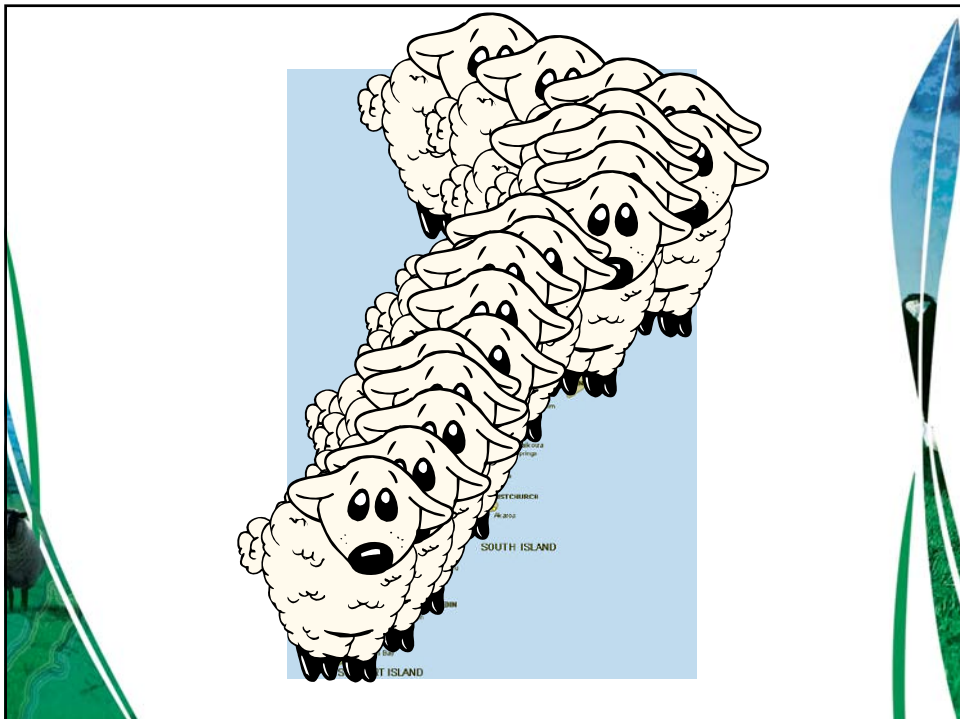


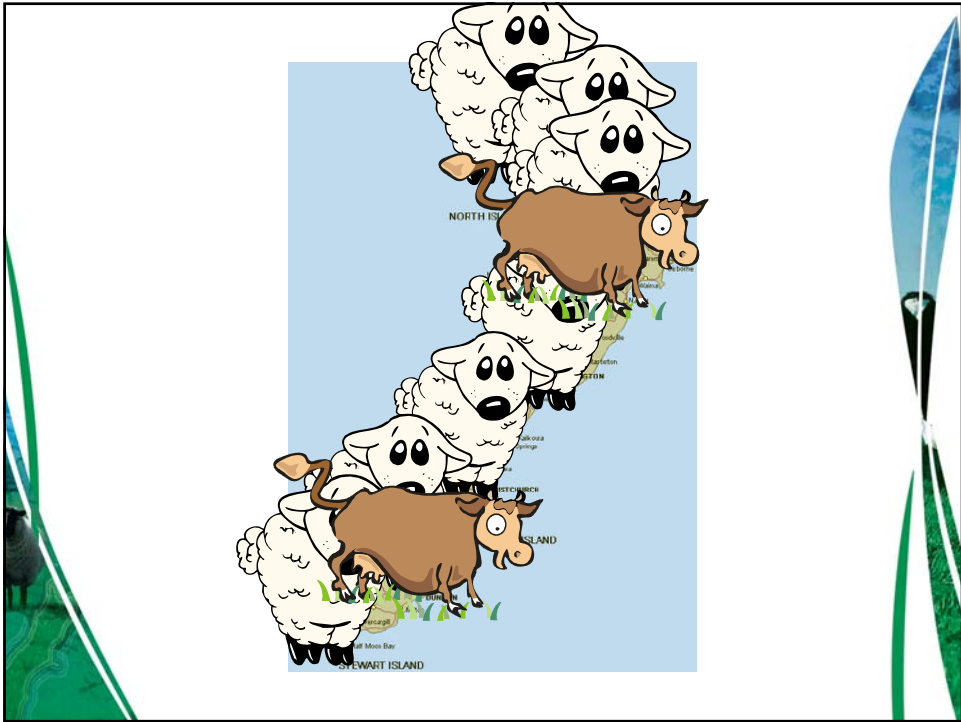
Plant Variety Protection and Technology Transfer: the Benefits of Public-Private Partnerships

*Use of Plant Variety Protection by
National Research Centres as it pertains
to Grasslanz Technology Limited in New
Zealand*

Jenn James

Geneva April 11 2011







Plant Variety Protection and Technology Transfer: the Benefits of Public-Private Partnerships

Use of Plant Variety Protection by National Research Centres as it pertains to Grasslanz Technology Limited in New Zealand

Jenn James

grasslanz
unique plant opportunities

Geneva April 11 2011

Today's Presentation

- Grasslanz Technology overview
- Role of NZ Government-owned R & D
- Impact & use of PVR
- Importance of PVR to Grasslanz as a commercialising agent of a National Research Centre
 - conventional species
 - fungal endophytes
- Issues and perceptions surrounding publicly funded research

Government Research & Development

- Pre and post 1992
- Research and financial focus shift

NUI EGMONT HUIA



Isup Expo APEX



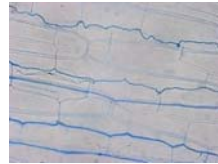
Grasslanz Technology Ltd

World leading agricultural company

Subsidiary of AgResearch Ltd

We fund research & development then license
plant technologies for commercialisation

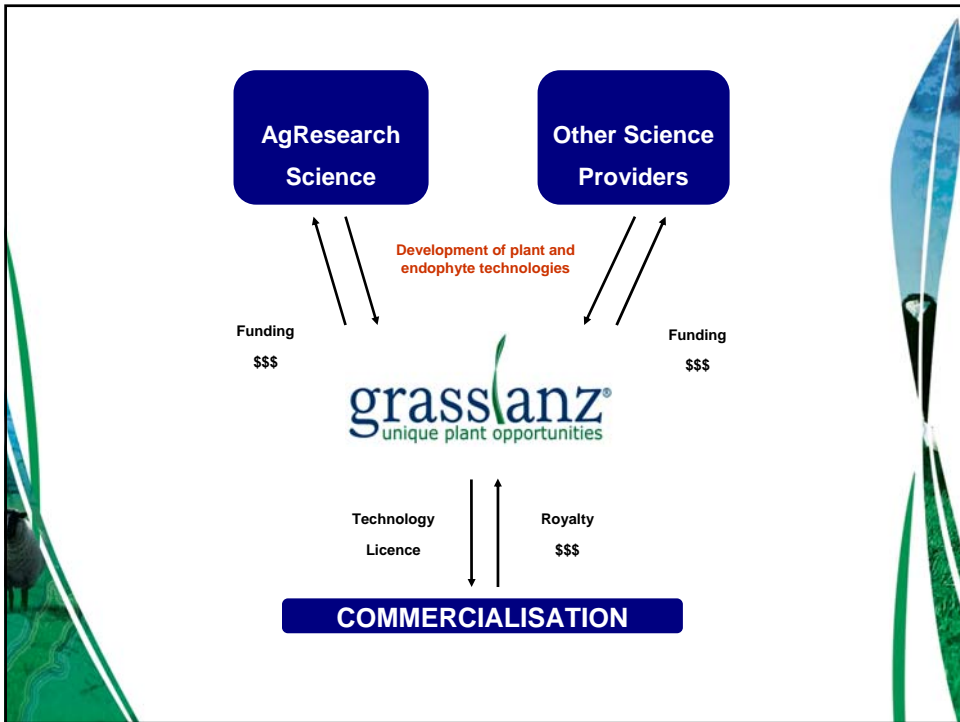
What are we famous for?



NEW ZEALAND
INTERNATIONAL
BUSINESS
AWARDS 2010
WINNER

Team Grasslanz



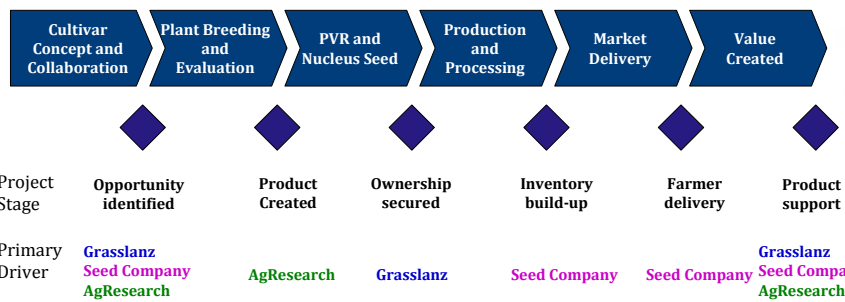


Unique

- Outsource
- Not exclusive
- Invest with the best- not the cheapest
- Product and technology delivery focus
- High level cost benefit



Plant Variety Development



Project Contributions

AgResearch: Plant Breeding and innovation, education

Grasslanz: Plant Variety Protection, nucleus seed, finance, project coordination, stewardship.

Seed Company: Seed production and processing, marketing, finance, royalties, knowledge transfer.

Grasslanz's Success

- Product development focus
- Match up suitable partners
- Clear path to market
- Tight-knit small team
- Access to multidisciplinary research



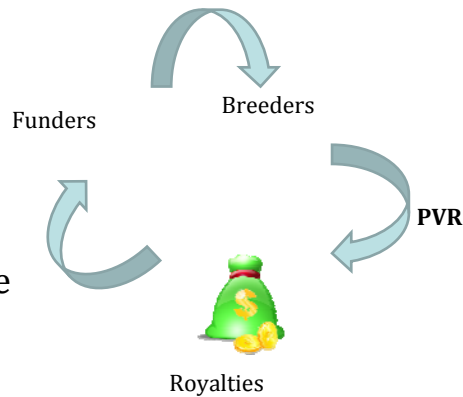
Plant Variety Rights in NZ

- NZ member UPOV 1981
- Signed 1991...
- Confidence for breeders & funders
- Supports principles of partnerships



Importance of PVR to Grasslanz as commercialisation agent of a National Research Centre

- Licences
- Royalties
- Completes the cycle



PVR & Grasslanz

- Full time Intellectual Property Manager
- 100s of PVRs

Grasses	Legumes
Perennial ryegrass	White clover
Italian ryegrass	Red clover
Hybrid ryegrass	Strawberry clover
Cocksfoot	Alsike clover
Tall fescue	Lotus
Phalaris	Birdsfoot trefoil
Prairie grass	Lucerne
Brome	Serradella
Timothy	Sulla
Browntop	Vetch
Cotula	Kura clover
Dogstail	Others
	Herbal Ley
	Chicory
	Plantain

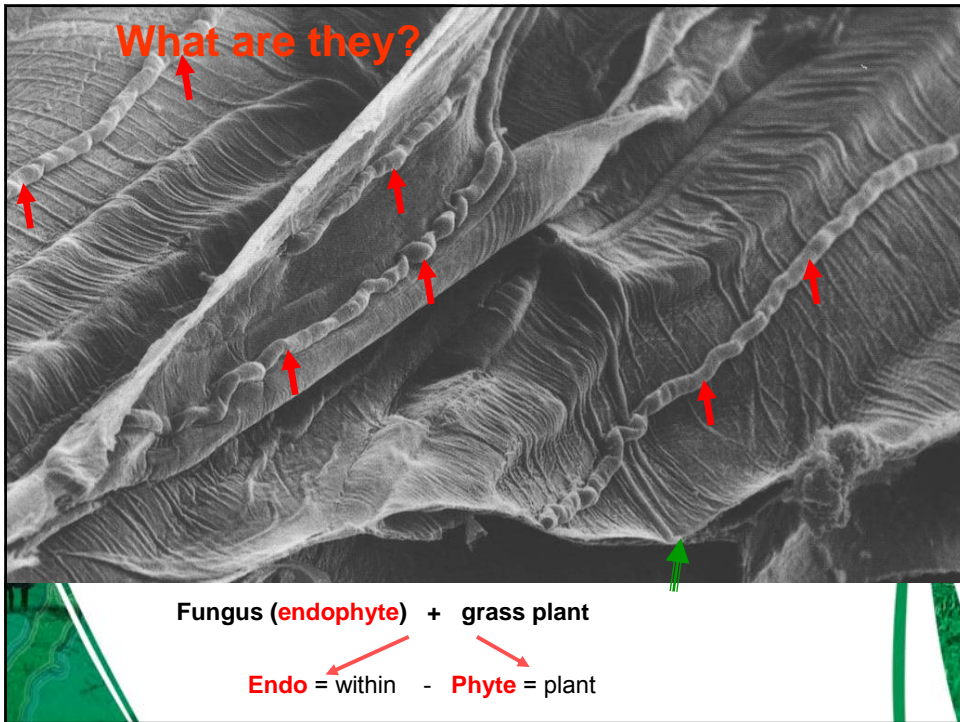
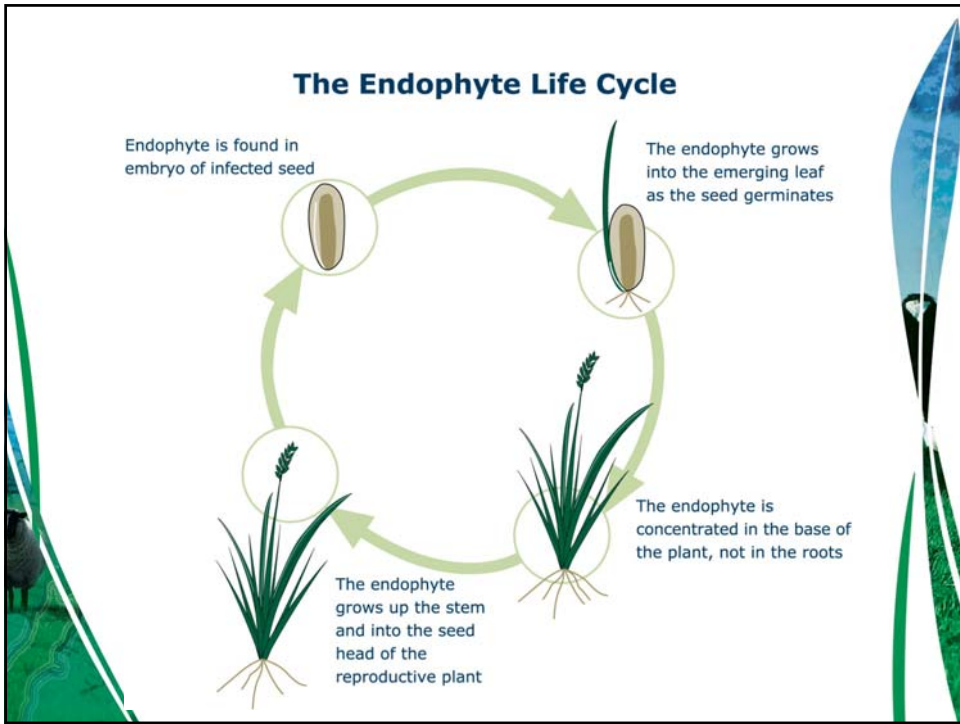


PVR & Grasslanz

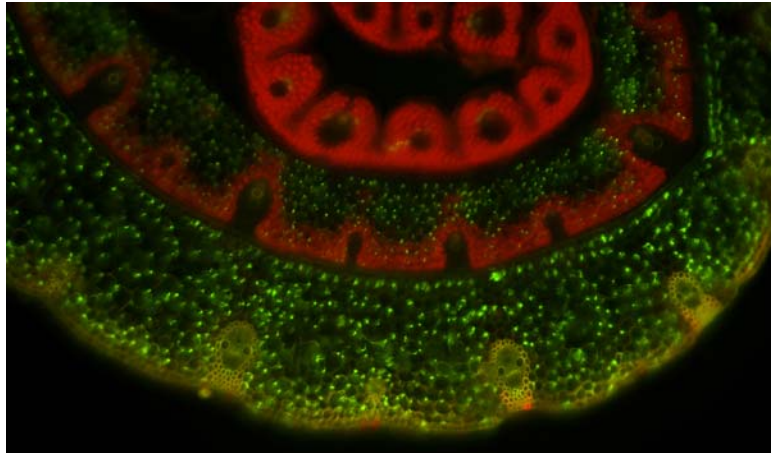
- Full time Intellectual Property Manager
- 100s of PVRs
- Close relationship with NZ Office
- Testing
 - Australasia, USA, Europe
- Endophytes

Mutualistic relationship





Fungal Endophyte

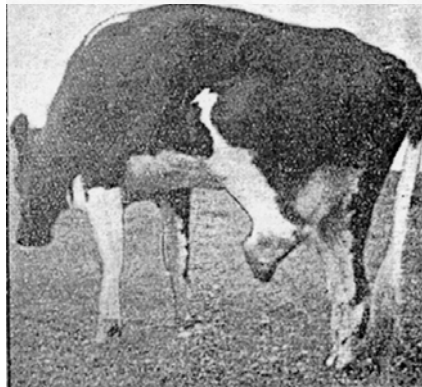


Cross section of a perennial ryegrass tiller. The endophyte strands, cut at right angles, appear as green dots. The red colour comes from chlorophyll.

Wild type Endophyte

TALL FESCUE GRASS IS POISON FOR CATTLE

By I. J. CUNNINGHAM, Superintendent,
Department of Agriculture Animal Research Station,
Wallaceville.



Wild type Endophyte



Ryegrass Staggers

Endophyte infected

Endophyte free



PVR of Fungal Endophytes

- World leaders
- Close relationship with NZPVRO
- DUS testing
- Big role in pastoral farming
 - Ryegrass in NZ
 - Fescue in USA



Grasslanz Endophytes



MaxP®



MaxQ®

If PVR did not exist?...

- Breeders ?
- Seed Companies ?
- Farmers ?
- Grasslanz's ability to add value across all groups

Perception & issues

- Publicly funded science to fill pockets of private companies
- IP ownership of AgResearch varieties

→ Education

→ Integrity



Summary

- Industry required to adapt
- Link between science and market
- Cyclic interlinked system
- **Plant Variety Protection essential**



grasslanz®
unique plant opportunities

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