

GRDC investment in R, D & E to address important issues identified by the Southern Regional Cropping Solutions Network

List of investments was current at 31 May 2019



FARM BUSINESS MANAGEMENT

- Agprofit - Practical financial figures for farm business management
- Assessing the economic value of precision agricultural tools for grain farming businesses in the Southern Region
- Development of a grower and industry based GRDC Farm Business Management Manual in hard copy and e-Book format
- Extension of knowledge and resources to manage risk and exploit opportunities to improve whole farm profit through successful integration of cropping and livestock enterprises in the GRDC Southern Region
- Grain and Graze II - Farm business logic application
- Grain and Graze III - Extension and deliver on mixed farm benefits in the Southern Region
- GRDC Farm Business Updates
- Identifying the key production and profitability drivers using commercial paddocks
- National Paddock Survey Initiative
- The integration of technical data and profit drivers for more informed decisions



BUILDING SKILLS AND CAPACITY

- Building capacity, skills and knowledge for the pulse industry in the Southern Region: Supporting expansion of high value pulses into new areas and ensuring sustained profitability of all key pulse crops in existing areas
- eXtensionsAUS
- Grains Industry (Research) Scholarships
- GRDC Conference Sponsorship
- GRDC Farm Business updates
- GRDC Research Updates
- GRDC - SARDI Bilateral Agreement
- Grower and Advisor Development Program
- Grower Leadership and Development Program
- Herbicide behavior workshops for the Australian grains industry
- Improving practices and adoption through strengthening development and extension capability in the Southern Region - GRDC - DEDJTR AgVic Bilateral Agreement



IRRIGATED GRAIN CROPS

- Development and validation of agronomic practices to realise the genetic potential of grain crops grown under a high yield potential, irrigated environment in the northern and southern regions
- Facilitated action learning groups to support profitable irrigated farming systems in the northern and southern regions
- Increasing yield potential of irrigated crops in the northern and southern regions through novel amelioration techniques that improve soil structure
- Optimising farm scale returns from irrigated grains: maximising dollar return per megalitre of water

GRDC investment in R, D & E to address important issues identified by the Southern Regional Cropping Solutions Network



TRANSFORMATIONAL TECHNOLOGIES

- Automated Weed and Plant Recognition for Agricultural Applications - Grains Industry Research Scholarship
- Enabling Analytics for Grain Crop Monitoring Applications
 - » Early detection and mapping of ascochyta blight in pulse crops, sclerotinia and blackleg in canola, and yellow spot in wheat
 - » Spatial quantification of frost damage during vegetative and reproductive phases in wheat and barley
 - » Crop classification and mapping of phenological characteristics
 - » High temporal and spatial resolution measures of plant available soil water (PAW)
- Future Farm Program
 - » Theme 1 - Intelligent Sensing
 - » Theme 2 - Intelligent Decisions
 - » Theme 3 - Intelligent Infrastructure



CLIMATE & ABIOTIC STRESSES

- Assessing and managing heat stress in cereals
- Managing Climate Variability Programs I - V
- National Frost Initiative
 - » Genetics
 - Screening of frost tolerance in cereals
 - Identification of wheat frost tolerance loci using a combination of genetics, biochemistry and molecular approaches
 - Determining yield under frost - one degree at a time
 - » Management
 - Advancing profitable farming systems - frost risk management
 - Spatial temperature measurement and mapping tools to assist growers, advisors and extension specialists manage frost risk at a farm scale
 - Advancing profitable farming systems - frost risk management
 - » Environmental Prediction
- Rural R & D for Profit - Seasonal Forecasting
- Using seasonal forecast information and tools to manage risk and increase profitability in the Southern Region
- Validating recent research on break crop options in the low rainfall zone to determine the best options for the different climate, soil type and biotic stress situations