

GRDC’s Kwinana West port zone Regional Cropping Solutions Network (RCSN) held two Open Forums in June 2019. The meetings were held at Badgingarra Research Station (20 June at 4pm) and Corrigin Hotel (26 June at 4pm).

A total of 48 guests attended the two Open Forums. Members of the general public were able to register for the Open Forums at the RCSN website www.rcsn.net.au and could submit an issue/idea should they be unable to attend.

GRDC staff spoke on GRDC investments; and Western Panel were in attendance at Badgingarra with most Kwinana West port zone RCSN members also attending. Online GroupMap technology was used to capture audience input. A key part of the Open Forum was the opportunity for participants to share the top issues affecting their profitability. The aim of these discussions was to provide growers with direct input into the analysis of current local priorities affecting productivity and profitability to assist in the discussions relating to future projects by GRDC’s RCSN and by GRDC’s Western Panel and GRDC staff.

A number of shorter term, smaller RCSN initiated projects have been put on the ground in the Kwinana West port zone since 2011. Final reports are available online at the Online Farm Trials website, www.farmtrials.com.au or on www.rcsn.net.au.

All issues raised at the Open Forums at Badgingarra and Corrigin were discussed by the RCSN members at their meeting held on 25th July in Adelaide (as part of the RCSN study tour). The RCSN also added further issues after gaps were identified. All issues were ranked according to five main factors: Does it impact on grower’s profitability? What area is affected by the issue? How frequently does the issue occur? If work was conducted on the issue, would it deliver more value to growers? Is the issue something that we can effect change upon?

Table 1: Summary of areas of interest raised at the Open Forums at Badgingarra (BG) & Corrigin (COR); or by RCSN members

Areas of interest raised at Kwinana West port zone Open Forums and RCSN members	Expanded areas of interest from Open Forums and RCSN members	RCSN member feedback from RCSN member meeting and further action
Harvest loss in canola	Must look at more than loss out the back of header ie losses from swathing and or draper fronts vs tin fronts	Noted as an issue by RCSN members at their member meeting, with possible work to occur in this space
<i>COR, RCSN - Maximising canola establishment in drier starts</i>	<i>Vertical mineralisation of N which is creating patchy germination in canola. Novel ideas to prevent crusting in heavy soil types to increase canola germination success. Many having germination issues especially with marginal rainfall starts with hot dry conditions that follow. Can we use liquid on furrow system with different products like liquid Gypsum, wetters etc? TOS and does it need to germinate as early as generally recommended? With and without press wheels.</i>	<i>Ranked highly by RCSN members at their member meeting. The RCSN identified this as an issue impacting on profitability and further developed some aspects of this issue.</i>
<i>BG, RCSN - Oat agronomy, particularly around weed management</i>	<i>Oats quality in drier regions; new grass chemistries; IMI tolerant pasture varieties.</i>	<i>Ranked highly by RCSN members at their member meeting. The RCSN identified this as an issue impacting on profitability and further developed some aspects of this issue.</i>
Variable yield results in canola including a lack of reliability with impact on farm profit	Establishment issues the driver of poor performance. Is there something we're not addressing as yields keep dropping - disease; varieties. Frost is the main driver	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC
COR, RCSN - Strip and disc systems	Need to learn more about the fundamentals of the system so farmers can transition successfully without going broke. It is a big system shift (and big capital costs), where do you start (most important parts, best investment areas)	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC
COR, RCSN - Frost is still priority number 1	Gap is frost in canola and legumes. Are there seed dressings or post emergent spray options to combat frost. Earlier times of sowing eg. March.	The RCSN identified this as an issue that impacted highly on profitability but did not further develop this issue at this time. There is

	Variety adaptable to all zones in the farm business, Nutrition, TOS.	large current GRDC investment in this area however the RCSN wanted to ensure that it continues to see a high level of investment with GRDC
Skilled labour supply	Possible extension using ideas such as You-tube on how to drive (tractors, headers etc)	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time.
BG, COR, RCSN - Alternative break crops, legumes and pastures	Further work required on alternative break crops especially on the wheatbelt grey clays. Full wheatbelt agronomic package around lentils and chickpeas etc; Can't find a break crop that fits the system or is profitable. Most successful is canola. What do we have for heavy land? Maybe pasture, chickpeas. CLIMA left the west and breeding hasn't helped WA. Frost takes out chickpeas and lentils. Lupins not always profitable	The RCSN identified this as an issue but did not further develop this issue at this time. There is current GRDC investment in this area
COR- Multiperil crop insurance	Not all cover types available due to drought last year in the east.	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time and considered this to be outside GRDC scope
BG: Physical soil improvement	Could we be considering shifting some of our better soil types from parts of a paddock to poorer parts of the paddock? Basically, physically improving the soil? Extension	Noted as an issue by RCSN members at their member meeting, however the RCSN did not further develop this issue at this time.
COR - Salt tolerant species, legumes and cereals	What options are available?	
COR - Measuring nutrient loss and moisture loss on burnt paddocks especially for crop emergence and nutrition loss	Is the WANTA trial looking at moisture loss on burning, the only trial that we can refer to?	Noted as an issue by RCSN members at their member meeting, with some further extension to occur around this issue
COR, BG, RCSN - Weed control in dry seeding situations	Dry seeding our whole program this year highlighted the importance of pre-emergent chemicals, crop hygiene, harvest weed seed management and rotation to minimise weeds and allow for cleaner establishment of crops. Further extension on looking at the whole of system approach rather than relying on post-emergent chemicals, especially in a system which includes oats and those who have not traditionally used dry seeding as a high proportion of their program. Era of dry seeding - but we somehow need to beat the weeds – and not just ryegrass. Focus on pre-emergents; and non-chemical options	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC
BG, COR, RCSN - Soil amelioration and ripping	Alternatives to lime and soil amelioration with the constant changes in reliable neutralising values and the difficulty in getting it into subsoil in rocky country	The RCSN identified this as an issue but did not further develop this issue at this time. There is current GRDC investment in this area including RCSN initiated projects
Soil Testing, with emphasis on soil test levels particularly K	Especially K - critical soil test levels of K may not be right now and therefore recommendations may not be correct Improving the reliability of response prediction or requirement based on soil test data. K in furrow vs top dressed.....fertiliser companies pushing compounded K products and not demonstrating MOP in furrow as a comparison	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC
COR - Weed control in oats, brome, barley and spear grass.	IMI tolerant varieties, particularly for the lower rainfall areas of the zone?	The RCSN identified this as an issue but did not further develop this issue at this time.

BG: How high can you go with N?	Questions arising about the curve and its relevance now. Variety also will change the effectiveness of response to N.	The RCSN identified this as an issue but did not further develop this issue at this time. There is current GRDC investment in this area
COR, RCSN - Non-wetting	Do lupins make non wetting worse? More numbers around light cultivation and spading, plozza etc. on all the different soil types in the southern Wickiepin, Corrigin areas. Also continued evaluation of wetters. Managing non wetting issues with dry starts, particularly this year seemed which seemed to be worse and more widespread. Plozza ploughing/mouldboarding works but have had huge erosion issues and struggled to get crop germinated as a result.	Noted as an issue by RCSN members at their member meeting, with some further extension of past/current work to occur around this issue and possible further work on identified soil types/systems
BG: Finding a use for our poorer sandy soils (tagasaste??).	Claying?	The RCSN identified this as an issue but did not further develop this issue at this time.
BG: Weed control in legumes still difficult and we are getting blow-outs.	Some discussion and disagreement. Extension issue	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC
Depth of sowing vs emergence date in marginal moisture starts	For cereals and legumes (similar to depth of sowing canola work done). Benefits and negatives whether you get early germination with deep sowing or not (yield potential, vigour loss in drought, frost risk etc)	Noted as an issue by RCSN members at their member meeting, with some further extension to occur around this issue
BG: Soil carbon	We are finding it hard to improve our soil carbon levels as it is too hard to lift it with the increase in cropping that we are now seeing.	The RCSN identified this as an issue but did not further develop this issue at this time.
BG: Pastures as a N fixing and disease break option	Are starting to be used more than legume crops to get the N benefit and disease break - cheaper and more reliable.	The RCSN identified this as an issue but did not further develop this issue at this time.
Crop establishment in a mixed farming enterprise	Evaluate the negatives of sheep on crop establishment especially around impact on soil surface (drying up, silting, furrow fill etc)	The RCSN identified this as an issue but did not further develop this issue at this time.
COR - Spray application technology	How spray technologies effect chemical efficiency? Upskilling staff - PPE etc	Noted as an issue by RCSN members at their member meeting, with some further extension to occur around this issue
COR - Barley diseases	For example STNB in new high yielding varieties	The RCSN identified this as an issue but did not further develop this issue at this time. There is current GRDC investment in this area particularly through CCDM
Investing in youth in agriculture	I have had the suggestion to re-invest in people coming through the Ag Schools. There is a lot of focus on livestock production but very little in cropping, could it be a project to set up a cropping competition between the schools where students demonstrate new technologies in grain production?	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC. Discussion with Bill Moore and Jo Wheeler to see if this can happen
COR - Drainage on saline soil types	What soil types are best suited and which soil types suit different types of drainage/banks. Re-jig the old FactNotes etc including assessment of historical drains. Revisiting saline areas that have been rehabilitated in the last 20 years what has/n't worked, why etc. Areas of salt are not seen as useful now with a lot of livestock out of the systems and with increase in land values. Work on	The RCSN identified this as an issue but did not further develop this issue at this time. There is current GRDC investment in this area which is included in the SCNRM GRDC project

	increasing profitability on marginal transient salinity soils	
COR, BG, RCSN - MRL and chemical use	Pursuing registration and MRL work on common off label herbicide use to enable long term sustainable use; extension of importance of meeting market requirements	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC
COR - Glyphosate loss.	What are glyphosate alternatives? Need something on the table before we lose it. An alternative to glyphosate. With the constant negative press regarding safety of this chemical have we got an alternative that's not an S7 poison like sprayseed which really is a scary thought.	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC
COR - Costs of hybrid canola versus open pollinated.	Would like to see breeders go back to breeding OP	The RCSN identified this as an issue but did not further develop this issue at this time. Was considered to be outside of GRDC scope
BG: Finding better markets for our lower protein wheats	Looking for markets to buy our grain and not just as a bulk commodity - rather than just improving quality to try and reach certain parameters such as protein. Currently we are seeing bulk buyers dropping out due to our low protein wheats. Possibly wholesale industry issue, remaining competitive means competing on price and quality	Ranked highly by RCSN members at their RCSN member meeting. The RCSN identified this as an issue but did not further develop this issue at this time. However, the RCSN wanted to ensure that it continued to have presence within GRDC. AEGIC is also placed in this space
BG: Markets for different legumes.	Getting lupins into human food consumption	The RCSN identified this as an issue but did not further develop this issue at this time, though there is some industry investment through GIWA; The Lupin Co; and others

NB: ALL issues raised at the Open Forums as notes above will continue to have presence at the RCSN discussion table and will be forwarded to the GRDC Western Panel and GRDC for continued visibility that may feed into existing or future initiatives.

Thanks and Further Details.

GRDC now have a Facebook page – www.facebook.com/theGRDC/ (like us!) as well as a dedicated RCSN website – www.rcsn.net.au. Follow us on Twitter @Julianne_Hill, or visit GRDC www.grdc.com.au. Thank you to everyone who attended the Open Forums and contributed to the detailed discussions. For further details, contact the RCSN Facilitator Julianne Hill on 0447 261 607 or email regionalcroppingsolutions@gmail.com