Time of Sowing - Effect on yield of wheat at Marchagee



Christine Zaicou-Kunesch, Research Officer, Department of Agriculture and Food, WA

Аім

Provide growers with useful information to understand the impact of sowing time on the yield and quality of new and current wheat varieties.

BACKGROUND

This trial is one component of a state wide project 'Variety specific agronomy for wheat yield and quality in the Western Region' which is funded through DAFWA and GRDC.

TRIAL DETAILS

Property	Clint, Ian & Helen Hunt, Marchagee		
Plot size & replication	18m x 1.54m x 3 replicates		
Soil type	Gravelly Loam		
Sowing date	TOS 1: 1/5/08; TOS 2: 16/5/08; TOS 3: 12/6/08		
Fertiliser	100 kg/ha Agstar Extra below the seed at seeding; 40 kg/ha Urea topdressed at seeding		
Herbicides, Insecticides &	Pre: 1.5 L/ha Sprayseed. IBS: 1.5 L/ha Treflan + 1 L/ha Roundup		
Fungicides	Post: 200 mL/ha Lontrol, 1 L/ha Jaguar		
	100 ml/ha Talstar, 200 mL/ha Dominex at seeding		
Growing Season Rainfall	324mm		

RESULTS

Table 1: Yield of wheat varieties sown at three times of sowing at Marchagee.

Variety	Grain Yield (t/ha)			Variety
	1-May	16-May	12-Jun	Ave.
Arrino	4.22	4.83	3.61	4.22
Axe	2.27	3.64	3.35	3.08
Binnu	4.70	4.94	3.61	4.42
Calingiri	5.41	4.89	3.73	4.68
Carinya	4.12	4.34	3.17	3.88
Carnamah	4.94	5.15	3.92	4.67
Catalina	3.40	4.30	3.91	3.87
Derrimut Wt	2.93	4.14	3.51	3.53
EGA Bonnie Rock	4.36	4.50	3.87	4.24
EGA Wentworth	3.99	4.11	3.39	3.83
Espada	4.11	4.59	3.64	4.11
Fortune	5.06	5.13	3.69	4.63
Gladius	4.11	4.63	3.71	4.15
Mace	5.08	5.40	3.66	4.71
Magenta	5.72	5.36	3.98	5.02
Tammarin Rock	3.85	4.70	3.65	4.07
Wyalkatchem	4.76	5.27	3.65	4.56
Yandanooka	4.99	4.97	4.31	4.76
Yitpi	4.61	4.46	3.78	4.28
Young	3.63	4.68	3.73	4.02
Zippy	2.84	4.40	3.55	3.60
Average within each TOS	4.24	4.69	3.66	4.20
TOS (lsd)	0.15			
Var (lsd)	0.24			
Var (lsd) between TOS	0.42			
Var (lsd) within TOS	0.42			ĺ
%CV	6			ĺ

COMMENTS

- The average yields peaked at the mid May sowing.
- Magenta and Calingiri were the higher yielding varieties when sown in early May. Their yields declined 0.4 and 0.5 t/ha respectively by mid May sowing.
- Yields of most of the varieties actually increased with the mid May sowing although the differences between the May sowings is not significant for varieties like Binnu, Carnamah, Carinya, EGA Bonnie Rock, Fortune, Mace, Yandanooka and Yitpi.
- Carnamah, Mace, Magenta and Wyalkatchem were the higher yielding APW or AH varieties when sown in mid May.
- Early maturing varieties Axe and Zippy did not yield well across all the sowing times. However we need more information on the grain quality with the later sowings (data will be available at the Crop Updates) and their value assessed in years with limited finishing rains.
- The new noodle variety, Fortune did not perform better than Calingiri with the early May sowing, however on average across all sowing times it yielded the same as Calingiri. Based on these results, none of the noodle wheat varieties were higher yielding than Calingiri with the early sowing opportunity, but with later sowings, they are a viable option.
- Grain quality results were not available at the time of print, but will be available by the Crop Updates.

ACKNOWLEDGEMENTS

- The Hunt family and Liebe Group for access to an excellent trial site.
- GRDC for financial support.
- Melaine Kupsch and Anne Smith for technical support.
- DAFWA Research support unit for seeding, spraying and harvesting the trial.

PAPER REVIEWED BY: BRENDA SHACKLEY.

CONTACT:

Christine Zaicou-Kunesch

Email: czaicou@agric.wa.gov.au

Ph: (08) 9956 8549