

Wheat Variety Demonstration – East Wubin

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Aim

Compare the new IGW3526 imidazolinone wheat with Mace in a farm scale demonstration to compare variety performance.

Background

Herbicide resistance and continuous cropping has increased pressure on our modern farming systems and their economic viability. The Clearfield or imidazolinone tolerant crops have provided another chemical option that effectively controls hard to kill weeds. The IMI-chemistry provides broad spectrum control for broadleaf and grass weeds, in particular brome grass and barley grass. Imidazolinone tolerant crops have the potential to form part of an integrated weed management system and reduce herbicide costs and the weed seed bank.

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.

Varieties

- IGW3526: A mid-short maturing, Wyalkatchem type, 2-gene imidazolinone APW wheat with strong yellow spot resistance.
- Mace: AH class, high yielding, short season with very large grain size.

Trial Details

Property	KL Carter and Co. east Wubin	
Plot size & replication	13.72m x 770m x 1 replication	
Soil type	Red river flat loam	
Soil pH (CaCl ₂)	0-15cm: 4.7	15-40cm: 4.4
EC (dS/m)	0-15cm: 0.06	15-40cm: 0.03
Sowing date	20/05/2014	
Seeding rate	40 kg/ha	
Paddock rotation	2011: wheat, 2012: wheat, 2013: lupins	
Fertiliser	20/05/2014: 30 L/ha Flexi-N, 50 kg/ha Agstar Extra	
Herbicides	20/05/2014: 0.06 L/ha EverGol, 0.02 L/ha Interco, 0.35 L/ha AuSu ² , 0.2 L/ha Ester 800, 0.11 L/ha LI700, 1.45 L/ha Roundup DST, 1.2 L/ha Trifluralin. 30/06/2014: 0.5 L/ha Jaguar, 0.01 kg/ha Logran	
Growing Season Rainfall	160mm	

Results

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

Variety	Yield (t/ha)	Protein (%)	Hectolitre Weight (%)	Screenings (%)	Grade
Mace	1.0	13.0	82.32	0.79	H1
IGW3526	1.2	13.0	80.45	2.15	APW1
Mace	1.1	12.7	82.10	1.22	H2

Comments

2013 lupins were not harvested, instead they were brown manured and incorporated. Salinity was present in the demonstration plots increasing southward. The most southern plot of Mace was the most affected.

The IGW3526 performed very similarly to the industry standard Mace in both yield and quality. The IGW3526 could provide another weed control option with the use of Intervix for troublesome weeds

like brome or barley grass without sacrificing yield. Further farmer trials and NVT trials should be conducted to better predict its performance for future years.
IGW3526 is to be released in February 2015 following final chemical registration.

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