

LRPB
Gauntlet **Milling Wheat****VARIETY SUMMARY**

- APH classification for the northern wheat zone and an AH classification for the southern wheat zone
- Mid-long season variety suitable for a wide range of planting times.
- Widely adapted high yielding variety suited to QLD, NSW and northern Victoria
- Root Lesion Nematode resistance and tolerance
- Outstanding grain quality (large grain size, hecto-litre weights, low screenings)
- Good disease resistance profile
- Good early vigour with medium length coleoptile
- Acid soil tolerance, with good yield performance in low pH soils
- Gauntlet is an alternative to EGA Gregory and out yields other varieties such as Janz, Baxter, Lang and Sunvale

 **BREEDING**

Gauntlet (LPB06-1120) is a Kukri/Sunvale cross. Gauntlet has been selected and extensively evaluated by the LongReach Plant Breeders technical team led by Dr Bertus Jacobs. The line was first entered into National Variety Trials in 2009.

 **AREA OF ADAPTATION**

Gauntlet is a high yielding and reliable performer that is widely adapted across the various geographical areas of the northern and southern wheat zones. Gauntlet is also suited to acid soils, and has shown promise in high yield irrigated sites.

 **PLANT CHARACTERISTICS**

Gauntlet is a medium-short plant, with medium straw strength. It has a seedling with good early vigour with a medium length coleoptile.

 **MATURITY**

A mid-long maturity variety, Gauntlet is similar to Sunvale, Lang and Janz, and can be planted from early to main season planting windows. Sowing times are recommended from early-mid May for low rainfall areas to mid-May to early June for higher rainfall areas.

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 **YIELD**

The high yield potential & grain quality benefits of Gauntlet can be maximised from earlier sowing opportunities, as well as from later sowing. Root lesion nematode resistance and acid soil tolerance allow Gauntlet to maximise yield potential compared to other varieties.

Table 1. Southern QLD (combined SEQ & SWQ)

Variety Name	Predicted Avg Yield (kg/ha)	% of Baxter	Total No. Trials
Gauntlet	3539	108%	14
Baxter	3288	100%	31
EGA Gregory	3652	111%	31
Janz	3310	101%	11
Kennedy	3319	101%	31
Lang	3322	101%	31
Sunvale	3383	103%	21

Table 2. Northern NSW (Combined NE & NW)

Variety Name	Predicted Avg Yield (kg/ha)	% of Sunvale	Total No. Trials
Gauntlet	3676	102%	55
Baxter	3365	94%	42
EGA Gregory	3815	106%	69
Janz	3438	96%	67
Kennedy	3304	92%	55
Lang	3465	97%	55
Sunvale	3587	100%	69

Table 3. Southern NSW (combined SE & SW)

Variety Name	Predicted Avg Yield (kg/ha)	% of Sunvale	Total No. Trials
Gauntlet	3191	102%	48
EGA Gregory	3359	108%	57
Janz	3002	96%	54
Kennedy	2900	93%	44
Lang	3039	97%	44
Sunvale	3120	100%	57

Data - all tables:

NVT main season trials long term analysis 2008 to 2012

GRAIN RECEIVAL QUALITY

Gauntlet exhibits outstanding grain quality, regularly achieving higher test weights, lower screenings and good grain size. Gauntlet is able to maintain grain quality in stressed environments better than most varieties.

NVT early & main season wheat average data for southern QLD (2012) and southern NSW trials (2011-2012)

Variety	Test Weight				1000 grain				Screenings %			
	Sth QLD		Sth NSW		Sth QLD		Sth NSW		Sth QLD		Sth NSW	
	Early	Main	Early	Main	Early	Main	Early	Main	Early	Main	Early	Main
Baxter	82.30	82.64	-	78.67	37.61	38.04	-	41.34	3.01	3.13	-	1.03
EGA Gregory	83.10	83.36	80.52	79.93	35.23	34.95	42.09	40.24	4.78	4.68	1.26	1.30
Gauntlet	85.00	85.15	81.41	81.15	36.72	35.26	42.83	40.94	3.41	2.98	0.88	0.70
Janz*	-	-	-	80.04	-	-	-	37.98	-	-	-	1.13
Kennedy	-	81.92	-	74.98	-	34.75	-	39.68	-	4.11	-	1.05
Lang+	84.80	83.49	79.33	78.62	33.31	31.28	37.05	35.88	2.87	4.02	1.01	1.28
Sunvale	84.30	-	80.84	80.63	32.22	-	37.36	36.20	3.10	-	0.84	0.78

+ Lang present in 8 out of 10 early season S QLD trials. *Janz only present in 1 S QLD trial.

Southern NSW data sourced from early season (26) and main season (27) trials. Not all varieties present in all trials, due to regional variation in entry list across years.

DISEASE AND PEST RESISTANCE

Gauntlet has a very good overall disease resistance profile for the wheat zone.

Gauntlet has resistance to Root lesion nematode (*P.thornei*) equivalent to the highest currently available in bread wheat. This will assist in reducing RLN levels and will advantage growers considering subsequent crop rotations.

Gauntlet shows good resistance to stripe rust based on adult plant resistance genes. Good resistance to stem rusts (R-MR) and leaf rust (MR-MS), with LongReach markers indicating it carries the Lr34 gene.

Rated (MS-S) to yellow spot, Gauntlet has exhibited significant resistance during the seedling stage which may help reduce disease build up. Rated (MS) to crown rot, and (MS-S) to *Septoria tritici*.

Variety	Stripe Rust		Leaf Rust	Stem Rust	Septoria tritici	Yellow Spot	Crown Rot	RLN (<i>P.thornei</i>)	
	WA/Jackie	Yr17+	Lr East	Sr East				Res.	Tol.
Baxter	MS-S	MS-S	MR	R & MS	S	S	MS	S	MT-MI
EGA Gregory	MR	MR	MR	MR	MS	MS-S	S	MS-S	MT
Gauntlet	R-MR	MR-MS	MR-MS	R-MR	MS-S	MS-S	MS	MR	MT
Janz	MS	MS	MR-MS	R-MR	MS	S	MS-S	VS	I-VI
Kennedy	MS	MS	MR-MS	MR	-	MS	MS-S	S-VS	MI
Lang	MS	MS	MR-MS	R	MS	MS-S	MS-S	S-VS	I
Sunvale	R	MR	MR-MS	R	MR-MS	MS-S	MS-S	MS-S	MT-MI

R-Resistant, MR-Moderately Resistant, MS-Moderately Susceptible, S-Susceptible, VS-Very Susceptible, T-Tolerant, MT-Moderately Tolerant, I-Intolerant, MI-Moderately Intolerant, VI-Very Intolerant.

(Source: NVT 2014)

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Growers are allowed to retain seed from production of this variety for their own use as seed only.

An End Point Royalty of \$3.00 per tonne (plus GST), which includes breeder royalties, applies to this variety.

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