WHEAT

LongReach HAVOC

a new wheat from Pacific Seeds

Western Australia Now Free to Trade

Please complete the grower sales declaration form available from our Pacific Seeds Website

VARIETY ATTRIBUTES

Havoc is based on Mace with similar yield stability and is well adapted to all areas of WA

Upgraded to Premium Hard AH (N) classification and suitable for Noodle blending segregations in WA

Yield increase of 2-7% on Mace over the last 5 years in WA

Quick maturity for main season planting like Corack and Mace with shorter canopy for crop and stubble management

Good Stripe Rust (MR), Nodorum blotch (MS) and Yellow Spot (MRMS) resistance

Improved Powdery Mildew resistance (MS) over Scepter to reduce disease build up in lower canopies

DISEASE RESISTANCE					
Stem Rust	S				
Leaf Rust	S				
Stripe Rust YrWA	MR				
Stripe Rust Yr17+27+	MR				
Septoria tritici WA	MRMS				
Nodorum blotch (Le	MS				
Crown Rot	MSS				
Yellow Spot	MRMS				
Powdery Mildew	MS				
CNN Res	S				
Black Point	MS				
Wheat Bunt	R				
Wheat Flag Smut	MS				
Common Root Rot		MS			
Prat.thornei	Res	MSS			
P.neglectus	Res	S			
P.Quasitereoides	Res	MRMS			

Resistance ratings: VS = Very Susceptible S = Susceptible, MS=Moderately Susceptible MR = Moderately Resistant, R = Resistant Tol Rating - T = Tolerant, MT = Moderately Tolerant MI = Moderately Intolerant, I = Intolerant Data sourced NVT and LongReach Plant Breeders 2021. p = Preliminary Data Based on limited data set

AGRONOMIC FEATURES

The cross (Mace/LPB07-0980) aimed to combine Mace's broad adaption with the superior canopy of a high yielding LongReach breeding line.

Havoc has a compact plant type throughout the season with an erect open canopy with upright leaves. Havoc spends time developing tillers in a similar manner to Wyalkatchem but with noticeable broader leaves to improve competition and vigour. Importantly Havoc has retained Wyalkatchems trait of prioritising tillering and does not rush like Mace has shown a tendency to do in warmer winters. The typical timing of heading is between Corack and Mace making Havoc a quick main season variety.

The flag leaf is distinctively erect with blocky heads at grain filling and Havoc has a similar height to Cobra or Wyalkatchem at maturity. From heading to grain filling, Havoc has shown it develops very fast to be a quick finishing variety at harvest.



HAVOC SUPERIOR GRAIN PACKAGE

WA main season grain receivals data, showing Test weight (Kg/hl) and 2.0mm Screenings (%) from the 2019-2020 NVT data accoss 78 Sites

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	Test Weight	Screenings						
Variety Avg kg/hl		Sites <76 Kg/hl	Avg % >2.0mm	Sites >5% Screenings				
LRPB Havoc	80.73	5	3.1	15				
Corack	79.77	10	2.9	15				
Scepter	79.44	14	4.5	26				
Масе	79.37	11	4.2	24				

Grain receivals data from NVT trials indicate that LRPB Havoc is less likely to be downgraded when compared to other key varieties.

This data shows NVT results (2019-2020) from 78 sites, comparing Test weight and screenings for basic grading criteria at delivery.

This data indicates that Havoc may be downgraded less often, in fact half to one third the number of times when compared to other key varieties for test weight. Havoc went above the 5% screenings cut-off significantly fewer times than Scepter and Mace.

Havoc is a reliable and robust on farm performer, that is less likely to be downgraded at delivery than many other key varieties. It stands up to hard tight finishes and still delivers when it counts for the grower.

YIELD PERFORMANCE

WA Main Season Long Term (2016-2020) NVT MET Predicted Yield (%SMY) yearly comparison accross Agzones 1, 2, 4 \uptheta 5									
	Year	2016	2017	2018	2019	2020			
	Mean Yield	3.54 t/ha	2.95 t/ha	3.56 t/ha	1.80 t/ha	2.62 t/ha			
Variety	Trials	18	35	33	34	36			
Scepter	156	108	109	110	112	110			
LRPB Havoc	156	101	104	107	110	109			
Corack	156	99	104	105	110	106			
Масе	156	100	103	104	108	104			

Havoc excelles in the tough finishing environments of Agzones 1, 2, 4 and 5



PLANT BREEDERS RIGHTS

LongReach Havoc is protected by Plant Breeders Rights (PBR). In regard to propagating material (planting seed) of this variety, any unauthorised commercial production or reproduction, conditioning for propagation, offering for sale, sale, import, export or stocking of propagating material is an infringement under the Plant Breeders Rights Act 1994. Grower to grower trading of seed of LongReach Havoc is allowed.

End Point Royalty (EPR)

Each time a grower purchases seed of LongReach Havoc the grower agrees to comply with the Variety Licence and Royalty Agreement, including agreement to pay the EPR of \$4.00 per tonne (GST excl). 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 Advanta Seeds to the Breeder (LongReach Plant Breeders) for investment in future wheat breeding programs.

