



Elmore CL Plus[®]



- ✓ Bred for tolerance to Clearfield® Intervix® herbicide
- ✓ Mid season maturity, similar to Janz
- ✓ Derived from Annuello[®]/Janz family of wheat
- ✓ Solid rust resistance
- ✓ Well adapted to medium rainfall environments
- ✓ Higher yield potential than Clearfield JNZ[®]
- ✓ AH quality classification in NSW and QLD



Clearfield® System

Elmore CL Plus[®] has been specifically developed to carry two genes for tolerance to Clearfield® Intervix® herbicide. Intervix® is a member of the imidazolinone chemical family with Group B mode of action, offering one-pass post-emergent knockdown and residual control of many major grass and broadleaf weeds including brome grass, barley grass, wild oat, Indian hedge mustard, muskweed, wild radish, wild turnip, and suppression of annual ryegrass.

Breeding

Elmore CL Plus[®] was tested as VX4338, and is derived from a cross between Annuello[®] and a Janz-type imidazolinone tolerance donor. Progeny from this cross were selected for high grain yield, quality and improved rust resistance. Throughout the breeding of the variety, imidazolinone herbicides were used to confirm the presence of tolerance.

Plant Characteristics

Elmore CL Plus[®] is a fully awned spring wheat with similar height, straw strength and maturity to Janz. It has a medium coleoptile length, similar to Janz. Elmore CL Plus[®] is intolerant to boron and aluminium toxicity.

Adaptation and Fit

Elmore CL Plus[®] is well adapted to medium rainfall regions of NSW and Queensland, with a similar adaptation pattern as Janz, but with a higher yield potential. See Table 1 for yield data. Elmore CL Plus[®] may be an option for growers looking for in-crop control of problem weeds, or to manage the risk of crop damage by chemical residues following Clearfield® Canola crops sprayed with Intervix®.

Grain Quality

Elmore CL Plus[®] has an AH quality classification for NSW and Queensland. Elmore CL Plus[®] has similar grain conformation as Janz, but grain size is approximately 2% smaller, with slightly higher screenings. Elmore CL Plus[®] has an intermediate level of sprouting tolerance, similar to Janz.

Disease Profile

Elmore CL Plus[®] exhibits a solid rust resistance profile, with excellent stem and leaf rust resistance, and good stripe rust resistance. It is susceptible to yellow leaf spot and CCN. See Table 2 for detailed disease ratings.

Elmore CL Plus[®] wheat

March 2012

Table 1. Predicted yields of Elmore CL Plus[®] and control varieties (yield % of EGA Gregory[®]) in NSW and QLD from long term MET analysis (2005-2011), and AGT trials in 2010-2011. Note: Elmore CL Plus[®] was only entered into NVT's for the 2011 season.

Variety	AGT Northern NSW		NVT MET		AGT Queensland		NVT MET		
	2010	2011	NE NSW	NW NSW	2010	2011	CQ	SEQ	SWQ
Elmore CL Plus[®]	106	96	95	96	113	92	96	-	96
Baxter [®]	-	-	88	92	-	-	94	92	94
*Clearfield JNZ [®]	-	-	91	92	-	-	-	-	92
Crusader [®]	-	-	92	94	-	-	92	94	92
EGA Gregory [®]	100	100	100	100	100	100	100	100	100
EGA Wylie [®]	-	-	89	91	-	-	95	95	94
Ellison [®]	-	-	92	91	-	-	89	92	91
Janz	-	92	92	92	-	92	94	94	92
Sunguard [®]	107	98	97	100	87	94	96	96	96
Wallup [®]	109	102	100	100	118	94	96	98	98

* Note: Clearfield JNZ[®] carries a lower level of resistance to imidazolinone herbicides than CL Plus varieties, and is only registered for use with Clearfield[®] Midas[®] herbicide. Use of Clearfield[®] Intervix[®] herbicide on Clearfield JNZ[®] will result in crop damage.

Table 2. Disease ratings for Elmore CL Plus[®] and control varieties.

Variety	Stem Rust	Stripe Rust	Leaf Rust	CCN	Yellow Leaf Spot	Septoria tritici blotch	RLN (<i>P. thornei</i>)	Black Point	Crown Rot
*Elmore CL Plus[®]	R-MR	MR-MS	R	S	S	MR-MS	S	MS	S
Baxter [®]	R,MS ^m	MS-S	MR	-	S	S	S	MS	MS
Clearfield JNZ [®]	MR	MS-S	MR-MS	S	MS-S	MR-MS	S-VS	S	S
Crusader [®]	R-MR	MS	R	MS	MR-MS	S	S-VS	MR	MS
EGA Gregory [®]	MR	MR	R-MR	S	MS-S	MS	MS-S	MS	S
EGA Wylie [®]	R	MS	R	-	MS-S	S-VS	S	MR	MR-MS
Ellison [®]	MR	MS	R	-	MR-MS	MS-S	S	MS	S-VS
Janz	R-MR	MS	MR-MS	S	S	MS	VS	S	MR-MS
Sunguard [®]	R	MR	R-MR	-	MS-S	MS-S	VS	-	MR-MS
*Wallup [®]	R-MR	MR-MS	MS	MR	MS	MS-S	MR-MS	MR-MS	S

R=Resistant, MR=Moderately Resistant, MS=Moderately Susceptible, S=Susceptible, VS=Very Susceptible, -=Insufficient Data, m=Mixed population, some susceptible plants in the mix, *=Preliminary rating, to be used with caution. Source: NSW DPI Winter Crop Variety Sowing Guide 2012.

Seed Availability

Commercial quantities of Elmore CL Plus[®] will be available through AGT Affiliates, or your local retailer. Please consult the AGT website for AGT Affiliate contact details.

Seed of Elmore CL Plus[®] can NOT be legally traded between growers. The sale or trade of seed of Elmore CL Plus[®] 'farmer to farmer' is an infringement of Australian Law under the *Plant Breeder Rights ACT of 1994*.

PBR and EPR

Elmore CL Plus[®] is protected by Plant Breeders Rights (PBR) and all production (except seed saved for planting) is liable to an End Point Royalty (EPR), which funds future plant breeding. Elmore CL Plus[®] growers will be subject to a Growers Licence Agreement that acknowledges that an EPR of \$3.55/tonne + GST has to be paid on all production other than seed saved for planting. (*\$3.00/tonne AGT Breeder Royalty, \$0.55/tonne BASF Technical Fee).

Herbicide Availability

Intervix[®] Herbicide is available via the Clearfield[®] Agricentre Agency system, administered by Crop Care. For further enquiries, please contact Crop Care Customer Service: 1800 111 454. www.crocare.com.au

Acknowledgements

Elmore CL Plus[®] was bred and selected by AGT's Horsham wheat breeding programme. The name Elmore continues in the tradition of naming wheats bred at Horsham after towns and localities.

More Information

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