# **EPARF Member Technical Newsletter**

April 2018 – No 2



So far, opening rains have by-passed upper and central EP. Parts of lower EP have received sufficient rainfall to germinate a few weeds and some of the dry sown feed and grain crops, but widespread seeding has not yet started. Hopefully a decent fall is received soon to allow sowing to proceed into a moist seed bed.

#### **Sowing Progress**

Some feed crops have been sown across EP – mainly vetch, cereals and mixes. Some legumes have been sown – mainly lupins at this stage but others are planned for the near future.

The "dry sowing" team are sowing cereals with some up to half way through their programs. At this stage, most of the dry sown cereals have no hope of germinating without a rain event.

As soon as there is a confident forecast of rain, expect a flurry of seeding activity.

#### **Dry Sowing**

If you plan to dry sow, remember the experiences of last year – staggered germination due to small post sowing rainfall events, lower plant populations, fertiliser toxicity on alkaline soils, uneven growth stages making timing of pesticide application difficult, uneven ripening, varied performance of pre-emergent weed control herbicides, some weed blow outs, wind erosion, etc.

Do everything you can to minimise the chance of these events occurring again. The easiest strategies are to increase seeding rates, choose your pre-emergent herbicides well, and make sure fertiliser is separated from the seed.

#### **Sowing Plans**

No need to panic yet, but if it is still dry in the week after Anzac day, sowing intentions and plans might need some adjustment.

For livestock producers, early feed will be slow, so consider another paddock of sown feed. A paddock of cereals for feed can enable you to move stock from regenerating pastures onto the feed paddock in June, and allow the other pastures time to bulk up. Additional area might have to be allocated for hay and feed grain production if hand feeding continues into June.

Review the role of varieties like Planet barley and Longsword wheat – they need to come up in April to perform on much of EP.

Canola area may scale back a little if it cannot be sown into moisture by May, particularly if there is no subsoil moisture available in the paddock.

Longer growing season pulses like chickpeas might also suffer an area cut unless they are on excellent deep soils with moisture at depth.

Consider the alternative if you plan on reducing the area of break crop. The fallback position is usually more barley or another pasture/fallow. Secure sufficient seed now in case your plans change.



A product of the GRDC funded EPARF project: Maintaining profitability in retained stubble systems (EPF00001).

# **Disease and Insect Risks**

Years without a significant green bridge in autumn are often years of low early insect (eg aphid) and disease pressure. The risk of localised early problems with Russian Wheat Aphid are lower than last year – last year we had some green paddocks on EP all summer.

Most farmers have chosen to protect a portion of their cereal crops from the threat of Russian Wheat Aphid by using an appropriate seed dressing. Until we understand more about this insect, this is likely to be a good strategy. However, given the lower risk of early infection on EP this year, some are opting to reduce the area treated with insecticide on the seed. No one knows the right approach to managing this pest at this stage.

Local sources of cereal rust inoculum are unlikely to occur on EP, so any early rust infection will have to blow in from another region. Remember many of our other common fungal diseases are stubble borne. Proximity to stubble, time of sowing, paddock rotational history, etc. all influence the prevalence of these diseases.

#### Mice

Mice numbers on EP are generally lower than the rest of the state. There are a few pockets of activity were feed availability has allowed numbers to build up. Mice numbers are related to feed availability: no feed = no mice.

Canola is a high risk crop for mice damage – if you have even low numbers and are sowing canola, consider baiting. Monitor intensively for mice activity of you are dry sowing any crop. The longer the seed is in the ground prior to emergence, the longer the mice have to find it.

The following link provides some valuable information on monitoring and control.

https://grdc.com.au/tt-better-mouse-management

## **Target Yields and Nitrogen**

As the break gets later, review you target yields. Remember, not many areas have good levels of subsoil moisture, so crops will largely have to grow on what falls in the growing season.

Review nitrogen plans in line with target yields. This is easier if you had some paddocks soil tested in autumn. If you did not test any paddocks, you should have! Guessing is not a management strategy. I have never read that guessing is a feature of good business managers!

Mallee research has shown that providing some additional N nutrition below the seed at sowing time consistently provides the best economic outcome on sandy loam soils. See article on page 163 of the EP Farming Systems Summary 2017 book.

## Pre-emergent herbicides that can damage crops

Pre-emergent herbicides like diuron, metribuzin, Terbyne Xtreme<sup>®</sup>, simazine and atrazine are all absorbed by weeds in the soil solution. They need to wash into the soil so they can be accessed by weed seeds. Application to dry soil can result in unacceptable crop injury if they are washed in to the root zone of cereal or pulse crops. Application to damp soil usually results in better crop safety.

The GRDC factsheet on Pre-emergent Herbicides has some excellent information on herbicide solubility, binding ability, and mobility in soil water. Ever wondered why metribuzin damage is more



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common than diuron damage? Check out the solubility and binding coefficient of each herbicide to guide decisions on how mobile they are in soil water.

https://grdc.com.au/resources-and-publications/all-publications/factsheets/2015/12/preemergentherbicide-use-fact-sheet

## **Do Something Different**

Plan a simple trial on your farm every year. If you don't challenge yourself, you will struggle to improve your practices and profit.

Simple comparisons include seeding rate, fertiliser rate and timing, deep tillage vs normal working depth, different rates of pre-emergent herbicides, water rate comparison when applying herbicides, trying a new herbicide or mix from a different chemical group, varying pulse inoculants rate with a nil strip, increase cereal plant density on weedy paddocks, etc.

Remember, it is hard to pick up small differences in treatments, so have a nil, a normal, and an extreme treatment.

## **Glyphosate resistant ryegrass**

Low level glyphosate resistance is widespread. Higher rates of glyphosate can sometimes control grass populations with developing resistance to glyphosate. The best way to manage/prevent/delay resistance to knockdown herbicides is to double knock – a high rate of glyphosate followed by a full rate of paraquat usually within 2-5 days then sow. Logistics may prevent this from occurring on every paddock, but rotating around your farm will protect glyphosate activity and ensure excellent pre-sowing weed control.

A population of barley grass on fence lines and around sheds has recently been confirmed as resistant to glyphosate. Be careful to rotate chemical groups, use non-herbicide methods of control, and get any suspect plants tested for resistance status.

## Some other useful factsheet links

Latest Canola Blackleg ratings <u>https://grdc.com.au/GRDC-FS-BlacklegManagementGuide</u>

Gross margins Guide <a href="https://grdc.com.au/FarmGrossMarginGuide">https://grdc.com.au/FarmGrossMarginGuide</a>

Nozzle Chart https://grdc.com.au/NozzleSelectionGuide

## **Upcoming EP Events**

- June Kimba Pulse Check Meeting
- July/August EPARF Spray Technology and Adjuvant Workshop
- 5 September Minnipa Agricultural Centre Annual Field Day

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