Oat Variety Demonstration – Buntine

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Aim

To evaluate the yield and quality of new and existing oat varieties in a low rainfall zone.

Background

The focus of this demonstration is WA302-9 and how it compares to existing varieties. WA302-9 is a new short season variety that reaches maturity 7-12 days earlier than Carrolup with similar grain, hay yield and quality. Carrolup provides the standard for both hay and milling oats. Brusher and Mulgara are classed specialist hay oats. Brusher is the next earliest maturing variety with a season length between WA302-9 and Carrolup. Brusher has good early vigour, is tall, but prone to lodging and shattering. Mulgara is a longer season variety, comparable to Wintaroo.

Property	Fitzsimons Property, east Buntine				
Plot size & replication	18m x 100m x 1 replication				
Soil type	Sandy loam				
Soil pH (CaCl ₂)	0-10cm: 6.0 10-20cm: 4.9 20-30cm: 4.7				
EC (dS/m)	0-10: 0.179				
Sowing date	02/05/2014				
Seeding rate	80 kg/ha				
Paddock rotation	2011: pasture, 2012: wheat, 2013: canola				
Fertiliser	02/05/2014: 30 kg/ha DAPSZC				
Herbicides	02/05/2014: 1.5 L/ha Gramoxone, 0.275 kg/ha Diuron				
Growing Season Rainfall	180mm				

Results

Table 1: Yield, quality and grade of wheat sown at east Buntine.

Variety	Yield	Protein	Hectolitre	Screenings	Grade
	(t/ha)	(%)	Weight (%)	(%)	
Mulgara	0.96	12.6	46.32	4.73	-
Brusher	0.86	12.8	47.58	5.25	-
Carrolup	0.60	13.3	50.18	11.37	Oat 2
WA302-9	0.51	12.3	52.42	2.74	Oat 2

Comments

All the oat varieties did not need a follow up weed spray due to the extra competition from good early vigour.

Brusher and Mulgara hectolitre weights were too light (below 50%) and were out of receival range.

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