

TIME OF SOWING ON WHEAT YIELDS AT BUNTINE

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AIM

To assist growers in making decisions on variety choice and management, a trial was conducted at Buntine to assess the yield, quality and economic response of new and potential wheat varieties to different sowing times.

TRIAL DETAILS

Property	Ian Syme, Main Trial Site, Buntine
Soil type	Loamy sand, N – 1ppm, P – 19ppm, S – 3ppm, K – 185ppm, OC% - 0.90, pH – 5
Plot size & replication	1.54 x 20m
Sowing date	TOS1: 17/05/06; TOS2: 30/05/06; TOS3: 29/06/06
Emergence	TOS1: mid/late May; TOS2: late June; TOS3: early Aug
Seeding rate	Approx 70 kg/ha
Fertiliser (kg/ha)	TOS1, 2 & 3: Banded below seed-100 kg/ha Agras No 1
Herbicides (/ha)	Whole trial 16/5/06: 1.6L Wipeout 450 + 50% Wetter Preseeding: SpraySeed 250 (3 L/ha TOS1, 2 L/ha TOS2)+ Triflur X (1.6 L/ha TOS1 & 2) SpraySeed250 (1.6L TOS3)+ Treflan (1.6L TOS3) Post emergent: Jaguar 1 L/ha & Lontrel 0.3 L/ha (TOS1)
Paddock rotation	2005= Pasture, 2004= Wheat (Calingiri), 2003= Volunteer Pasture, 2002= Volunteer Pasture, 2001= Wheat (Calingiri)
Growing Season Rainfall	May to October 123mm

RESULTS

Table 1: Effect of sowing time/emergence on yield, quality and economic returns of wheat on loamy sand at Buntine.

		Grain Yield (t/ha)			Protein (%)			Screenings (%)*			Hectolitre wt (kg/hl)			Gross income (\$/ha)		
		TOS 1	TOS 2	TOS 3	TOS 1	TOS 2	TOS 3	TOS 1	TOS 2	TOS 3	TOS 1	TOS 2	TOS 3	TOS 1	TOS 2	TOS 3
HARD	Carnamah	1.26	1.06	0.70	15.1	15.6	16.3	4.6	10.5	9.3	78	75	76	330	262	174
	EGA BonnieRock	1.37	1.22	0.94	15.4	16.0	16.1	4.6	9.6	15.5	80	79	78	367	295	212
	EGA EagleRock	1.16	1.04	0.62	15.6	16.1	16.2	6.9	9.0	14.2	79	79	78	296	255	142
	GBA Sapphire	1.14	1.04	0.75	15.5	15.4	15.8	6.8	18.9	18.8	80	79	78	286	213	153
	Tammarin Rock	1.25	1.22	0.90	14.8	15.3	15.1	3.9	4.0	10.7	78	79	76	319	323	215
	Yitpi	1.20	1.16	0.88	14.8	15.4	16.0	6.5	10.1	7.1	79	78	75	309	286	224
APW	Ellison	1.00	0.87	0.62	17.0	17.4	18.0	7.1	13.4	8.2	80	77	77	250	189	152
	EGA Wentworth	1.04	0.94	0.62	15.9	16.2	16.3	9.7	22.1	20.9	78	76	76	250	193	126
	Wyalkatchem	1.41	1.30	0.84	15.2	15.5	15.5	2.5	6.6	10.4	81	79	76	365	326	201
	Young	1.30	1.15	0.85	15.2	15.4	16.3	8.3	15.7	26.5	80	79	77	319	241	212
ASW	AGT Scythe	1.13	1.08	0.68	15.8	15.9	16.9	7.5	14.3	17.0	75	73	72	264	233	140
	Guardian	1.32	1.14	0.89	14.7	15.0	15.3	9.8	16.5	22.3	80	79	78	300	238	181
	H46	1.16	1.06	0.83	15.3	15.9	15.5	7.7	13.9	23.3	80	79	78	272	227	171
	Sentinel	1.13	1.04	0.73	15.4	15.8	15.9	8.0	10.6	9.8	78	78	76	265	231	175
NOODLE	Arrino	1.22	1.22	0.77	16.0	16.2	16.5	2.5	7.1	12.3	79	78	75	302	288	169
	Binnu	1.33	1.11	0.87	14.6	15.2	15.5	9.2	14.1	20.3	79	78	76	306	240	178
	Calingiri	1.37	1.17	0.89	14.4	15.3	15.3	4.3	6.3	7.7	80	79	78	337	280	207
Potential	GBA03.1129	1.10	1.08	0.76	16.2	16.6	16.8	3.1	6.8	8.3	79	78	76			
	GBA3.09.AH	1.15	0.97	0.67	15.4	15.9	16.6	7.2	18.7	15.0	80	78	78			
	WAWHT2713	1.03	0.98	0.75	15.3	15.6	15.7	10.2	11.7	8.5	78	77	72			
	WAWHT2750	1.32	1.12	0.76	15.4	15.4	16.1	2.6	6.0	6.9	78	77	75			
	WAWHT2773	1.33	1.17	0.83	15.4	15.9	16.2	4.4	9.4	12.3	80	78	76			
	Ave TOS	1.21	1.09	0.78												
	TOS (lsd)	0.16														
	Var TOS (lsd)	0.18			0.64			2.4			1.0					
	Var (lsd) within TOS	0.14			0.62			2.1			0.9					
	%CV	10.2			2.4			11.9			0.6					

* Whole and cracked grain. Price Notes: Calculated using AWB Golden Rewards. Base rate APW:\$250, AHP:\$260, AH:\$255, ASW:\$237.

COMMENTS

Buntine

- TOS1 was sown in mid May and established well. TOS2 was sown in late May but did not emerge until late June. TOS3 was sown in late June and emerged a few days later.
- This site was very low yielding and moisture stresses throughout the year had a huge impact on yields of all varieties at all sowing times. Although sown and established in mid May (TOS1), the varieties experienced an extended dry period until late June which will have impacted considerably on the crop yields (Table 1).
- Similarly to Mingenew, screenings (whole and cracked) increased and hectolitre weight decreased with delayed sowing time. The varieties which tended to have reduced risk of screenings were Arrino, Calingiri, EGA Eagle Rock, GBA03.1129, WAWHT2750 and Wyalkatchem. However these rankings may change with the removal of cracked grains from the sample. (Table 1).

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