



Does Mungbean have a fit in southern Australian Farming Systems?

An opportunity-risk analysis

Lindsay Bell, Heather Pasley, Heidi Horan, James Nuttal, Audrey Delahunty, Marisa Collins

Australia's National Science Agency

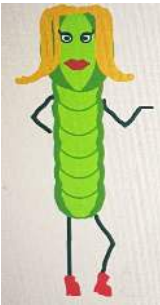




Simulation of mungbean systems

APSIM

next generation



Overall, the new model is robust and accurate.

- ✓ Yield/Biomass
- ✓ Nitrogen Dynamics
- ✓ Water Stress
- ✓ Time of Sowing

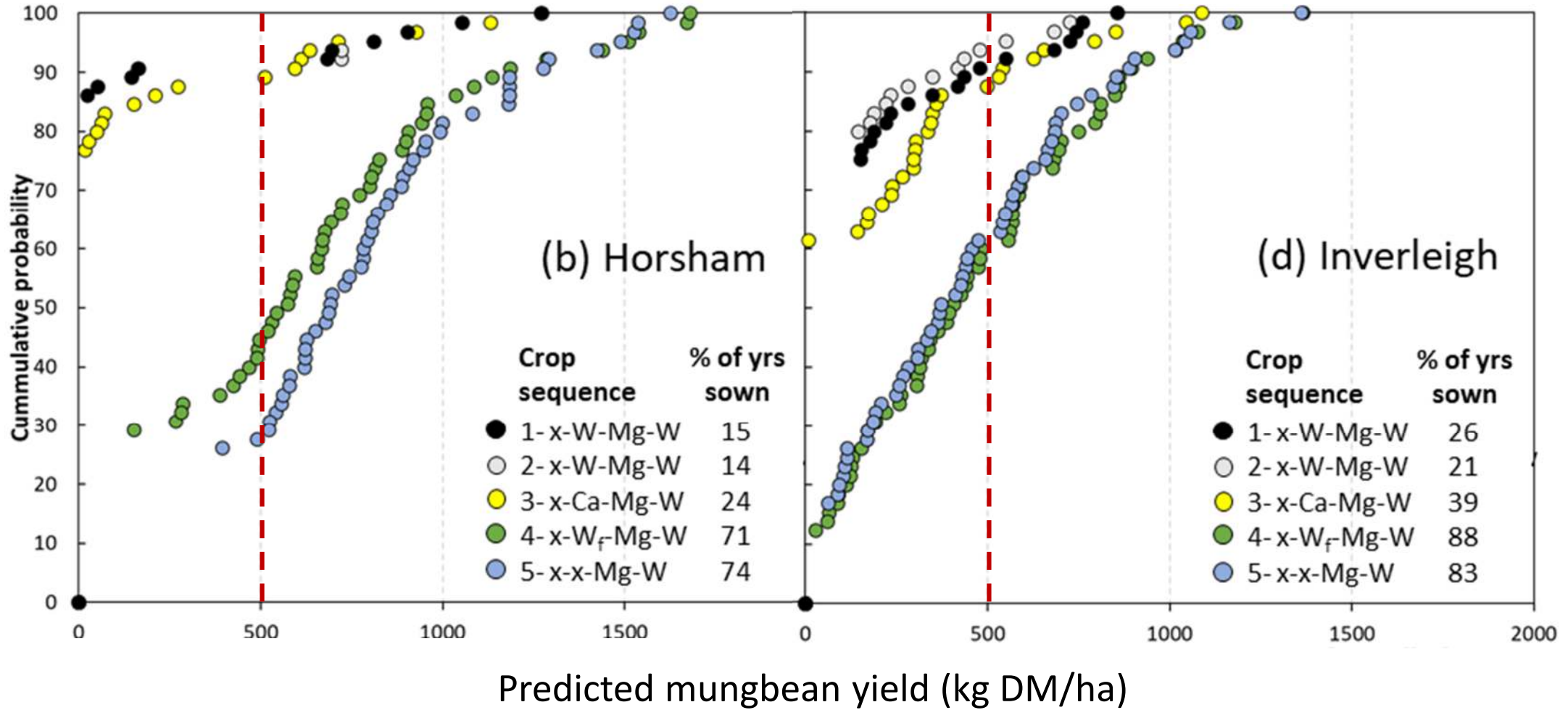
System
fit

1. Wheat only (REFERENCE)
2. Wheat – mung (>30 mm)
3. Wheat – mung (> 50 mm)
4. Canola – mung (> 50 mm)
5. Cereal hay – mung (> 50 mm)
6. Fallow - mung

Following
wheat
crop



Mungbean yield predictions





System implications

Mungbean System Fit	Following crop yield change (t/ha)		Sequence income (\$/ha) c.f. wheat only	
	Horsham	Inverleigh	Horsham	Inverleigh
After wheat (30mm)	0	-0.53	+34	-27
After wheat (50mm)	0	-0.47	+1	-2
After canola	0	-0.56	+105	213
After cereal hay	+0.82	+0.11	-54	-224
After fallow	+0.81	+0.03	-327	-347



Questions