

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 (MRMS) over Mace and Scepter to reduce disease build up in lower canopies

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 Wyalkatchem's 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.

DISEASE RESISTANCE

Stem Rust	S
Leaf Rust	S
Stripe Rust YrWA	MR
Stripe Rust Yr17+27+	MR
Septoria tritici WA	MRMS
Nodorum blotch	MS
Crown Rot	S
Yellow Spot	MRMS
Powdery Mildew	MRMS
CNN Res	S
Black Point	MS

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
2019. p = Preliminary Data Based on limited data set

YIELD PERFORMANCE

Long Term data shows that Havoc is broadly adapted as it has consistently out yielded Mace, Corack and Wyalkatchem in WA. Scepter has also consistently out yielded Mace and is replacing it on farm in WA.

Partnering Scepter with Havoc is an excellent strategy as Havoc has quicker maturity to suit faster finishing situations and improved Powdery Mildew resistance (Havoc, MRMS; Scepter, S) adds security in an epidemic year. Havoc has also shown it can deliver a higher protein than Scepter.

WA Main Season Long Term (2014-18) MET Predicted Yield (%SMY)												
Yield Range		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
Site Mean Yield	t/ha	0.82	1.34	1.75	2.25	2.77	3.28	3.74	4.20	4.69	5.23	5.66
Variety	Trial No.	4	15	21	22	36	26	24	20	16	2	3
Corack	189	105	109	103	103	105	102	103	103	103	98	101
LRPB Havoc	102		108	107	107	109	105	106	105	106		106
Mace	189	105	107	103	103	104	102	103	103	103	99	102
Scepter	145		112	110	111	111	110	111	110	110		109
Wyalkatchem	189	100	101	101	101	100	99	100	100	99	97	99

LRPB Havoc was first included in WA NVT Main Season trials in 2016 and Scepter in 2015

WA Main Season (2013-18) LongReach Yield (%SMY) - Years								
Year		2013	2014	2015	2016	2017	2018	Ave t/ha
Site Mean Yield	t/ha	2.03	3.90	2.65	3.42	3.71	3.98	3.49
Variety	Trial No.	2	6	6	4	6	9	33
Corack	33	120	103	96	100	100	103	3.55
LRPB Havoc	33	134	105	111	110	109	106	3.78
Mace	33	118	103	106	105	102	103	3.63
Scepter	19	-	-	-	104	109	112	-
Wyalkatchem	33	115	104	99	99	99	98	3.50

Scepter first included in WA LPB trials in 2016



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