Wheat Variety Demonstration – West Wubin

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Aim

- Compare the new noodle wheat variety Supreme (IGW6042) against Calingiri to gauge variety performance.
- Compare noodle wheat to Mace in order to determine the economic viability of growing noodle wheat.

Background

2015 will mark the first year since Fortune came out in 2009, that there will be new noodle varieties available to growers. In response to growers' need for higher yielding and better disease resistant noodle varieties to keep up with recent APW/AH varieties, InterGrain has bred Supreme, a mid-short season Arrino type and Zen, a mid-long season Calingiri type. The new varieties released in 2014 show marked improvements in both yield and leaf disease resistances to Arrino and Calingiri respectively.

This demonstration will examine the physical quality traits and yield of Supreme versus Calingiri wheat to gain a measure of noodle wheat variety performance. It also examines the difference in yield and quality characteristics between noodle wheat and Mace. (Ideally we would have liked to compare Zen with Calingiri and Supreme against Arrino to compare similar maturities but sufficient seed of these varieties was not available).

This demonstration was conducted using farmer equipment. Farm scale demonstrations are a valuable way to explore new varieties, products or practices, complimenting results which are produced through more scientifically rigorous, small plot trials. The varieties tested include those that are widely grown in the area as well as recently released varieties.

Varieties

- Supreme – ANW class, early to mid-maturity, Arrino alternative.
- Calingiri – ANW class, late maturity, good early sowing option.
- Mace – AH class, early-mid maturity, Wyalkatchem background, high yielding.

Trial Details

Property	Miamoon Farm, west Wubin
Plot size & replication	16.65m x 200m x no replication
Soil type	Sandy loam
Soil pH ($CaCl_2$)	0-10cm: 4.9 10-20cm: 4.7 20-30cm: 4.9
Soil amelioration	2012: 1 t/ha lime
Sowing date	12/05/2014
Seeding rate	65 kg/ha
Paddock rotation	2011: wheat, 2012: wheat, 2013: canola
Fertiliser	12/05/2014: 35 L/ha UAN, 50 kg/ha DAPSZC:MOP 80:20
Herbicides	09/05/2014: 1.5 L/ha Panza 450, 0.5% LI 700 12/05/2014: 800 mL/ha Spray.Seed, 120 g/ha Sakura
Growing Season Rainfall	206mm

Results

Table 1: Yield, quality, grade and gross return of wheat sown at west Wubin.

Variety	Yield (t/ha)	Protein (%)	Hectolitre Weight (%)	Screenings (%)	Grade	Gross Return ($/ha)
Calingiri	1.41	13.5	81.11	1.82	ANW2	400.44
Supreme	1.31	12.8	82.58	0.59	ANW2	372.04
Mace	1.23	14.3	83.21	0.33	H1	373.92

Calingiri	1.33	13.6	80.87	1.03	ANW2	377.72

*Note: 2014 average prices: H1 = $304, ANW2 = $284.

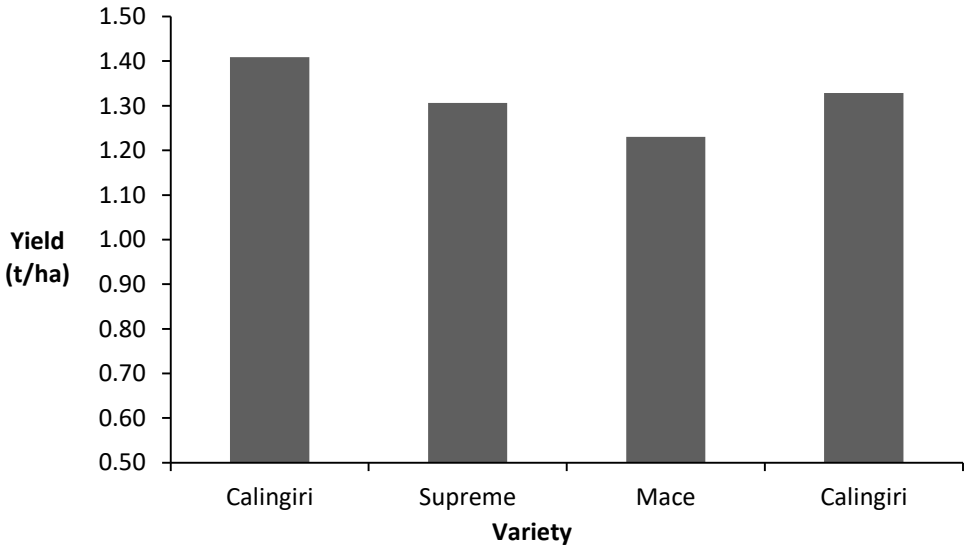

Figure 1: Yield results from wheat varieties sown at west Wubin, 2014.

Comments

The paddock was severely windblown on the 16/06/2014. All the varieties were damaged, with Calingiri being the worst. This resulted in the Calingiri plot having fewer plants per square meter which may have been beneficial in the August dry spell as the surviving plants had less competition for soil moisture.

The new noodle variety Supreme has performed similarly to Mace in a tough finish in this farmer demonstration. As Supreme is a mid-short season variety like Mace, it would be sown in a similar timeframe so this is an encouraging result for Supreme as a mid-late sowing udon noodle option. All varieties had good hectolitre weight and screenings however, the noodle varieties protein was too high to go ANW1 due to the harsh finish.

In this demonstration the extra yield achieved by Calingiri was enough to increase return over the $20 premium gained for H1 ($304) compared to ANW2 ($284), Table 1.

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