Recommendations for late sowing rice in 2020

Due to spring rainfall and increased water availability some growers may consider sowing rice later than the recommended times. What are the implications of this?

The sowing date recommendations aim for microspore and flowering to align with the period of least risk of low temperatures. Sowing later than recommended will increase the risk of low temperature induced sterility reducing grain yield

Varieties

As Viand and Sherpa have both exceeded demand Reiziq is the best available variety for sowing later than recommended.

Reiziq can be sown later than the recommended window and still achieve high grain yields (Figure 1) but the risk of cold induced sterility is increased. It is important to note that there have been few severe cold events over the seven seasons included in this graph.



Figure 1. Reiziq grain yield over a range of sowing/first flush dates for aerial, drill and DPW sowing methods. Data is from 53 experiments conducted over 7 seasons covering both valleys.

Sowing method

Aerial sowing has the fastest crop development, with pre-germinated seed preferred over dry seed as plant establishment is faster and more consistent.

Drill sowing delays development by approximately one week compared to aerial sowing. If drill sowing late it is best to go to permanent water early, after the 2nd flush and don't use delayed permanent water.

Sowing dates

If necessary, it is realistic for Reiziq sowing to be extended into the pink box areas in Figure 2. Sowing at this time may provide some increase in cold risk with flowering occurring later.

			(Oct	obe	November					December					January								February								
		5	10	15	20	25	31	5	10	15							3	6	9	12	15	18	21	24	27	31	3	6	9	12	15	18
MIA & CIA	Aerial		Sov				wing																									
	Drill	First flush													PI						MS			Flower								
	DPW	First flush																														
Murray Valley	Aerial					Sov	ving																									
	Drill	First flush														PI				MS			Flower									
	DPW	First flush																														

Figure 2. Reiziq recommended sowing dates and hatched area showing period of least risk of low temperatures. Pink boxes show potential extended sowing period and flowering low temperature risk.

Nitrogen

Growers may not have time to wait for paddock conditions to be right for normal nitrogen application methods. There are two practices that should be avoided as they lead to excessive nitrogen losses;

1. Do not spread urea onto a wet soil surface: Urea spread onto wet soil will not move into the soil when permanent water is applied and up to 50% of the nitrogen may be lost.

2. Do not spread urea into flooded bays when rice plants are very small: Up to 50% of nitrogen flown into rice water soon after sowing can be lost before the rice plants can use it.

If you can't drill urea into the soil prior to permanent water, there are two of options:

1. Multiple top dressings. At early tillering, top dress about half the urea rate that you would normally have drilled into the soil then apply the other half in a second application at mid tillering.

2. After establishment drain and top dress. Once an aerial sown crop has established (about 40 days after sowing) it can be drained. Urea can then be spread onto dry soil prior to the application of permanent water as for drill sowing. This approach is more nitrogen efficient than the above option but may lead to extra herbicide requirements.

Contact

Brian Dunn Research Agronomist, NSW Department of Primary Industries phone: (02) 6951 2742 email: brian.dunn@dpi.nsw.gov.au

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