GRDCs Kwinana West port zone Regional Cropping Solutions Network (RCSN) held three Open Meetings on 17 2017 July at Cunderdin Sport and Recreation Centre (9am); and Wongan Hills Community Resource Centre (3pm); and on 18 July 2017 at Dalwallinu Recreation Centre (8am).

A total of 92 guests attended the three open meetings. Members of the general public were able to register for the Open Meetings at the RCSN website www.rcsn.net.au and could submit an issue/idea should they be unable to attend. Those presenting were:

- Brondwen MacLean (GRDC) and Chris Wilkins (Western Panel) who spoke about GRDCs investment into crop nutrition and gave a GRDC update.
- Craig Scanlan (DAFWA) who spoke on interactions between macronutrients and soil pH; the value of fixed N; N response in barley; and potassium research.
- Ravjit Khanghura (DAFWA) who spoke on Sclerotinia and timing of foliar fungicide applications for this season (Cunderdin and Wongan Hills)

The following Regional Cropping Solutions Network initiated projects were also presented:

- Ben White (Kondinin Group): Machinery replacement options for growers in the Kwinana West port zone (Cunderdin and Wongan Hills)
- Bill Bowden (WMG): Lime product trial results undertaken throughout WA (Dalwallinu)

Also in attendance were Kwinana West RCSN members. Online GroupMap technology was used to capture audience input. A key part of the open meeting 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 projects have been put on the ground in the Kwinana West port zone through the RCSNs since 2011. Most final reports are available online at the Online Farm Trials website, www.farmtrials.com.au or by contacting Julianne Hill, RCSN Coordinator.

All issues raised at the Open meetings at Cunderdin, Wongan Hills and Dalwallinu were discussed by the RCSN members at their meeting held on 18 and 19 July 2017 in Dalwallinu. The RCSN also added further issues after gaps were identified. All issues were ranked according to three main factors:

- 1. Is the idea/issue something that impacts on grower's profitability?
- 2. If work was conducted on the issue, would it deliver more value to growers?
- 3. And is the issue something that we can effect change upon?

Table 1: Summary of Areas of Interest raised at the Cunderdin (C); Wongan Hills (WH); and Dalwallinu (D) Open meetings

Areas of interest raised at Kwinana West Open meetings	Expanded areas of interest	RCSN member feedback and further action
C, D: Business models	Business models - transition from a family farm operation to a business that does farming. Business management skills training and upskilling the industry. Effective management across entire business to ensure prolonged profitability	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue however noted that much of this work is being covered by private industry and other providers.
C, D: Frost mitigation strategies	A frost management package needs to be developed that includes more than one or two management strategies to minimise frost risk. Needs to include different growing areas, different break of seasons, different sowing times, stubble retention etc. Does the removal of stubble solve issues of frost risk and crop establishment. Is it economic to bale and remove stubble for alternative uses, eg. Feedlot litter, bio ethanol, fibre board.	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue heavily impacting on profitability over most years, however noted that much of this work is being covered by the current GRDC investment in frost.
C, D: Legume Extension	More extension about the importance of legume break crops in the rotation. Viable options for growers to increase the profitability of these crops. Extension of management concepts to support options for having legumes in the rotation	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue impacting on profitability over most years, however noted that much of this work is covered in current investments.

Areas of interest raised at Kwinana West Open meetings	Expanded areas of interest	RCSN member feedback and further action
C, D: Rhizoctonia and nematodes	Rhizoctonia and nematodes - options for control and management. Rhizoctonia control in late established crops, especially barley	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue heavily impacting on profitability over most years, however noted that much of this work is being covered by a current GRDC investment.
C, WH, D: Early sowing	Better decision-making tools around early sowing opportunities. Understanding the implications of early sowing and managing risk. An example is for farmers to have a checklist which will assess the risk of early sowing. With increased summer rainfall events and increased winter dry spells, how does this affect the risk and viability of early sowing? Early sowing opportunities for canola -how early is too early with changing rainfall patterns, moisture conservation and utilisation. Machinery designs to best establish a crop and harvest moisture. Alternatives to canola for early sowing.	The RCSN identified this as an issue for the Kwinana West port zone, however noted that there had been quite a few early sowing investments over the past years that will address many of the questions raised here.
C, WH, D: Herbicide resistance	New modes of action for herbicides. Resistance – subsidised or organised and encouraged annual testing. Weed management - herbicide resistance, methods to manage, alternative weed control, summer spraying, chemical residual, chemical fallow	Ranked highly by RCSN members at their closed member meeting. RCSN members ranked this highly and further developed this issue. Discussion included intense farm level herbicide resistance testing; and promotion of testing and sharing of results state-wide. Heavy extension of results, especially in areas that have a high level of resistance results.
C, WH, D: New soil testing options	New potash soil testing measurement. Soil testing - are our 1-10cm soil tests telling us what we need to know? K testing methods aren't consistent. Alternative K testing methods need to be compared with currently used methods on a range of soil types (including light and heavy soils) to determine most effective method. Micronutrients - understanding the impact of adding one thing on another. Combination with changing pH.	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue impacting on profitability however noted that much of this work is being covered in a current GRDC tender.
C, WH, D: pH and liming	On the go pH testing and overseas technology for mobile pH testing. VRT use to lime where necessary. Alternative liming strategies and sources including looking at crops that are acid tolerant. Testing currently needs to be done +30% moisture-how can we do it in dry paddocks?	The RCSN identified this as an issue impacting on profitability over most years, though did not further develop this area at this time.
C, WH: Crop establishment in poor years	Strategies (points, spacings etc) for better establishment in marginal moisture and dry seeding, such as a year like 2017. Years like this are becoming more commonplace and we need information on how to get good germination and establishment, rather than the patchy result this season. There are good examples of paddocks that have been well established this year, so communication of what has gone right could be beneficial. Improving crop establishment in challenging moisture conditions after good Autumn but minimal planting rain events (soil preparation via machine or product application on to soil surface).	Ranked highly by RCSN members at their closed member meeting. RCSN members ranked this highly and further developed this issue. Discussion included seeding systems set up for crop establishment in drying soils and seeding depth. Review of seeding gear 2017. Farmer experience and extension. Which seeding systems worked the best in 2017?



Areas of interest raised at Kwinana West Open meetings	Expanded areas of interest	RCSN member feedback and further action
C, WH: Grain marketing and washouts	Timing and risk management of marketing grain. Being stuck in contracts that you can't fill in a poor season - strategy to use. Want to know how to protect risk, historical highs and lows of grain prices in our port zone - when to sign contracts. Step by step triggers for third, third, third marketing plan. The marketing of grain to markets that can extract premiums for WA grown high quality grain to enable a more stable return to growers.	The RCSN identified this as an issue impacting on profitability over most years, however noted that this area was primarily covered by private industry.
C, WH: Weed control in canola	Weed management including knockdown options for self-sown RR canola. HWSD - mechanical destruction, options other than chemicals. Cost of chemicals vs other control options. Weed control in canola. With limited options for both pre-em and post-em control there is a need to understand both chemical and cultural options	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue heavily impacting on profitability over most years, however noted that much of this work is being covered by the current GRDC investment and did not further develop this issue at this time.
C: Non-wetting soils	The effect of legumes in the system and impact on non-wetting. How best to deal with sheep camps. Management of non-wetting soils. What's beneath our soil (reefinator highlights deficient or surplus nutrient status) as does mouldboarding or spading etc	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue heavily impacting on profitability in this zone, however noted that much of this work is being covered by the current GRDC investment into non-wetting soils led by DAFWA's Steve Davies and his team.
D, WH: Machinery	Machinery cost. Increasing cost of agricultural machinery, low life expectancy and low residual values is a very large cost to farmers. Need to find a way to get average use of most machines to at least 10000hrs, with much better servicing regimes to ensure reliability through critical times. Maybe we need to encourage more competition. What do we need to do the job? Triggers for decisions such as turnover, repairs, etc.	The RCSN identified this as an issue heavily impacting on profitability, however did not think that it was an area that could be impacted upon in the short term
WH, D: CTF	Sustained benefit from deep ripping/ploughing and moving into CTF to prolong associated yield benefits. Combining CTF with overcoming soil compaction, long term cost benefit analysis of this system. Integrated with weed control systems ie. Chaff Decks.	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue impacting on profitability over most years, however noted that much of this work is being covered by the current GRDC investment in the subsoil constraints project area.
WH, D: Water holding capacity to help make decisions on seeding	Better technology for getting crops to emerge under dry conditions and which undercarriages are better for which soil type under different seasons. Seed coating etc. Knowing what soil types hold water when making seeding decisions rather than basing it on crop type.	Ranked highly by RCSN members at their closed member meeting. The RCSN identified this as an issue often impacting on profitability, however did not further develop this issue at this time
WH: Genetics and crop breeding	Want increased coleoptile length in wheat, and more work on genetics - work into varieties that are salt/drought resistance etc.	The RCSN identified this as an issue impacting on profitability, however felt it is being covered by current long term GRDC investment



Areas of interest raised at Kwinana West Open meetings	Expanded areas of interest	RCSN member feedback and further action
C, D: In season and late N decision- making	In season and late N decisions and the application of it, spreading urea, spraying flexi N etc. Cost of convenience, logistics, uptake efficiency.	The RCSN identified this as an issue often impacting on profitability, however have not further developed this issue at this time

NB: All issues raised at the Open Meetings will continue to have presence at the RCSN discussion table and will be forwarded to the GRDC Western Panel and GRDC for continued visibility as port zone related issues that may feed into existing or future initiatives.

Connect with Us.

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.

Thanks and Further Details.

Thank you to everyone who attended the Open Meetings and contributed to the detailed discussions. For further details on the RCSN, please visit www.rcsn.net.au or contact the RCSN Facilitator Julianne Hill (GRDC Regional Cropping Solutions Network Co-ordinator) on 0447 261 607 or email regionalcroppingsolutions@gmail.com.

