WESTERN AUSTRALIA 2021
(WESTERN ZONE)

INTERGRAIN

IGW6683

POTENTIAL APW

ALTERNATIVE TO:

- LRPB TROJAN$^{\Phi}$
- CUTLASS$^{\Phi}$
- CATAPULT$^{\Phi}$
- YITPI$^{\Phi}$
- SCEPTER$^{\Phi}$
- MAGENTA$^{\Phi}$
- DS PASCAL$^{\Phi}$

HIGH YIELDING WITH CHART TOPPING DISEASE RESISTANCE

FOR MORE INFORMATION PLEASE CONTACT:

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RELEASE - Potentially March 2022 (pending a successful quality announcement)

VARIETY OVERVIEW

IGW6683 is a high yielding potential APW wheat with a very attractive disease resistance profile. The variety is mid-maturing, with a slightly later time to flowering than Scepter(ф) although earlier than RockStar(ф). IGW6683 is broadly adapted and well suited to early May sowings.

One of IGW6683's key attributes is its powdery mildew resistance. The variety has shown extremely low powdery mildew infection levels in high pressure disease screening environments in recent seasons. A significant advantage in areas where powdery mildew is a challenge.

Additionally, IGW6683 has very good resistance to stem and stripe rust (All MRMSp), combined with excellent yellow spot resistance (MRMSp). IGW6683 is MRp for CCN.

IGW6683 is present in 2021 NVT trials and has potential for an APW quality classification. It will be available for planting in 2022 from local resellers and Seedclub Members pending receipt of a quality classification in March 2022.

VARIETY AT A GLANCE

EXCEPTIONAL YIELD

GOOD POWDERY MILDEW RESISTANCE (Rp)

GOOD STRIPE RUST RESISTANCE(MRMSp)

GOOD STEM RUST RESISTANCE (MRMSp)

MID SPRING MATURITY

PLANT FEATURES

VARIETY	IGW6683	ROCKSTAR(ф)	CATAPULT(ф)	CUTLASS(ф)	LRPB TROJAN(ф)	SCEPTER(ф)	YITPI(ф)	MAGENTA(ф)
Classification (Western Zone)	Potential APW/AH	AH(N)	AH	APW(N)	APW(N)	AH	AH	APW
Maturity	Mid	Mid-Slow	Mid - Slow	Slow	Mid - Slow	Mid	Slow	Mid - Slow
Coleoptile	Mid-Long	Medium	-	Long	Medium	Medium - Short	Long	Long
Plant Height	Medium	Medium	Medium	Medium - Tall	Medium	Medium	Medium - Tall	Medium - Tall

Source: 2021 Western Australian Crop Sowing Guide and InterGrain wheat breeding.

DISEASE RATINGS

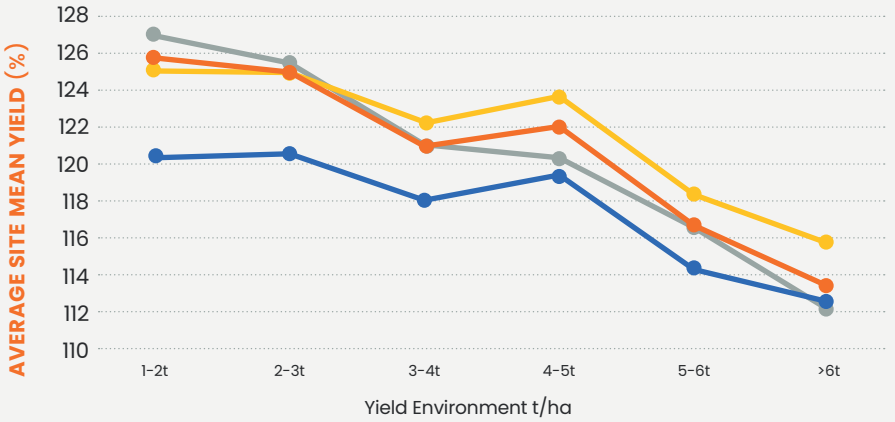
VARIETY	IGW6683	ROCKSTAR(ф)	CATAPULT(ф)	CUTLASS(ф)	LRPB TROJAN(ф)	SCEPTER(ф)	YITPI(ф)	MAGENTA(ф)
Stripe Rust*	MRMSp	RMR	RMR	RMR	MR	MR	MRMS	-
Stem Rust	MRMSp	MR	MR	R	MRMS	MRMS	S	RMR
Leaf Rust	MSp	S	S	RMR	MRp	MSS	S	R
Yelllow Leaf Spot	MRMSp	MRMS	MRMS	MSS	MSS	MRMS	SVS	MRp
Wheat Nodorum Blotch	-	MRMS	MS	MRMS	MS	-	-	MRMS
Powdery Mildew	Rp	MSS	S	S	S	S	MS	MRMS

Source: 2020 NVT Pathology consensus disease ratings. IGW6683 InterGrain Wheat Breeding provisional ratings.

R = Resistant, RMR = Resistant to Moderately Resistant, MR = Moderately Resistant, MRMS = Moderately Resistant to Moderately Susceptible, MS = Moderately Susceptible, MSS = Moderately Susceptible to Susceptible, S = Susceptible, SVS = Susceptible to Very Susceptible, VS = Very Susceptible. * Pathotype dependent, () = Higher disease at some sites, p= provisional rating

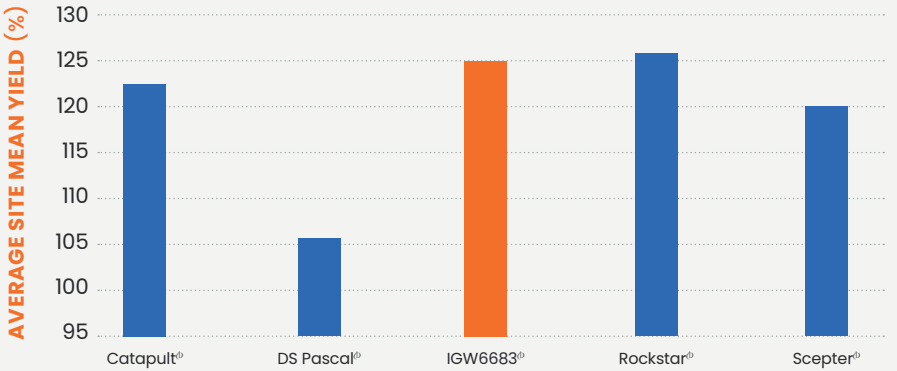
Magenta(ф): Ratings are based on 2017 NVT Pathology as data is unavailable from NVT in 2018, 2019 and 2020.

YIELD PERFORMANCE



2016-20 InterGrain National MET yield performance, represented by yield environment as a % of site mean yield (87 trials)

IGW6683 SCEPTER◊ CATAPULT◊ ROCKSTAR◊



2017-20 InterGrain South Coast WA MET yield performance, represented by yield environment as a % of site mean yield (8 trials)

Powdery Mildew –

Powdery Mildew when left untreated can result in significant yield losses. Figure 1. Shows the difference between a susceptible breeding line and IGW6683, highlighting the value of genetic resistance in lowering leaf area infections.

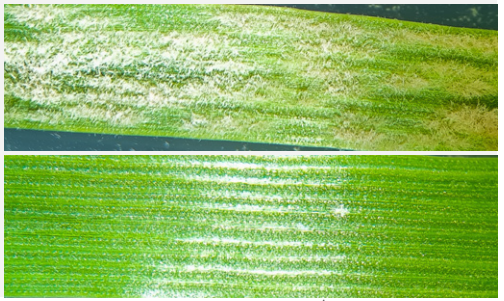
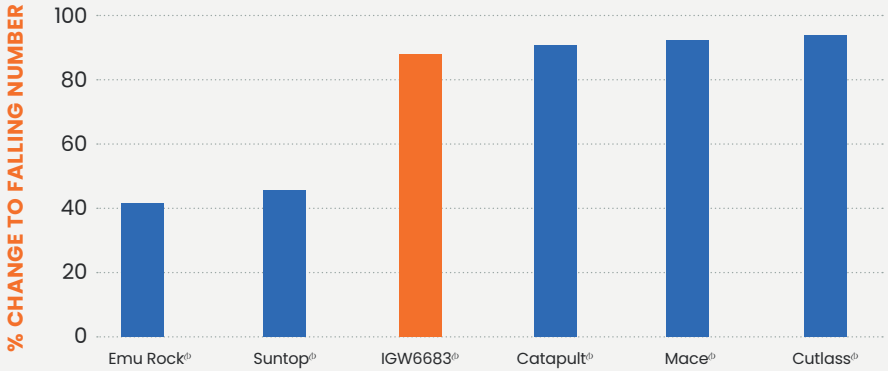


Figure 1. IGW6683 (bottom) and Wyalkatchem◊ (top) within 2021 CCDM Powdery Mildew Screening.

PRE-HARVEST SPROUTING

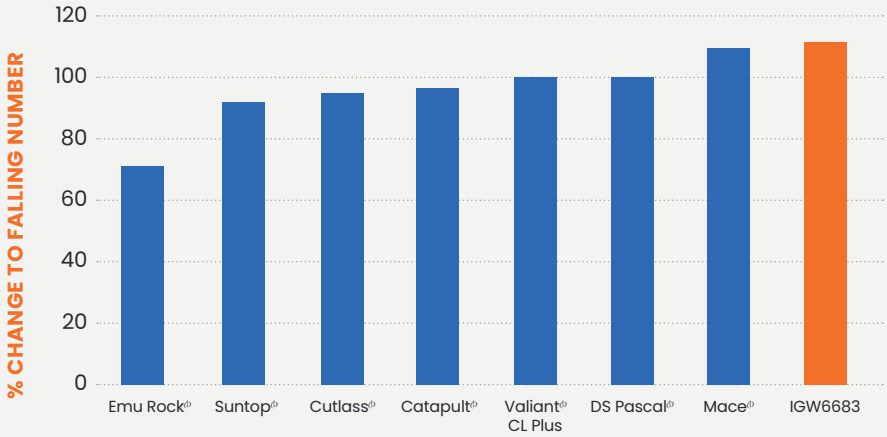
In 2020 InterGrain conducted trials to simulate two harvest rainfall events from our York and Eradu trial sites. The rainfall treatment involved regular intermittent wetting events across a 54 hour period (total of 20mm rainfall). The information presented represents the % fall in inherent falling number when comparing the results following the rainfall treatment to the control. These preliminary test results indicate that IGW6683 is likely to possess a similar PHS tolerance to Mace◊ however, further testing from the 2021 harvest is required.

YORK



2020 Pre-harvest sprouting screening representing % change in falling number

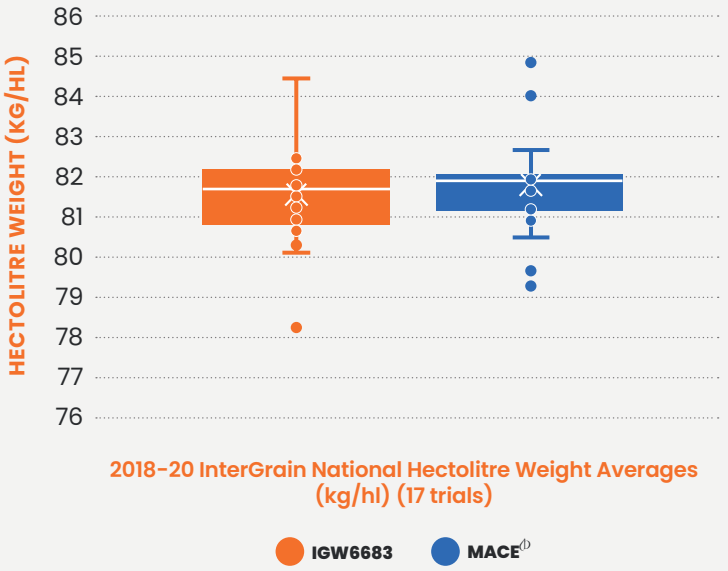
ERADU



2020 Pre-harvest sprouting screening representing % change in falling number

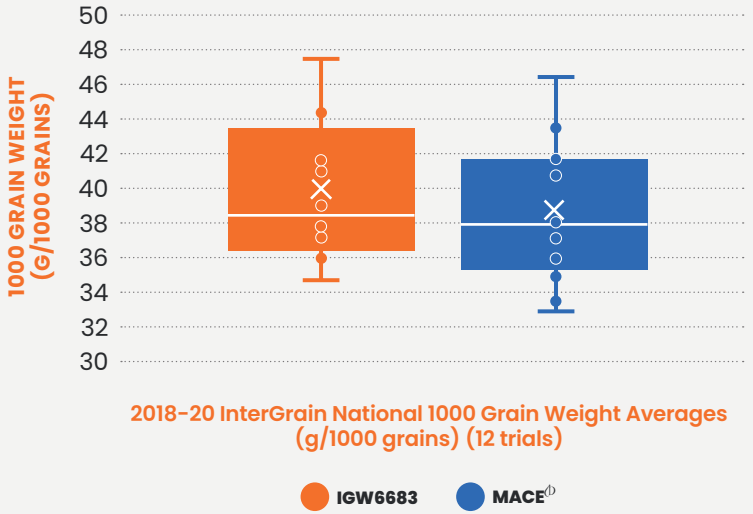
GRAIN QUALITY

HECTOLITRE WEIGHT



2018-20 InterGrain National Hectolitre Weight Averages (kg/hl) (17 trials)

THOUSAND GRAIN WEIGHT



2018-20 InterGrain National 1000 Grain Weight Averages (g/1000 grains) (12 trials)

For more information please contact:

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PBR/EPR

IGW6683 will be protected by Plant Breeder's Rights and will be subject to an end point royalty, GST Exclusive, pending commercial release. IGW6683 is an InterGrain variety bred by Dr Dan Mullan and the InterGrain wheat breeding team.

Seed Availability - IGW6683 be available for planting in 2022 from local resellers and Seedclub Members pending receipt of a quality classification in March 2022.

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