

Panel discussion – agronomic strategies to optimise pulse productivity in 2021

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Key words

pulse, agronomy, management, harvest, storage, marketing

Take home message

PLANNING is the key for successful and profitable pulse crops!

- plan now for 2021 production of pulse crops
- plan now for storage of harvested grain to suit marketing options
- know your marketing strategy now, before you even plant the crop.

Please bring your questions to the panel discussion. The following are just some of the topics we think are important to optimise pulse productivity in 2021.

Key agronomic/production strategies

- Paddock selection to suit pulse crop type – soil type & pH, previous crop rotation history, and was there a pulse crop right next door to that paddock in 2020 (disease risk?)
- Consider paddock history in terms of potential chemical residues either tied up in stubble or in the soil, particularly residual herbicides from Group I, Group C or any Group B products
- Also, consider paddock history in terms of weed control in 2021 – broadleaf herbicide options can be limited; and you may think grasses are easy to control in pulse crops but what if there is a herbicide resistance issue?
- Source high quality seed and have it tested for germination, vigour and disease levels; be particularly mindful of virus-infected seed from the 2020 crop for faba bean, narrow-leaf lupin and lentils
- Variety choice – don't just consider yield – think also about disease resistance, maturity to suit your environment, and quality of product for human consumption market premiums
- Sow on time for each pulse crop type – know the optimum sowing window in your district and be ready to sow as early as possible in that window
- All pulse seed should be inoculated with the right inoculant (no excuses, no sob stories!) – what is the best method on your farm to maximise survival of rhizobia so it works?
- In 2021 after a great season in 2020 – plan now for potential mice or locust plagues at sowing time in autumn and insect pressure in spring
- Hopefully 2021 will be as rainfall-reliant as 2020 – so plan now to have enough fungicide in stock (on farm) for foliar disease management, particularly for faba bean, chickpea and lentil crops
- Don't throw away all your hard work at harvest – harvest at the right time (when the crop is ready) to maximise seed quality and marketing potential; plan now to determine if you have the right gear and time available, or would finding a contract-harvester be better?

Harvest management strategies

- Desiccation/crop topping:
 - Can even up the crop for quicker harvest
 - Use only registered products
 - Ensure application timing meets label requirements for pre-harvest with-holding periods and Minimum Residue Limits.
- Harvest as soon as crop is ready to avoid:
 - Losses in field (wind, rain, hail)
 - Broken grain from being too dry
 - Quality downgrade due to rain
 - Losses at header front.
- Correct header set up:
 - Know the delivery specifications for the target market.

Storage strategies

- Know where your grain is going to be delivered as harvested
 - On-farm (aeration, insect control, running sample?)
 - Warehouse
 - End user or packer.
- Minimise the number of times you handle all pulses
- What is my backup plan if grain quality is compromised?
- Be mind-full of grain contaminants, stones, soil, faeces (most pulse products are going to human consumption markets)

Marketing strategies

- Pulses take patience to execute better prices - don't be a forced seller
- Understand market cycles and competitor supply cycles
- Liquidity:
 - What are your cash flow needs?
 - Can buyers take them when you want to deliver or sell?
- Buyer reliability:
 - Do they have good reputation?
 - Do they pay on time?
 - Are they helpful during the growing season?
 - Potential for overseas government interference in your target market?

Recommended references & website links

NSW DPI: Winter crop variety sowing guide:

available online at: <https://www.dpi.nsw.gov.au/agriculture/broadacre-crops/guides/publications/winter-crop-variety-sowing-guide>

(note this publication contains multiple links to further references on specific topics for each pulse crop type, from many different organisations)

NSW DPI: Weed control in winter crops:

available online at: <https://www.dpi.nsw.gov.au/agriculture/broadacre-crops/guides/publications/weed-control-winter-crops>

GRDC website:

GrowNotes™ for all pulse crop types, see Northern region section at bottom of website page
<https://grdc.com.au/resources-and-publications/grownotes/crop-agronomy>

Pulse Australia website:

for all the latest info on pulse crops, including Growing Pulses and Marketing sections
<http://www.pulseaus.com.au/>

National Variety Trial (NVT) website:

including updated variety performance results, and further links to commercial variety guides
<https://www.nvtonline.com.au/>

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