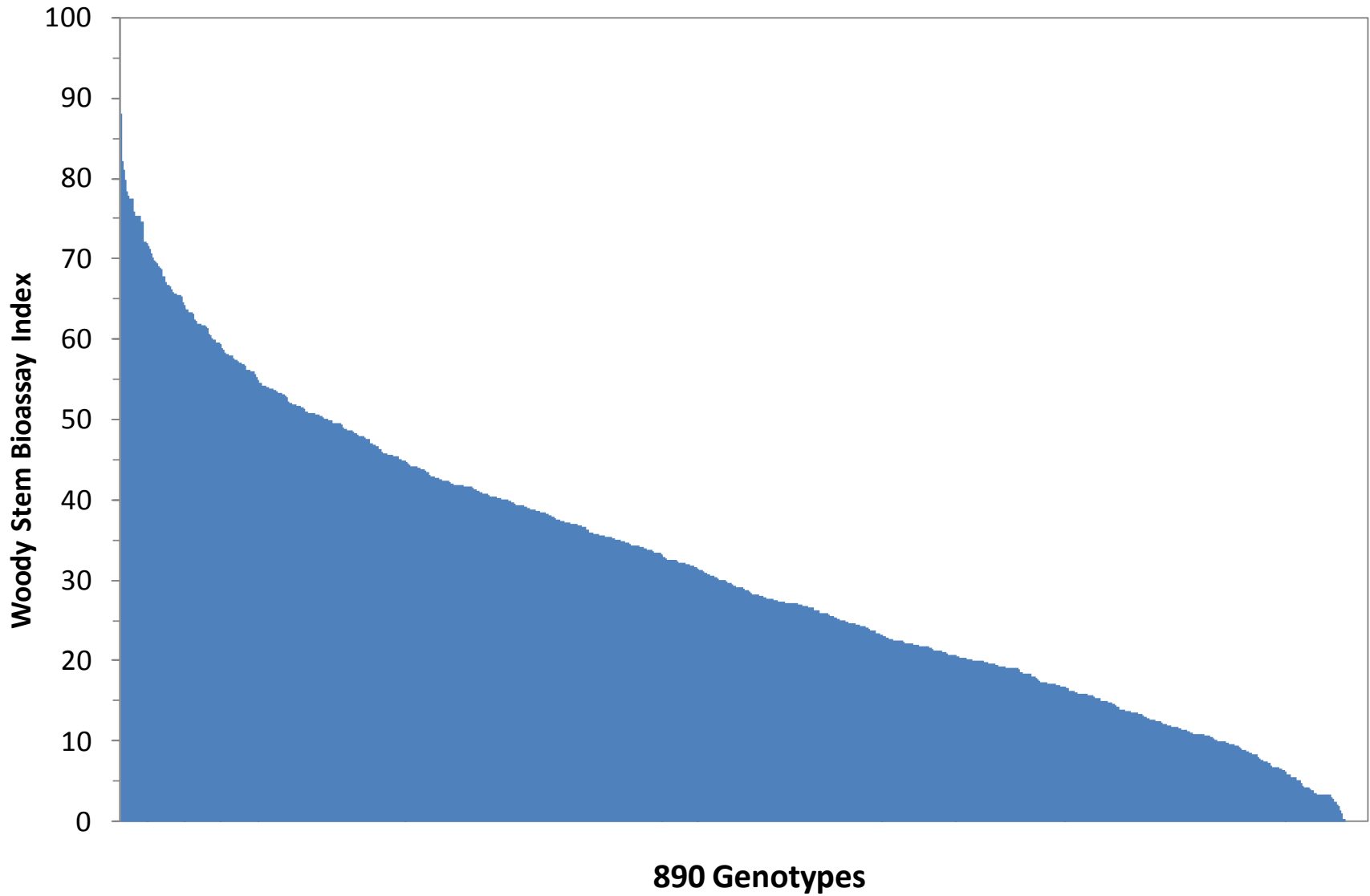


And is there hope for the breeding programme - HTP?



20,000 seedlings at Kelly Rd

And is there hope for the breeding programme - germplasm



‘Russell’ x ‘Hort16A’

1 to 10%



90-95%



Future breeding:

- Screen lots of seedlings
- Speed up the breeding cycle
- Predict using genotyping
- High throughput phenotyping



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