

GRDC Regional Cropping Solutions Network – South

Issues (opportunities and constraints) which have the greatest impact on the profitability of growers in the high rainfall zone of the Southern Region

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Rank No.	Title
1	Reliable supply of canola seed - is F2 canola an option?
2	Identify and develop high value grain crops to complement existing common crops
3	Emerging K deficiencies in crops and interactions with other elements - what is the best practice approach (4Rs)?
4	Opportunity to capitalise on the synergies for livestock and cropping enterprises and increase whole farm profit
5	Spatially specific (real time) assessment data to better inform in-season N decisions in high rainfall environments
5	Enhanced accuracy of N management decisions
7	Poor harvester efficiency (including grain loss) is impacting on profitability
8	Risk with limited stock of canola (no seed supplies)
9	Improved management packages for multi-herbicide resistant annual ryegrass
10	Understanding the potential for using straw either off farm (e.g. biofuels, biochar) or within paddock (e.g. stubble bio-digestion)
11	Develop new markets for broad and faba beans
12	Determine practices (rotations) to reduce the high input costs required to grow high yield wheat
13	Ensuring long term cost-effective management of important HRZ foliar diseases by prolonging the life of fungicide and varietal resistance
14	Disease management package for sclerotinia, blackleg and powdery mildew in canola
14	Develop harvest and weed seed management techniques to deal with late germinating annual ryegrass
16	Need to use higher rates of Clethodim to control ryegrass in canola
17	Develop new (non GM) canola varieties
18	Encourage soil testing and how to interpret results (growers and advisors)
19	More accurate weather forecasts
20	Accelerated development of waterlogging tolerant barley
21	Improved establishment of canola
22	Quantify the optimum yield and inputs to maximise the profit margin (for each grower)
22	Determine how optical sensors can be used profitably to inform decision-making
22	Extracting greater 'value' from spatially referenced data which is already being collected
25	Delay in growers gaining access to long season, Northern Hemisphere varieties is hampering productivity gains

- 26 Increasing labour demands with cropping systems
- 27 Improved grain marketing through expanded or differentiated markets (faba beans and cereals) and greater grower marketing skills advice to get a better price
- 28 Limited choice of linseed varieties, including winter varieties
- 29 Improving phone/internet services/speeds in rural areas to enable access to services
- 30 Is the increasing use of neonicotinoids building up residues in the soil?
- 31 Growers not understanding and acting to minimise any unintended impacts on the environment through their use of N and P fertiliser.
- 32 Maintain and enhance research and advisory capacity so growers can access independent advice
- 32 Managing farmer health
- 34 Identify the reasons for inconsistent nodulation (and subsequent yield loss) in faba and broad beans
- 34 Determine if cover crops have a profitable impact on soil health
- 36 Screen potential milling oat varieties which are adapted to the high rainfall zone and available internationally
- 37 Determine sustainable and profitable management strategies of high volume stubbles
- 38 Extension on the use of PA tools - which tools are most appropriate for a particular situation (evaluate to remove confusion)
- 38 Insufficient information on the grazing value of faba beans
- 40 Determine practices to alleviate chronic and acute waterlogging
- 40 Improving soil water-holding capacity (WHC)
- 42 Loss of chemicals and the need for greater grower advocacy around the retention of various herbicides and pesticides
- 43 Develop a faba bean and broad bean agronomy packages
- 43 Develop appropriate recovery strategies (mainly N application) for waterlogged crops
- 43 Identify the species, varieties and agronomy to grow a profitable summer crop
- 46 A more integrated pest management strategy needed to reduce the use of fipronil in canola and on a broadacre scale to kill hard to kill pests
- 47 Gaining faster access to pesticides used in Europe and the United States
- 47 Agronomy and varieties to increase energy in grain (for domestic feed markets)
- 47 Herbicide package (what works and what's safe) to support the increasing adoption of disc seeders
- 50 No effective spring control tactics for slugs and snails to reduce harvest contamination and damage to following crops
- 50 Improved disease (chocolate spot and ascochyta) resistance in faba beans
- 52 Manage sub-surface (5-15cm) acidity on land with good surface lime application history
- 53 Conflicting information on the quality and response of natural versus recycled gypsum
- 54 Approaches to improve poor water use efficient WUE (hyper-yields and 3 crops in 2 years)
- 55 Early prediction of disease outbreaks in pulse to inform fungicide management decisions

- 55 Homogenisation (clustering) of land, rainfall and environmental influences in the High Rainfall Zone is missing (masking) the diversity across the region (when undertaking analysis)
- 57 Understand the opportunities for delving or ripping on sandy soils
- 57 Quality control over data entered into Online Farm Trials (OFT)
- 59 Develop practices to reduce electricity costs in irrigation
- 60 Lack of grower attendance at local events
- 61 Quantify the impact of powdery mildew on canola yields in the Lower SE of SA, Tasmania and Gippsland, Victoria
- 62 Identify a 'pillar crop' to build a sustainable and profitable farming rotation
- 63 Renewable or alternative N fertilisers
- 63 Managing animal health issues of livestock grazing annual clovers
- 65 The pros and cons of disc seeder versus tyne seeders
- 66 Opportunity to use aerial seeding for relay cropping, e.g. aerial sowing millet and/or rape into wheat crops
- 67 Carbendazim for snail control - does it work, MRL issues, registration of use patterns
- 68 Enhanced spray application to penetrate and provide coverage of wet and/or bulky crops
- 69 Potential to use of plant growth regulators (PGR's) for crop management (canopy and grain quality)
- 70 Development of genetically modified (GM) crops for yield and enhanced management options
- 71 Register existing chemicals for use with shielded sprayers
- 72 Method to calculate nitrogen (N) loss when soils are above field capacity
- 73 Understanding how climate change will affect the incidence of waterlogging
- 74 Improved management of water and including nutrients and chemicals to conserve moisture and limit runoff
- 74 Value and response of phosphites as a bio-stimulant which is being used in Europe
- 76 Managing drainage beyond the farm gate
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