

Mitch[®]



- ✓ Mid-late maturity, suits late April-early May planting in northern NSW/Qld
- ✓ Elite yielding variety for this planting window
- ✓ Good stem and stripe rust resistance
- ✓ One of the best levels of resistance to crown rot available for this planting window
- ✓ Moderately resistant to black point
- ✓ Good straw strength, suitable for irrigation
- ✓ Lower EPR rate than other new varieties in this planting window
- AH quality classification (Northern Zone)



Breeding

Mitch[®] was tested as QT14381, and is derived from a cross between a high yielding CIMMYT breeding line and Giles[®].

Plant Characteristics

Mitch[®] is a spring wheat with white chaff and fully awned heads. It is tall in height, similar to EGA Gregory[®], with relatively strong straw. Mitch[®] is a mid to late maturing variety, reaching anthesis at a similar time to EGA Gregory[®] and Sunvale.

Grain Quality

Mitch[®] has an AH quality classification in the Northern Zone (nNSW/Qld). Mitch[®] is susceptible to pre-harvest sprouting. Mitch[®] has large grain with low levels of screenings loss. Mitch[®] has good levels of tolerance to black point.

Adaptation and Fit

Mitch[®] produces very high yields relative to other varieties across Queensland and northern NSW in the early to mid season sowing window. Mitch[®] may be a suitable option where yellow leaf spot and crown rot are limitations to crop production. Mitch[®] also performs well under irrigation.

Disease Profile

Mitch[®] offers growers a good disease resistance package, with good resistance to stem and stripe rust, as well as yellow leaf spot. Mitch[®] is moderately susceptible to crown rot and susceptible to *Septoria tritici* blotch, while being moderately tolerant/moderately intolerant of root lesion nematode (*P. thornei*). See Table 2 for detailed disease ratings.

Table 1. Predicted yields of Mitch[®] and control varieties (yield % of trial mean) in northern NSW and Queensland regions from NVT long term MET analysis, early sown trials (2010-2014).

Variety	North East NSW	North West NSW	Central QLD	South East QLD	South West QLD
Mitch[®]	104	106	110	104	110
Baxter [®]	94	94	98	102	101
EGA Gregory [®]	103	105	107	104	107
Lancer [®]	101	99	99	103	102
Strzelecki [®]	84	94	101	93	96
Sunzell [®]	92	94	95	96	94
Viking [®]	107	107	106	105	107
<i>Mean yield (t/ha)</i>	<i>3.9</i>	<i>3.2</i>	<i>2.7</i>	<i>4.2</i>	<i>3.2</i>

Table 2. Disease ratings for Mitch[®] and control varieties.

Variety	Stem Rust	Stripe Rust	Leaf Rust	Yellow Leaf Spot	Septoria <i>tritici</i> Blotch	Crown Rot	RLN (<i>P. thornei</i>)	Black Point	Acid Soils Tolerance
Mitch[®]	MR-MS	MR-MS	S-VS*	MS	S	MS	MT-MI	MR	MT-MI
Baxter [®]	MR-MS	MS-S	S*	S	S	MS	MT	MS	MT
EGA Gregory [®]	MR	MR	MR	S	MS	S	MT	MS	T
Lancer [®]	R	MR	R-MR	MS	MS	MS-S	T-MT	-	-
Strzelecki [®]	MR-MS	MR	R	MS	MS	S	I	MS	-
Sunzell [®]	MR	MS	MR-MS*	MS-S	MS-S	MS-S	MT	S	T-MT
Viking [®]	MR	R-MR	S-VS*	MS-S	S	MS-S	T	-	-

R=Resistant, MR=Moderately Resistant, MS=Moderately Susceptible, S=Susceptible, VS=Very Susceptible, T=Tolerant, MT=Moderately Tolerant, MI=Moderately Intolerant, I=Intolerant, VI=Very Intolerant, -=Insufficient data, *=Preliminary rating, to be used with caution. Source: NSW DPI Winter Crop Variety Sowing Guide 2015.

Seed Availability

Commercial quantities of Mitch[®] may be available through AGT Affiliates, or your local seed retailer. Please consult the AGT website for AGT Affiliate contact details.

Growers who purchase seed from a recognised seed retailer will be able to trade Mitch[®] seed with other growers upon the completion of a Licence Agreement as part of AGT's Seed Sharing Initiative.

PBR and EPR

Mitch[®] 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. Mitch[®] growers will be subject to a Growers Licence Agreement that acknowledges that an EPR of \$3.25/tonne + GST has to be paid on all production other than seed saved for planting.

Acknowledgements

Mitch[®] was bred at the Leslie Research Centre, Toowoomba QLD, while late generation evaluation was conducted by AGT's Narrabri NSW wheat breeding programme. The name Mitch continues in the tradition of naming wheat varieties bred at Toowoomba after explorers; Sir Thomas Mitchell being a famous Australian surveyor and explorer.

More Information

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