

LONGREACH OPTIMUS

LPB18-6238



Queensland and
New South Wales

VARIETY ATTRIBUTES

Mid spring maturity with similar plant type and yield build to its Lancer parent.

Consistent high and stable trial performance across a range of sowing times in NSW and QLD.

Strong grain receivals package similar to Lancer.

Demonstrated high yields in both acid and sodic soil screening trials across the last two years.

LRPB Optimus has received AH classification for NSW and QLD with a submission for upgrade planned in 2025.

DISEASE RESISTANCE	
Stem Rust	MR
Leaf Rust	RMR
Stripe Rust East	MRMS
Yellow Leaf Spot	MSS
RLN (p.thornei)	MTMI
Crown Rot	S
Powdery Mildew	MS

AGRONOMIC BACKGROUND

LRPB Optimus is a Lancer based variety that was bred with the aim of developing a mid spring maturing variety with the same trusted grain package and yield stability as its Lancer parent, with the addition of strong abiotic soil tolerances.

First entered into LongReach field trials in 2018 and tested across both early and main season breeding trials since 2021, LRPB Optimus has demonstrated a high degree of flexibility in its sowing window without compromising on relative yield performance or grain receivals. Analysis of this data set indicates a preferred sowing window in the first three weeks of May.

Similar to its LRPB Lancer parent, LRPB Optimus has a compact canopy combined with excellent standability and yield performance under heavy Crown Rot infection.

Longreach disease ratings have been compiled from LongReach Disease Screening data and from NVT Disease Ratings March 2024. Resistance ratings: VS=Very Susceptible, S=Susceptible, MS=Moderately Susceptible, MR=Moderately Resistant, R=Resistant. Tolerance ratings: T=Tolerant, MT=Moderately Tolerant, MI=Moderately Intolerant, I=Intolerant, VI=Very Intolerant, p=preliminary data based on limited data set. #=may be more susceptible to alternative pathotypes.

LONGREACH OPTIMUS

YIELD PERFORMANCE

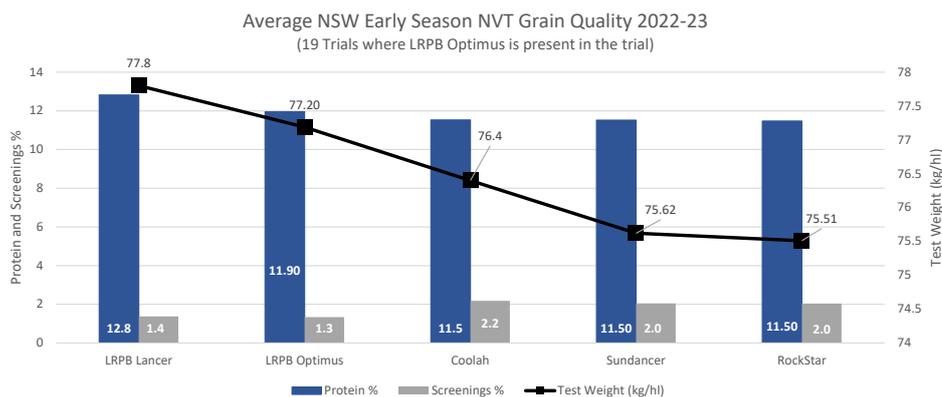
In early season NVT MET analysis LRPB Optimus is showing significant improvement in yield performance over varieties currently on farm with similar maturity across NSW and QLD.

NSW & QLD Early Season NVT MET Analysis (2019-2023)							
Variety	Maturity	All Trials	2019	2020	2021	2022	2023
LRPB Optimus	Mid-Spring	109%	116%	112%	108%	104%	111%
RockStar	Mid-Spring	107%	119%	108%	108%	99%	111%
LRPB Raider	Mid-Slow Spring	103%	106%	105%	103%	100%	104%
Sunflex	Mid-Slow Spring	103%	105%	105%	103%	101%	104%
Coota	Mid-Spring	102%	113%	103%	102%	95%	107%
Coolah	Mid-Slow Spring	101%	105%	103%	101%	98%	103%
LRPB Stealth	Mid-Slow Spring	100%	107%	101%	100%	96%	102%
LRPB Lancer	Mid-Slow Spring	97%	106%	96%	95%	93%	100%
Predicted Mean Yield (t/ha)		4.39	2.26	4.56	5.26	5.32	4.00
Trials in Analysis		161	27	33	36	35	30

Note - LRPB Optimus first entered NVT trials in 2022

GRAIN RECEIVALS

LRPB Optimus has shown similar screenings and test weight as LRPB Lancer throughout the LRPB breeding program, and is showing similar performance in the early season NVT trials. While protein accumulation appears to be slightly behind LRPB Lancer across this data set, this could be attributed to yield dilution due to LRPB Optimus’s higher yields when compared to LRPB Lancer.



LRPB Optimus is available through our Associate Network For Contact Information please go to www.pacificseeds.com.au

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