



LongReach Cobra Wheat



KEY FEATURES

- ▶ A high yielding mid to long season variety developed for Western Australia
- ▶ Australian Hard (AH) classification in Western Australia
- ▶ Excellent Yellow Spot resistance (MR-MS*)
- ▶ Has a sound rust resistance package for WA pathotypes of Stem (MR*), Leaf (MR-MS*) and Stripe (MS*)
- ▶ Medium length coleoptiles with good seedling vigour
- ▶ Well suited to acid soils



BREEDING

Pedigree: Westonia Derivative

Cobra (LPB07-0956) was bred by LongReach Plant Breeders in Western Australia. This line has been extensively evaluated by the LongReach Plant Breeders technical team since 2007, led by Dr Bertus Jacobs, in more than 50 yield and quality trials. The line was first entered into National Variety Trials in 2010.

OPTIMUM PLANTING TIMES & REGIONS

Northern Regions	Cobra is suited to early to mid season plantings in the northern regions of WA similar to varieties such as Carnamah and Magenta
Southern Regions	Cobra is suited to mid season plantings in the southern regions of WA similar to varieties such as Carnamah

GRAIN QUALITY

Cobra has an AH classification in Western Australia

Cobra has good grain size with sound test weights and low screenings

COBRA GRAIN RECEIVAL QUALITY (8 LongReach trials, WA, 2010)

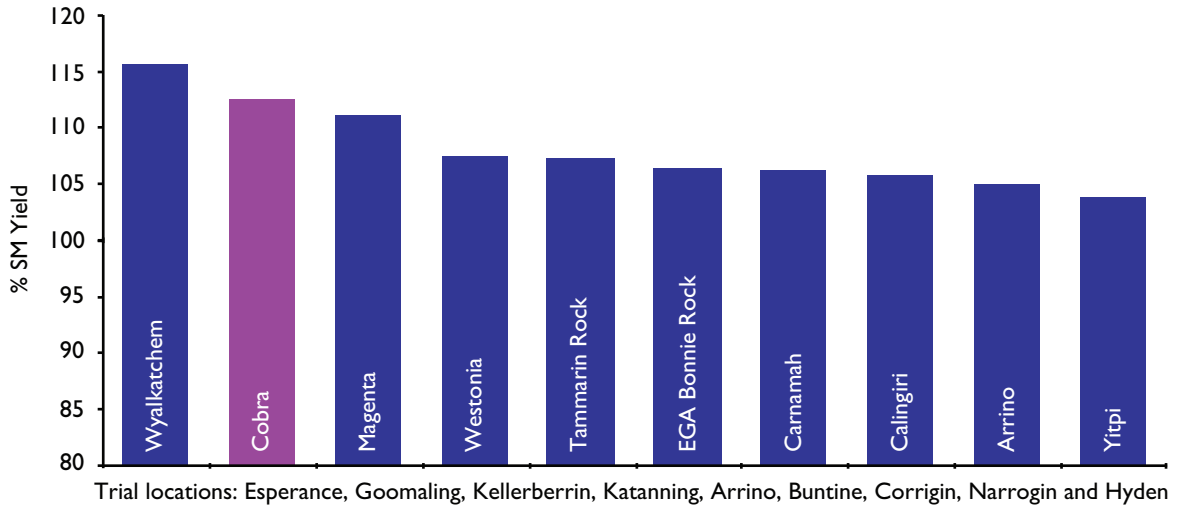
Variety	Trial No.	1000 grain weight (g)			Test Weight (kg/hectolitre)			Screenings % (2.0mm sieve)		
		Ave	Min	Max	Ave	Min	Max	Ave	Min	Max
Arrino	8	33.8	28.5	36.5	79.9	74.7	84.0	1.5	0.4	2.6
Calingiri	8	38.4	34.0	43.5	81.9	79.7	84.5	2.2	0.5	4.2
Carnamah	8	35.0	30.5	39.5	80.0	76.3	83.3	3.9	0.5	10.1
Cobra	8	36.1	33.0	39.5	80.7	77.9	83.3	2.5	0.3	5.0
Mace	8	38.3	32.5	42.0	82.4	80.7	84.9	3.1	0.5	8.3
Magenta	8	37.1	34.5	41.0	81.3	78.8	84.3	3.1	0.5	6.2
Tammarin Rock	8	39.1	35.5	43.5	80.5	78.5	83.9	3.8	0.6	7.1
Westonia	8	35.9	31.0	39.5	79.4	75.7	83.1	3.2	0.4	6.3
Wyalkatchem	8	37.6	35.0	41.0	82.0	80.5	83.8	1.6	0.4	3.7
Yitpi	8	40.9	37.5	43.5	83.0	81.4	84.8	3.3	0.5	7.4



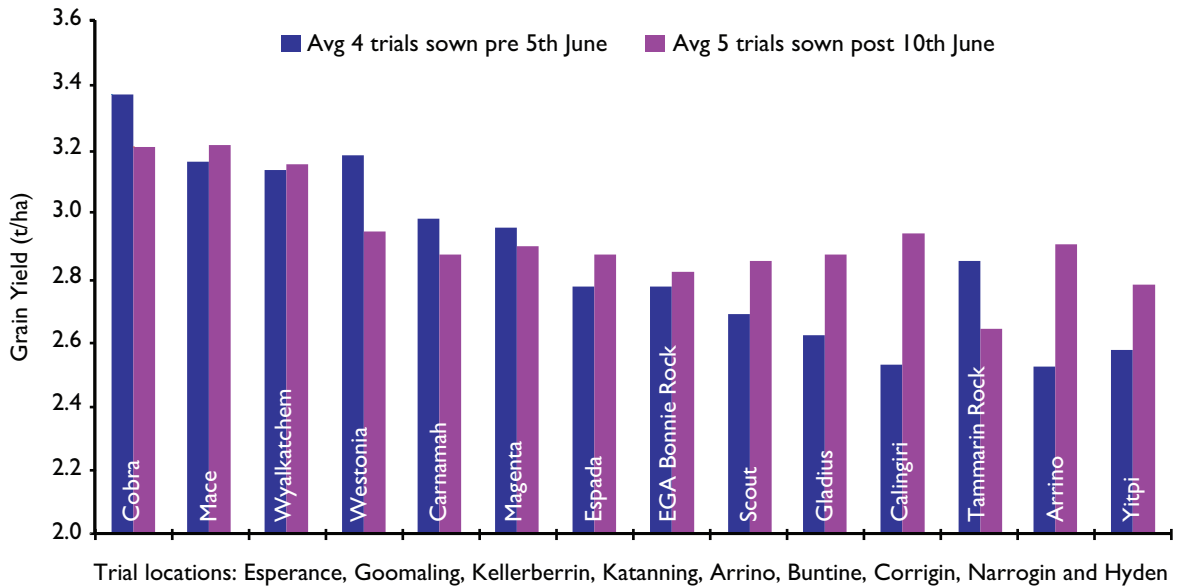


YIELD PERFORMANCE – WESTERN AUSTRALIA

Cobra Yield Performance
(LongReach Plant Breeders Long-Term trials 2008-2010)



Cobra Yield Performance
comparison of the average yield of two distinct groups of sowing times, expressed in t/ha (for 9 LongReach trials, WA, 2009)





AGRONOMIC FEATURES

Cobra is a high yielding variety developed for WA - it has shown excellent yield performance especially in average to above average rainfall years

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

Medium length Coleoptiles with excellent seedling vigour

Compact plant height at maturity, being 6-10cm taller than Wyalkatchem

Cobra is moderately resistant (MR) to lodging

Table 2. Disease and Pest Resistance Ratings: Cobra and Commercial Varieties

Variety	Rust			Septoria tritici	Yellow Spot (Seedling)	Black Point	CCN		RLN	
	Stripe	Leaf [#]	Stem				Resistance	Tolerance	Resistance	Tolerance
	WA									
Arrino	S	MS	S-VS	MR-MS	MS	MS-S	-	-	-	-
Calingiri	S	MS	S	MS-S	MS	MS	-	-	-	-
Carnamah	S	MS-S	MR-MS	S	MR-MS	MS	S	-	MS-S	-
Correl	MR-MS	MS-S	MR	S	S-VS	MS	MR	MT-MI	S	-
Gladius	R	MS	MR	S-VS	MS	MS	MS	-	MS-S	-
Cobra	MS*	MR-MS*	MR*	MS-S*	MR-MS*	MR*	S*	-	-	-
Mace	R	R	MR	MS-S	MR-MS	MR-MS*	MR-MS	-	MR-MS	-
Magenta	MS	R*	R-MR	MR-MS	MR	MS	MS-S	-	MS	-
Westonia	VS	MS	S-VS	S-VS	MS-S	MS	S	-	MS-S	-
Wyalkatchem	S	R	S/MR	S-VS	MR	MS	S	MI-I	MR	-
Yitpi	MR-MS	MS	S	MR-MS	S-VS	MS	MR	MT	MS	MI

Notes:

Resistance: R = Resistant, MR = Moderately Resistant, MS = Moderately Susceptible, S = Susceptible, VS = Very Susceptible
 /= Scores separated by a "/" indicates the response to the currently predominant and alternate strains of stem rust existing in WA

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

* = Preliminary Data. Data Provided by DAFWA 2011, and LongReach Plant Breeders 2011





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END POINT ROYALTY (EPR)

Each time a grower purchases seed of Cobra, the grower agrees to comply with the Variety Licence and Royalty Agreement, including agreement to pay the EPR of \$3.50 per tonne (ex GST). 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

Please contact one of the following Pacific Seeds Associates or your local seed supplier to place an order.

WESTERN AUSTRALIA

Coorow Seeds Coorow WA 6515 Ph: 08 9952 1088	Melchiorre Seeds Narrogin WA 6312 Ph: 08 9881 1155	Terrell Seeds P/L Esperance WA 6450 Ph: 08 907 1787	Australian Seed & Grain Moora WA 6510 Ph: 08 9651 1069
EDSCO Kellerberrin WA 6410 Ph: 08 9045 4036	Multiseed Production Pty Ltd Esperance WA 6450 Ph: 08 9071 1053		



ACKNOWLEDGEMENTS Cobra 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 pacific seeds enquiries, please contact
Josh Johnson Pacific Seeds Territory Manager WA 0429 619 103**

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