

CLEARFIELD® BARLEY GUIDE 2021/22



WESTERN ZONE
(WESTERN AUSTRALIA)

COMMODUS [Ⓢ]PBR CL

POTENTIAL MALT BARLEY

A COMPASS [Ⓢ] BARLEY
DESCENDANT WITH YIELD,
CLEARFIELD® TOLERANCE
AND GOOD EARLY VIGOUR.



MAXIMUS [Ⓢ]PBR CL

MALT BARLEY

THE SPARTACUS CL [Ⓢ]
MALT SUCCESSOR!




Clearfield®
Production System

WHAT ARE MY IMI BARLEY REQUIREMENTS?


WHAT IS MY RAINFALL ZONE?



Do I want a malting variety?




Commodus[®] CL
Currently classified as a feed variety. Earliest potential malt accreditation in 2023.




Maximus[®] CL
Malt accredited

What plant type am I requiring?

Commodus[®] CL has a semi-prostrate early growth plant type

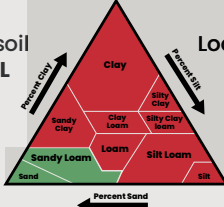


Maximus[®] CL has an erect plant type



What soil type do I have?


Predominantly sandy/lighter soil
Commodus[®] CL




Sandy-Loam/Loam/Heavier soil
Maximus[®] CL

Can I manage lodging and head loss risks in my system?

Commodus[®] CL has a lodging and head loss risk similar to **Compass[®]**




Maximus[®] CL has strong lodging tolerance and low-medium head loss risk.




Plant Height

Commodus[®] CL has a tall plant type



Maximus[®] CL has a shorter plant type (lower biomass production)



MEET INTERGRAIN'S NEW IMIDAZOLINONE (IMI) TOLERANT GLADIATOR TROUPES!

InterGrain has an exceptional reputation of delivering high performing with Clearfield[®] barley varieties with the suite of options ever increasing.

2021 marks the entry of two new gladiators to the arena in **Maximus[®] CL** and **Commodus[®] CL**. Both are high yielding, quick-mid maturing, imidazolinone tolerant barley varieties. However, both possess very different characteristics providing options for different farming systems.



Commodus[®] CL is a high yielding, quick-mid maturing Clearfield[®] barley derived from **Compass[®]**. The variety is agronomically similar to **Compass[®]** and is ideally suited to lighter soils and medium-low rainfall environments. The variety has a comparable yield potential to **Compass[®]** based on InterGrain trials and 2020 NVT yield performances.

It offers an effective disease resistance profile, including CCN resistance and a useful level of spot form of net blotch resistance. **Commodus[®] CL** has excellent grain size and a similar lodging tolerance and head loss risk to **Compass[®]**. Harvest management strategies should be considered in higher yielding seasons and/or when harvest delays may occur to maximise varietal productivity.

Commodus[®] CL has recently been accepted into the Barley Australia Malt Accreditation program with earliest potential final accreditation in March 2023.



Maximus[®] CL is a high yielding, quick-mid maturing, malt accredited, Clearfield[®] barley. **Maximus[®] CL** represents a general disease improvement compared to **Spartacus[®] CL**, particularly to both spot form and net form of net blotch.

Similar to **Spartacus[®] CL**, **Maximus[®] CL** has an erect plant type, strong lodging tolerance and a low-medium head loss risk. The variety also has very good physical grain qualities, including excellent grain plumpness (plumper than **Spartacus[®] CL**) and hectolitre weight. The variety has a short coleoptile and it is recommended that sowing depth be considered carefully when planting this variety.

Maximus[®] CL received malt accreditation in February 2021.

PLANT FEATURES

	COMMODUS [Ⓛ] CL	MAXIMUS [Ⓛ] CL	SPARTACUS CL [Ⓛ]	COMPASS [Ⓛ]	RGT PLANET [Ⓛ]	SCOPE CL [Ⓛ]	LA TROBE [Ⓛ]	BEAST [Ⓛ]
Classification	Potential Malt	Malt	Malt	Malt	Malt	Malt	Malt	Potential Malt
Maturity	Quick-Mid	Quick-Mid	Quick	Quick-Mid	Mid	Mid	Quick	Quick
Coleoptile Length	Medium	Short	Short	Medium	-	Short	Short	Medium
Plant Height	Mod. Tall	Mod. Short	Medium	Tall	Medium	Tall	Medium	Tall
Lodging Tolerance	Poor	Strong	Strong	Poor	Medium	Poor	Medium	-
Head Loss Risk	Medium	Low	Low	Medium	Low	High	Medium	-
Grain Plumpness	Good/Excellent	Good	Mod. Good	Good/Excellent	Fair	Fair	Mod. Good	-
Rachilla Hair Length	Long	Long	Short	Long	Short	Long	Short	-

Source: 2021 WA Sowing Guide and InterGrain Barley Breeding. Maturity based on mid-May planting.

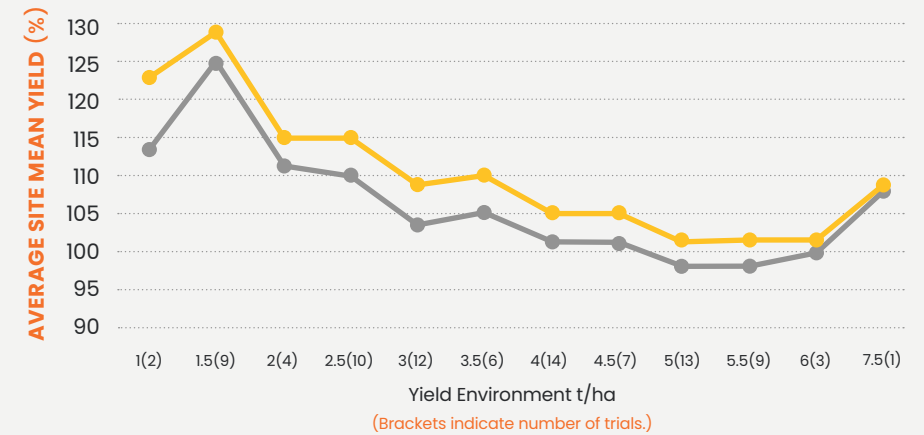
DISEASE RATINGS

VARIETY	COMMODUS [Ⓛ] CL	MAXIMUS [Ⓛ] CL	SPARTACUS CL [Ⓛ]	COMPASS [Ⓛ]	RGT PLANET [Ⓛ]	SCOPE CL [Ⓛ]	LA TROBE [Ⓛ]	BEAST [Ⓛ]
Leaf Rust [^]	SVSp	MSS	MSS	S	MRMS	MSS	MSS	MS-S
Powdery Mildew [^]	RMRp	RMR	MR-MS	MR-MRMS	R	R	MSS	MSS
Spot Form Net Blotch [^]	MSSp	MS	SVS	MS	SVS	MSS	MSS	MSS
Net Form Net Blotch [^]	MRMS-Sp	MRMS-S	MRMS-S	MRMS-S	MRMS-S	MR-S	MRMS-MSS	MR-S
CCN	R	R	R	R	Rp	S	R	MR
Barley Yellow Dwarf Virus (WA)	MSp	MR	MS	MS	MRMS	MRMS	MS	MSS
Scald [^]	S	R-MR	R-MR	MS-S	MR-MRMS	MS-S	R-MR	SVS

Source: 2020 NVT Pathology consensus disease ratings. [^]Western Australian ratings. #pathotype dependent

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

YIELD PERFORMANCE | MAXIMUS[Ⓛ] CL

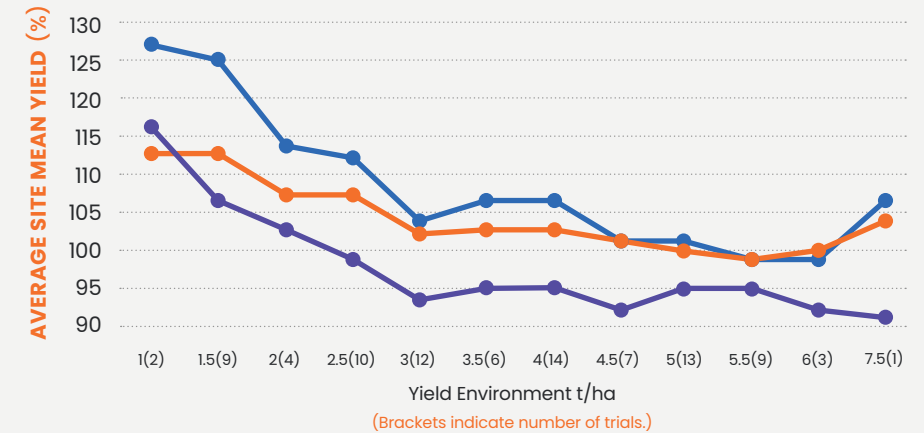


2016-20 WA main season NVT predicted MET yield performance, represented by yield environment as a % of site mean yield

(Data accessed from the NVT Online website on 09/02/2021.)

● MAXIMUS[Ⓛ] CL ● SPARTACUS CL[Ⓛ]

YIELD PERFORMANCE | COMMODUS[Ⓛ] CL



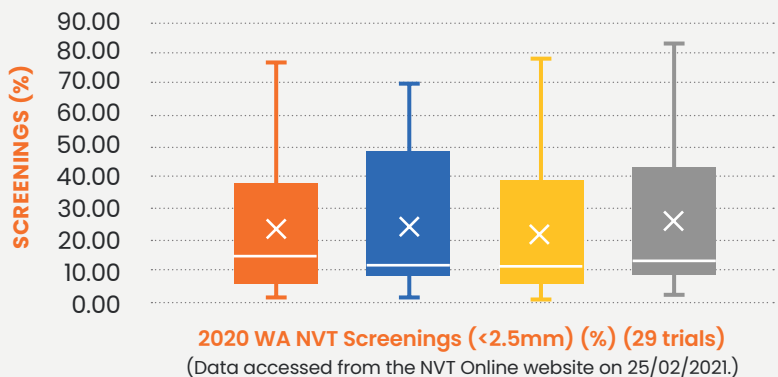
2016-20 WA main season NVT predicted MET yield performance, represented by yield environment as a % of site mean yield

(Data accessed from the NVT Online website on 09/02/2021.)

● COMMODUS[Ⓛ] CL ● COMPASS[Ⓛ] ● SCOPE CL[Ⓛ]

GRAIN QUALITY

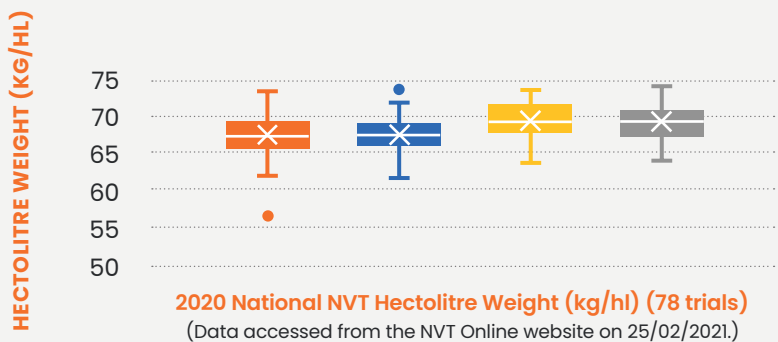
SCREENINGS



● **COMMODUS^{CL}** ● **COMPASS^{CL}** ● **MAXIMUS^{CL}** ● **SPARTACUS^{CL}**

Western Australian screenings standards is the % of <2.5mm, which is different from the eastern states where screenings is the % < 2.2mm screen.

HECTOLITRE WEIGHT



● **COMMODUS^{CL}** ● **COMPASS^{CL}** ● **MAXIMUS^{CL}** ● **SPARTACUS^{CL}**

GROUP B IMIDAZOLINONE HERBICIDE INFORMATION

InterGrain only supports use of Australian Pesticides and Veterinary Medicines Authority (APVMA) approved imidazolinone products for COMMODUS^{CL} and MAXIMUS^{CL}.

Where the grower uses an APVMA approved herbicide they must comply with all label recommendations and requirements for the specific herbicide used.

COMMODUS^{CL} and MAXIMUS^{CL} possesses the gene conferring tolerance to label application rates of registered imidazolinone products. Imidazolinone herbicides are Group B herbicides, ALS inhibitors. Registered imidazolinone herbicides provide control of many major grass and broadleaf weeds present in broadacre cropping systems. These weeds include brome grass, barley grass, wild oats, indian hedge mustard, muskweed, oats, wheat and barley (non-Clearfield[®]), wild radish, wild turnip and suppression of annual ryegrass.

For registered product labels, plant back and application details please refer to the following:

Pre-Emergent Herbicide:

Sentry[®] - <https://bit.ly/302wiic>

Post-Emergent Herbicide Options:

Intervix[®] - <https://bit.ly/2HCCQ1p>

Intercept[®] - <https://bit.ly/2VLyVpj>

InterGrain strongly supports sustainable Clearfield[®] and IMI Barley Production Systems and we recommend reviewing the stewardship guidelines suggested within the below guides to ensure longevity of APVMA approved imidazolinone herbicides:

Nufarm IMIcrops: <https://bit.ly/3xXmhT8>

BASF Clearfield Stewardship: <https://bit.ly/3yZohvw>



For more information please contact:

Georgia Trainor ☎ 0439 093 166 @ gtrainor@intergrain.com

PBR/EPR

COMMODUS^{CL} and MAXIMUS^{CL} are protected by Plant Breeder's Rights and are subject to an end point royalty of \$4.25/tonne GST Exclusive.

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