LongReach DUAL (Tested as LPB18-7982)

AH

Description

TECHNOTE

LRPB Dual is AH grain quality and well adapted to low to medium rainfall areas. LRPB Dual has acceptable grain yield but is lower yielding than many widely grown varieties in order to meet the rigorous requirements for both hay and grain markets. LRPB Dual should be targeted at red and amber zones on farm which are known to have some frost risk rather than replacing high yielding wheats on lower-risk green zones. LRPB Dual has steady biomass accumulation, sound tillering and a Mid-Slow Spring maturity between Trojan and Yitpi. LRPB Dual adds diversity on farm as it holds heading back later than widely grown varieties like Vixen and Scepter. Maturity triggers indicate moderate strength photoperiod controls making it reasonably stable in different seasons.

A Hay EPR has been added to the LongReach seed licence for the 2024 season to support Awnless Wheat variety development.

Variety Background

LRPB Dual was developed from pre-breeding germplasm produced by CSIRO in a Scout/Yitpi background that was distributed to breeding programs Dr Greg Rebetzki. The objective was to provide growers with real options to managing frost risk zones by ensuring different harvest strategies could be deployed in Spring as required. Dual purpose wheats need adequate grain yield and quality, suitable hay yield and quality and to be awnless to be accepted by many hay markets.

The Mid North High Rainfall Zone research effort led by Agrilink's Mick Faulkner has identified the most promising selections for dual purpose Hay/Grain development from these novel Awnless wheats since 2017. This has included agronomy studies to identify management required on farm for grain and hay production. Agrilink was contracted by AgriFutures Export Fodder Program (PRJ-011946) to assess the yield and quality of dual-purpose wheat varieties (including LRPB Dual) for suitability to the export fodder industry. Longreach acknowledges Agrilink and AgriFutures Export Fodder Program's contribution to the assessment of these varieties. LRPB Dual has shown an acceptable hay yield and suitable quality over a number of years of testing.

South Australia and Victoria

Attributes

LongReach PLANT BREEDERS

| Stem Rust | MRMS | | | | |
|----------------------|-------------------|--|--|--|--|
| Stripe Rust | MS | | | | |
| Leaf Rust | MSS | | | | |
| Yellow Spot | SVS | | | | |
| Septoria tritici | MSS | | | | |
| Cereal Cyst Nematode | R | | | | |
| Black point | S | | | | |
| Crown Rot | S | | | | |
| Powdery Mildew | S | | | | |
| EPR Rate/MT (Grain) | \$3.50 (GST exc.) | | | | |
| EPR Rate/MT (Hay) | \$3.50 (GST exc.) | | | | |
| Farmer to farmer | Allowed | | | | |
| Classification | AH (SA, VIC & WA) | | | | |

LongReach disease ratings have been compiled from LongReach Disease Screening data and from NVT Disease Ratings (March 2024).







Dual Purpose Wheat

Variety Agronomy

Disease ratings show similar rust resistance to many widely grown varieties and the presence of the Cre8 CCN resistance gene. Dual has shown to be very susceptible (SVS) to Yellow Leaf Spot and should not be grown in wheat-on-wheat rotation phases for this reason. Dual also show significant yellowing in cold winter conditions, especially when N stressed, and the addition strobilurin fungicides that are known to enhance canopy greenness has shown some value in 2021. Later in Spring the upper canopy has shown it holds good leaf greenness with some lower leaf necrosis typical of Scout/Yitpi. Dual has shown useful Boron tolerance (MT) and Acid Tolerance (MT-MI). Has a much longer coleoptile than currently grown varieties.

Detailed agronomy notes are available in the LongReach Dual AgroPack from the LongReach website.

| | State | | | Victoria | | | | | |
|--------------|--------|----------|----------|-----------|---------|-----------|----------|------------|---------|
| | Region | Upper EP | Lower EP | Yorke Pen | Mid Nth | SA Mallee | Sth East | Vic Mallee | Wimmera |
| Variety | Trials | 32 | 10 | 18 | 19 | 27 | 5 | 37 | 14 |
| LRPB Matador | 70 | 111 | 110 | 110 | 109 | 110 | 108 | 109 | 109 |
| Calibre | 148 | 111 | 108 | 109 | 109 | 113 | 106 | 110 | 111 |
| Ballista | 188 | 111 | 109 | 109 | 109 | 110 | 109 | 110 | 110 |
| RockStar | 187 | 109 | 108 | 109 | 108 | 109 | 109 | 109 | 110 |
| Vixen | 188 | 112 | 112 | 110 | 109 | 107 | 109 | 109 | 106 |
| Scepter | 188 | 106 | 109 | 107 | 105 | 107 | 104 | 106 | 105 |
| LRPB Trojan | 187 | 100 | 103 | 102 | 101 | 100 | 103 | 101 | 102 |
| LRPB Scout | 131 | 102 | 96 | 99 | 101 | 102 | 102 | 102 | 103 |
| LRPB Dual | 108 | 96 | 92 | 95 | 95 | 98 | 93 | 95 | 96 |
| Yitpi | 188 | 91 | 92 | 93 | 93 | 94 | 92 | 93 | 94 |
| Mean Yield | t/ha | 2.24 | 4.83 | 4.16 | 4.54 | 2.35 | 5.74 | 3.59 | 4.22 |

NVT MET Predicted Long Term Yield (2019-23) for SA/Vic Main Season trials as Regions (% Mean Yield)

LRPB Dual first included in NVT in 2021 (NVT MET 29th Feb 2024)

To support the development of Awnless dual purpose wheat varieties like LongReach Dual a Hay EPR of \$3.50/MT (GST Exc.) has been implemented for the 2024 season as per the standard LongReach Seed licence: https://www.longreachpb.com.au/royalties



Dual Purpose Wheat



LongReach Dual Awnless AH Mid-Slow Spring Wheat available for this seeding from RH Verner & Co, Korunye SA: https://rhverner.com.au/. LongReach Dual is also able to be grower to grower traded.

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