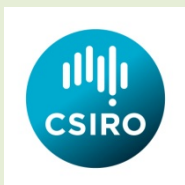




FUTURE FARM  
INDUSTRIES CRC

# Future Farm Industries CRC





FUTURE FARM  
INDUSTRIES CRC

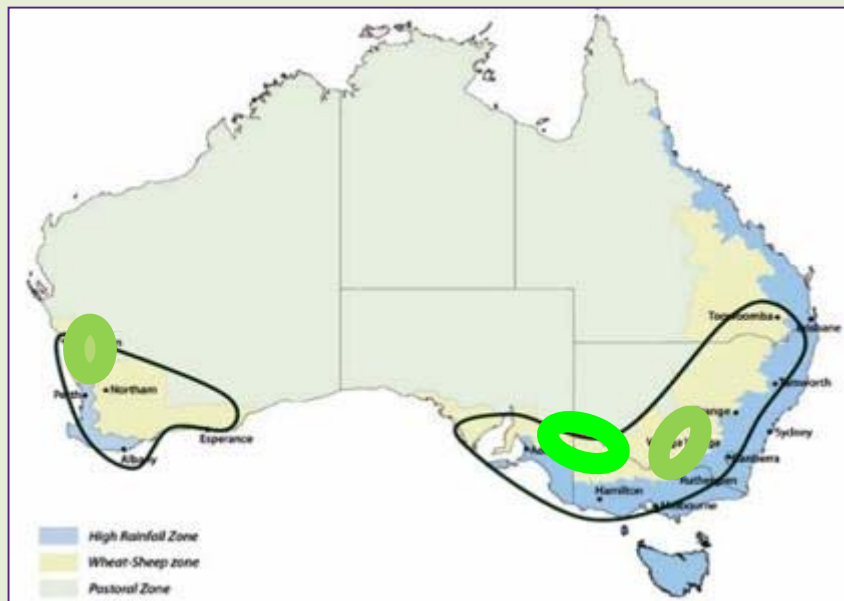
# The EverCrop Project

**'Identify and develop perennial-based options for improved farming systems in the crop-livestock zone'**

**Medium-rainfall zone**

Focus region:  
WA northern agricultural

*Pasture  
cropping*



**Uniform-rainfall zone**

Focus region:  
Sthn NSW

*Grasses and  
new options  
in rotation*



**Low-rainfall zone**

Focus region:  
SA-Vic Mallee



*Options for marginal soils*



# 1. Summer-active grasses

FUTURE FARM  
INDUSTRIES CRC

- \* *Panicum* spp. Gatton, Petrie, Bambatsi; Rhodes Grass; Finger Grass





# Bambatsi Panic (75 mm rain 13-14<sup>th</sup> Feb)





# 1. Summer-active grasses

FUTURE FARM  
INDUSTRIES CRC

- \* *Panicum* spp. Gatton, Petrie, Bambatsi; Rhodes Grass; Finger Grass
- \* Can they establish? Yes \*
- \* Will they survive? Yes
- \* Are they a valuable source of out-of-season feed? Yes
- \* Can they stabilise poor erodible soil? Yes
- \* Are they at the stage of farmer trialing? Yes
- \* Are they good for livestock production? *Probably*
- \* Is pasture cropping a possibility for the low rainfall areas of the Mallee?  
Still not 100% sure

What is necessary to sustain productivity  
and production of swards with perennials?  
Grazing and Nitrogen !?





FUTURE FARM  
INDUSTRIES CRC

## 2. Growth & value of forage shrubs

- \* Goal: Provide a productive option for land that is of marginal or no value for cropping
  
- \* How shrubs can maximise profit:
  - \* Current Saltbush types: 1-7% of farm
  - \* Lower establishment costs: 5-7% of farm
  - \* 15% improvement in OM Digestibility: 14-18% of farm
  
- \* New options



**60 000 plants  
(27 provenances)  
3 research sites**

**2009**

**90 genotypes  
(12 provenances)  
3 research sites**

**2012**

**12 genotypes  
(4 provenances)  
15 research sites**

**2014/2015**

**2-3 genotypes  
Commercialised**

- 15% units higher digestibility (48 to 63% OMD)
- Double voluntary intake
- Whole farm economic models indicate this can DOUBLE the profitability of the shrub enterprise



FUTURE FARM  
INDUSTRIES CRC

## 2. Growth & value of improved forage shrubs

- \* Goal: Provide a productive option for land that is of marginal or no value for cropping
- \* How shrubs can maximise profit:
  - \* Current Saltbush types: 1-7% of farm
  - \* Lower establishment costs: 5-7% of farm
  - \* 15% improvement in OM Digestibility: 14-18% of farm
- \* New options (species, provenances) – more palatable, digestible, better energy → profitability
- \* Future: Interrow options – to sustain and improve the overall productivity







FUTURE FARM  
INDUSTRIES CRC

## Future

- \* EverCrop III
- \* For more information:

Andrew Smith  
CSIRO, Waite Campus  
Email: [andrew.p.smith@csiro.au](mailto:andrew.p.smith@csiro.au)

8 April 2014  
Canberra

**future farm LIVE**  
INNOVATION IN PROFITABLE PERENNIAL FARMING SYSTEMS

Join researchers and farmers at a full day event to showcase the results of seven years of Future Farm Industries CRC research