

Influence of sowing time on Wheat variety at Coorow in 2009

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Purpose:	To support growers with agronomic decisions such as sowing time and variety selection to enhance industry profitability through improved wheat yields and grain quality
Location:	Micheal Bothe, Coorow
Soil Type:	Loamy sand
Rotation:	2008 lupin; 2007 wheat; 2006 wheat; 2005 lupin.
GSR:	May to Sept: 267mm; Jan- Apr: 28.4mm

BACKGROUND SUMMARY

Twenty commercially popular or recently released wheat varieties were sown at three sowing times at Coorow to provide growers with useful information to understand the impact of sowing time on the yield and quality.

TRIAL DESIGN

Plot size: 20m x 1.54m

Replications: 3

Seeding rate: 75 kg/ha

Sowing date: 13 May (dry sown, rained 20th May effective sowing date), 2 June and 15 June

Fertiliser: 100kg/ha Agstar Extra drilled below + 50 kg/ha Urea topdressed at seeding

Herbicides: For each sowing time: SpraySeed, Treflan and Dominex IBS

Post emergence sprays: Jaguar, Ally and Lontre

RESULTS- See over page.

DISCUSSION

- Crop yields declined by an average of 31 kg/ha/day when sowing was delayed from the 20th May to the 2nd June. Delaying seeding from 2nd June to the 15th June resulted in an average yields decline of 45 kg/ha/day.
- There were not any significant interactions between varieties in their response to delayed sowing time from 20th May to the 15th June.
- The top performing AH/APW varieties were Carnamah, EGA Bonnie Rock, Espada, Katana, King Rock, Mace, Scout, Wyalkatchem and Zippy. Screenings of these varieties was less than 5% at each sowing time.
- The varieties Binnu, EGA Bonnie Rock, Espada, Fang, Lincoln and Yandanooka produced screenings greater than 5% when sown in mid June.

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RESULTS

Table 1: Yield and quality of wheat sown at Coorow in 2009 at three times of sowing.

	Grain Yield (t/ha)				Protein (%)				Screening (whole and cracked)		
	20 May	2 Jun	15 Jun	Av	20 May	2 Jun	15 Jun	Av	20-May	2-Jun	15-Jun
Axe	3.50	3.38	2.20	3.03 (82)	13.7	11.0	11.9	12.2	2.7	3.1	3.0
Binnu	4.23	3.44	2.95	3.54 (96)	11.9	10.2	10.5	10.9	4.9	4.8	7.3
Bumper	4.73	3.69	3.20	3.87 (105)	11.9	10.3	11.2	11.1	3.2	3.6	4.9
Calingiri	4.05	3.26	2.79	3.37 (91)	12.8	11.0	12.1	12.0	2.6	2.8	3.3
Carnamah	3.90	3.67	2.87	3.48 (94)	12.7	10.8	11.6	11.7	3.4	2.9	3.9
EGA Bonnie Rock	4.29	3.55	3.03	3.62 (98)	12.5	10.6	11.3	11.5	4.8	4.6	6.0
Espada	4.04	3.65	2.84	3.51 (95)	12.4	10.8	12.0	11.7	3.9	4.1	5.4
Fang	3.31	2.90	2.57	2.92 (79)	13.1	10.6	12.0	11.9	15.3	6.7	11.0
Fortune	3.75	2.95	2.67	3.12 (84)	12.1	11.6	11.8	11.8	2.5	2.6	3.5
Gladius	3.70	3.51	2.87	3.36 (91)	13.2	10.7	12.0	12.0	3.3	3.9	4.1
Katana	4.17	3.94	3.15	3.75 (101)	12.8	10.5	11.8	11.7	3.7	3.4	3.6
King Rock	4.52	3.83	3.11	3.82 (103)	12.5	10.6	11.6	11.6	3.6	3.3	5.5
Lincoln	3.58	3.44	3.03	3.35 (91)	12.6	10.5	11.2	11.5	6.9	4.9	6.2
Mace	4.08	3.94	3.43	3.82 (103)	11.2	10.2	10.4	10.6	3.2	2.5	3.6
Magenta	3.61	3.26	2.77	3.21 (87)	13.2	11.3	11.7	12.1	5.4	4.8	4.9
Scout	4.27	3.56	2.78	3.54 (95)	12.2	10.6	11.7	11.5	4.0	2.9	4.4
Waagan	4.03	3.66	3.32	3.67 (99)	11.9	10.2	10.9	11.0	2.6	2.0	2.3
Wyalkatchem	4.37	3.68	3.06	3.70 (100)	12.1	10.4	11.2	11.2	1.7	1.3	2.4
Yandanooka	3.32	3.09	2.63	3.01 (81)	13.3	11.2	12.4	12.3	3.1	3.4	6.1
Zippy	3.67	3.94	3.34	3.65 (99)	12.5	10.2	11.5	11.4	3.2	3.4	3.1
Ave within each TOS	3.94	3.54	2.95		12.5	10.7	11.6	11.6	4	3	4
TOS (lsd)	<.001	0.19			0.001	0.47			0.02	0.6	
Var (lsd)	<.001	0.31			<.001	0.49			<.001	1.3	
Var (lsd) between TOS	ns				ns				0.012	2.2	
Var (lsd) within TOS										2.2	
%CV	9.6%					4.5%				7%	

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