



# LongReach Spitfire



## KEY FEATURES

- ▶ A high yielding early mid maturing variety similar to Baxter
- ▶ Australian Prime Hard (APH) in Queensland and Northern NSW
- ▶ Excellent Yield potential under extreme Root Lesion Nematode pressure (MT)
- ▶ Good level of resistance to Stripe Rust (MR) resistance based on Adult Plant Resistance
- ▶ Crown Rot Resistance (MS)
- ▶ Market leading grain package with large grain size, low screenings and high protein accumulation
- ▶ Long Coleoptiles with strong early seedling vigour



## BREEDING

Pedigree: Drysdale/Kukri

Spitfire (LPB05-2148) was bred by LongReach Plant Breeders, and has been extensively evaluated by the LongReach Plant Breeders technical team led by Dr Bertus Jacobs. The line was first entered into National Variety Trials in 2008.

## OPTIMUM PLANTING TIMES AND REGIONS – TABLE I

Spitfire is suited to a main season planting window with an early to mid season maturity.

TABLE I. SPITFIRE OPTIMUM PLANTING TIMES

Region	Planting Times by Weeks															
	April				May				June				July			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Central Highlands Dawson-Callide - low frost risk (higher slopes)	E	E	E	O	O	O	O	O	L	L						
Central Highlands Dawson-Callide - high frost risk (river flats)					E	O	O	O	O	O	L					
Maranoa, Balonne Western Downs South West				E	E	O	O	O	O	O	O	L				
Darling Downs (Northern uplands)					E	E	O	O	O	O	O	O	L			
Darling Downs - high frost risk (Central, Southern)									E	O	O	O	O	L		
South Burnett						E	E	O	O	O	O	O	L	L		
NSW North-West Slopes					E	O	O	O	O	O	L	L				
NSW North-West Plains					E	O	O	O	O	O	L	L				

NOTES: E= Earlier than ideal but acceptable, depending on frost risk/probability O = Optimum planting time L= Later than ideal, but acceptable.





## GRAIN QUALITY

Spitfire has a final APH classification in Queensland and Northern NSW

Spitfire has large grain size, similar to Ellison, larger than Ventura and Livingston

Spitfire has consistent high grain protein

### Spitfire Grain Receival Quality (Qld-NVT, 2009)

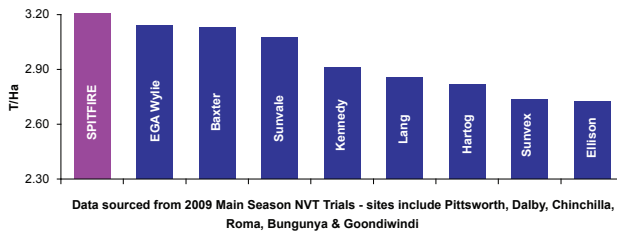
Qld NVT 2009	Trial No.	Test Weight (kg/ hectolitre)			Grain Protein %			Screenings % (2.0mm sieve)		
		Ave	Min	Max	Ave	Min	Max	Ave	Min	Max
Baxter	8	81.6	80.0	85.0	13.1	8.4	15.9	1.8	0.4	5.2
Ellison	8	82.1	78.0	86.0	13.8	10.8	16.6	1.7	0.5	4.9
Kennedy	8	80.6	78.0	84.0	13.3	8.3	15.9	1.1	0.0	4.5
Lang	8	82.6	81.0	86.0	13.2	8.3	16.6	1.8	0.3	5.9
Spitfire	8	84.4	82.0	88.0	13.9	8.7	17.4	1.8	0.0	5.0
Sunvale	8	83.4	81.0	87.0	13.1	8.2	15.9	1.7	0.3	6.9
Sunvex	8	82.8	81.0	86.0	12.7	8.8	16.4	2.5	0.0	6.5
Ventura	8	82.4	78.0	86.0	12.6	8.2	14.9	2.3	0.0	6.7
<b>Average</b>		<b>82.4</b>	<b>80.7</b>	<b>85.2</b>	<b>12.8</b>	<b>8.4</b>	<b>15.6</b>	<b>2.1</b>	<b>0.8</b>	<b>5.2</b>

### Spitfire Grain Receival Quality (NSW North East-NVT, 2009)

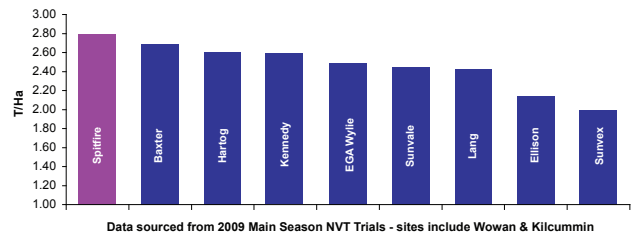
NSW NE NVT 2009	Trial No.	Test Weight (kg/ hectolitre)			Grain Protein %			Screenings % (2.0mm sieve)		
		Ave	Min	Max	Ave	Min	Max	Ave	Min	Max
Baxter	8	81.6	79.6	84.4	14.1	12.6	18.8	5.2	1.9	10.5
Ellison	8	82.0	80.8	84.1	13.8	12.3	18.3	7.4	3.4	19.0
Kennedy	8	80.8	79.0	82.8	13.8	12.0	18.3	6.0	2.7	12.0
Lang	8	81.7	80.8	84.4	13.7	11.8	17.6	5.4	2.0	13.0
Spitfire	8	83.4	80.9	84.7	14.6	12.5	20.0	6.1	2.3	10.4
Sunco	8	82.9	81.1	84.6	14.1	12.2	17.2	3.9	1.5	9.9
Sunvale	8	83.4	81.4	86.5	14.1	12.4	16.8	4.6	2.3	10.3
Ventura	8	82.0	80.2	84.0	13.2	11.7	18.2	7.5	2.1	17.3
<b>Average</b>	<b>8</b>	<b>81.9</b>	<b>80.5</b>	<b>83.6</b>	<b>13.4</b>	<b>12.1</b>	<b>17.4</b>	<b>5.9</b>	<b>3.0</b>	<b>11.4</b>

## YIELD PERFORMANCE – QUEENSLAND

### Spitfire versus commercial varieties Southern QLD

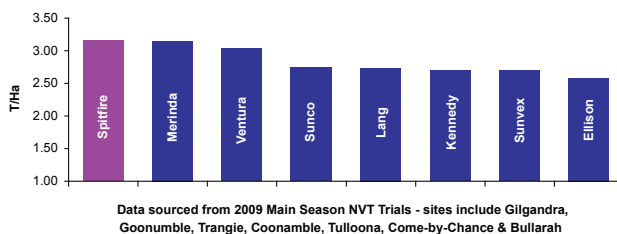


### Spitfire versus commercial varieties in Central QLD

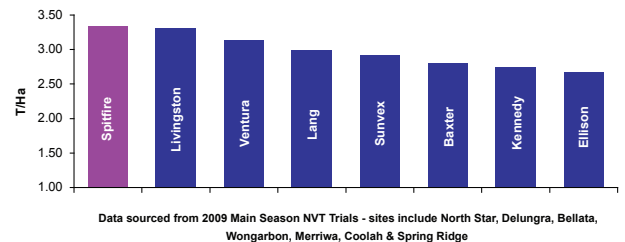


## YIELD PERFORMANCE – NORTHERN NSW

### Spitfire versus commercial varieties North West NSW



### Spitfire versus commercial varieties in North East NSW





## AGRONOMIC FEATURES

Spitfire is suited to main season planting with early to mid season maturity similar to Baxter

Long Coleoptiles with excellent seedling vigour

Medium plant height at maturity, fully awned, white chaffed and has white grain

Spitfire is rated (MS) for lodging

Appears well suited to Acid Soils, with good yield performance in low pH soils

## DISEASE PROFILE - TABLE 2

Table 2. Disease and Pest Resistance Ratings: Spitfire and commercial varieties.

Variety	Disease Ratings							Pest Reactions
	Stem Rust	Leaf Rust	Stripe Rust		Crown Rot	Common Root Rot	Yellow Spot	Root Lesion Nematodes
			Jackie pt	WA + Yr17 pt				Pratylenchus thornei (P.thornei)
	Res	Res	Res	Res	Res	Res	Res	Tolerance
<b>Baxter</b>	R-MR	R-MR	MS	MS	MR-MS	MR-MS	MS-S	MT-MI
<b>Crusader</b>	R-MR	R	R	MR-MS	MS*	MS	MR	MT-MI
<b>Ellison</b>	R-MR	R	R	MR-MS	S	MS-S	R-MR	MI-I
<b>EGA Wylie</b>	R	R	MR-MS	MR-MS	MR	MR-MS	MS-S	MT
<b>Kennedy</b>	MR	MR-MS	MS	MS	MS	MR-MS	MR	MT-MI
<b>Lang</b>	R	MS	MS	MS	MS	MR	MS	MI-I
<b>Livingston</b>	MR	R-MR	R	R-MR	S	MS-S	MS	MT-MI
<b>Spitfire</b>	<b>R-MR</b>	<b>MS</b>	<b>MR</b>	<b>MR</b>	<b>MS</b>	<b>MS</b>	<b>MS-S*</b>	<b>MT</b>
<b>Sunco</b>	R	MS	MR-MS	MR-MS	MR-MS	MR	MS-S	MI-I
<b>Sunstate</b>	MR	R-MR	R	MS	MS-S	MR	MS-S	MT-MI
<b>Sunvale</b>	R	MR-MS	R	MR	MS	MR-MS	MS-S	MT-MI
<b>Ventura</b>	R-MR	R-MR	R	MS	MS	MR	MS-S	MT-MI

**Notes:** Resistance: R = Resistant, MR = Moderately Resistant, MS = Moderately Susceptible, S = Susceptible, VS = Very Susceptible

**Tolerance:** T = Tolerant, MT = Moderately Tolerant, MI = Moderately Intolerant, I = Intolerant, VI = Very Intolerant

\* = Preliminary Data. Data Provided by QLD DEEDI 2010, NSW DPI 2010, LongReach Plant Breeders 2009





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## END POINT ROYALTY (EPR)

Each time a grower purchases seed of Spitfire, the grower agrees to comply with the Variety Licence and Royalty Agreement, including agreement to pay the EPR of \$3.85 per tonne (GST inclusive). EPR is payable on all grain production, except on seed retained by the grower for replanting by the grower. The majority of the EPR will be paid by Pacific Seeds to the Breeder (LongReach Plant Breeders) for investment in future wheat breeding programs.

## SEED AVAILABILITY

Good stocks of Spitfire are available. Please contact one of the following Pacific Seeds Associates or your local seed supplier to place an order.

### QUEENSLAND

**Galleon Grains**  
Springsure, QLD  
Ph: 07 49846141

**Philp Brodie Grains**  
Toowoomba, QLD  
Ph: 07 46906400

**Woods Seeds**  
Goondiwindi, QLD  
Ph: 07 46700400

### NEW SOUTH WALES

**Agrigrain**  
Narromine, NSW  
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**Auswest Seeds**  
Forbes, NSW  
Ph: 02 6852 1500

**Hart Bros. Seeds**  
Junee, NSW  
Ph: 02 6924 7206

**Grainland**  
Moree, NSW  
Ph: 02 67521511



**ACKNOWLEDGEMENTS** Spitfire was developed with the assistance of numerous independent professional contract service providers and public agency researchers. The support of farmer co-operators in all parts of the Australian wheat belt who have provided trial sites since 2003 is also acknowledged.

**For other sales enquiries, please contact Pacific Seeds Distribution centre on 07 4690 2701.**

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