PIONEER®

MADE TO GROW™

2024

HYBRID RANGE

Winter OSR

CORTEVA™ agriscience

Contents

For further information about Pioneer Oilseed Rape hybrids, please visit: **www.corteva.co.uk/pioneer**
Pioneer hybrids in this booklet contain OG-INRA Technology from INRA, France.
AHDB data referenced can be found in full at **www.ahdb.org.uk**

Winter Oilseed rape comparative agronomic descriptions 2024

PIONEER®
MADE TO GROW™

	Traits & Characteristics	Trial Information	Oil content (%)	Lodging resistance	Stem stiffness	Autumn vigour	Height (cm)	Light leaf spot resistance	Stem canker resistance	Protector Sclerotinia	Turnip Yellows Virus (TuTV)	Pod Shatter	Verticilium stem stripe	Earliness of flowering	Earliness of maturity	Launch year	Data source
PT303	Protector® Sclerotinia, TuYV, Verticilium Stem Stripe, Phoma Rlm7	AHDB UK Recommended, 2024	45.7	7.9	8	6.0	157	7	6	✓	✓		GRT**	5	5	2021	1/2/3/4
PT312	Pod Shatter, TuYV, High Oil	UK National Listed 2023	47.6	9	8	6.0	165	5	7	✓	✓	✓:T*	GRT**	4	7	2023	2/3/4
PT315	Pod Shatter, TuYV, Phoma RlmE, High Oil	UK National Listed 2023	46.8	9	8	6.9	169	6	6		✓	✓:R*	GRT**	6	7	2023	2/3/4
PT279CL	Clearfield®	AHDB East/West Recommended, 2022	44.8	8	8	6.5	147	5	5				nd	6	6	2018	1/2/4
PX131	Maximus® Semi-Dwarf	AHDB UK Described, 2024	46.0	8	8	6.1	110	6	5		✓	✓:R*	MR***	6	5	2019	1/2/4

TuYV = Turnip Yellows Virus resistance; Rlm = Phoma resistance type, nd = no data

* R = Pod Shatter Resistant, T = Pod Shatter Tolerant

Good Resistance/Tolerance (Source: ADAS); * = Moderately Resistant (Source: AHDB);

Data source key: 1 = AHDB Database; 2 = Official UK Trial Results; 3 = ADAS; 4 = Pioneer Research Data

PT303

AHDB RECOMMENDED

PIONEER PROTECTOR SCLEROTINIA

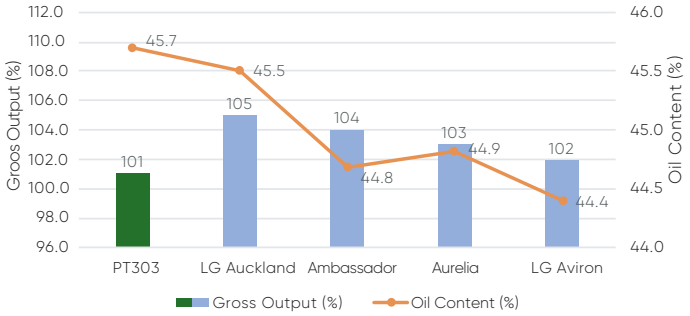
PT303 is the first winter oilseed rape hybrid to offer growers in the UK and Ireland top level yields with built-in tolerance to Sclerotinia.

- Gross Output of 101% on 2024 AHDB UK Recommended List
- Sclerotinia tolerance
- Good resistance, or tolerance, to Verticillium stem stripe
- Turnip yellows virus (TuYV) resistance
- Strong autumn vigour and spring regrowth
- Light Leaf Spot 7, Stem Canker 6
- Specific Rlm7 phoma resistance plus broad genetic resistance
- Unique growth habit and genetics spreads risk from damaging late season stem-based disease
- Later flowering - earlier maturing combination
- Large stature with good lodging resistance and stem stiffness

Top level gross output

PT303 has an impressive UK gross output yield on the AHDB Recommended List of 101%. This high gross output is derived from a very high seed yield and a top-level oil content..

Gross output and oil content of PT303 versus selected varieties AHDB UK recommended list 2024

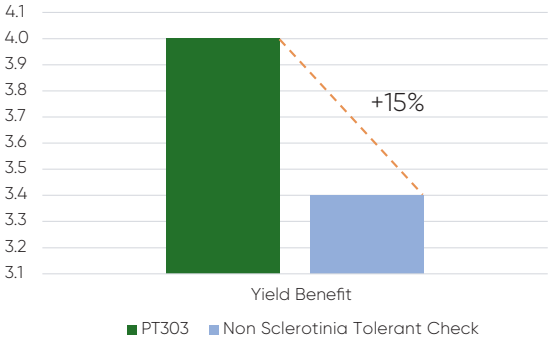


Sclerotinia tolerance

PT303 is the first hybrid to be marketed in the UK with a claim for tolerance to Sclerotinia. This yield sapping disease can reduce yields in commercial situations by up to 30%.

Significant yield loss can occur where flowering fungicide applications are missed or delayed - or just in years when sclerotinia pressure is very high. PT303 Protector Sclerotinia can provide extra support for your crop when this unpredictable and highly damaging disease strikes.

Seed yield (t/ha)



Sclerotinia infection is largely eliminated from both treated and untreated AHDB trials through comprehensive fungicide applications at flowering. In commercial situations however flowering treatment programmes may be more limited, and applications may be inadvertently mistimed.

Consider that results from trials that are comprehensively treated for disease at flowering time may entirely mask susceptibility to stalk diseases such as sclerotinia and verticillium stem stripe.

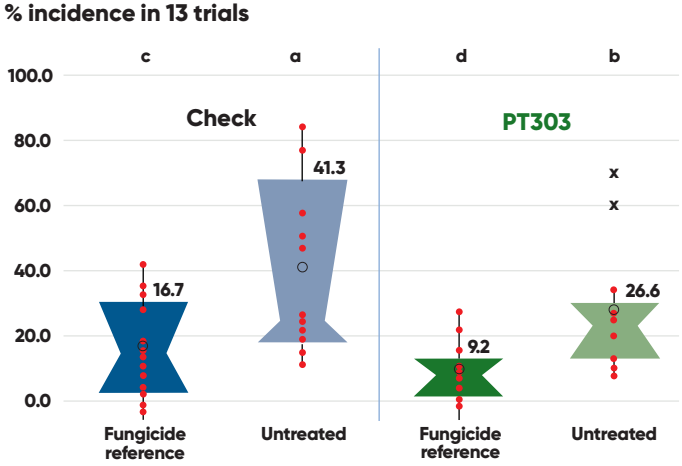
Non-tolerant comparator

Protector Sclerotinia

Essex 2021

PT303 has given very high gross output yields in AHDB UK RL trials even though sclerotinia infection was probably well controlled at all locations. The Sclerotinia tolerance of PT303 is therefore likely to be an additional benefit to its proven performance.

Impact of incidence of sclerotinia infection, 2019-2021



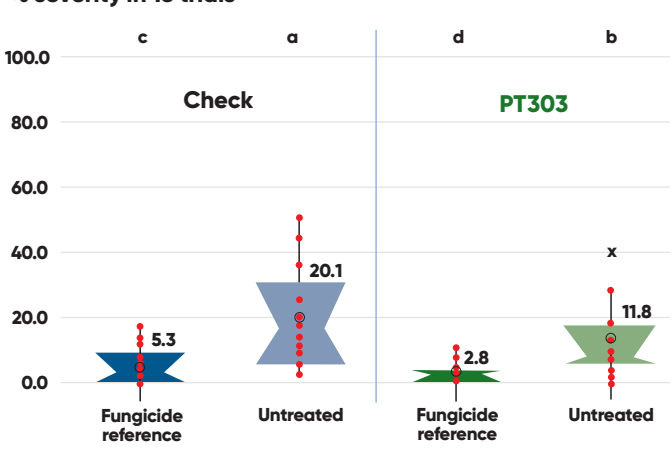
Incidence = frequency of stems infected by *Sclerotinia sclerotiorum.*

Sclerotinia Protector significantly reduced the number of infected stems.

Average reduction of 36%.

The variability of infestation of PT303 was significantly less than the check.

Severity of sclerotinia impact, 2019-2021



Severity = intensity (extent) of *Sclerotinia* lesions.

Sclerotinia Protector significantly lowered the severity on plant stems.

Average reduction of 42%.

The reduction of the variability of lesions was very marked, even in untreated plots.

The efficacy of the fungicide treatments applied was also improved.

Verticillium stem stripe resistance

ADAS trials at a UK location with a recent history of verticillium have indicated PT303 has partial resistance or tolerance to Verticillium Stem Stripe. Combined with its tolerance to Sclerotinia, this gives PT303 a unique potential to reduce the severity of yield robbing stem-based disease at harvest.

ADAS results at this location confirmed the ability of PT303 to quickly establish high levels of ground cover and grow rapidly in both the autumn and spring, even in a verticillium infected site.

Verticillium stem stripe pre-harvest assessment

	Verticillium incidence % of plants affected	Verticillium index (0-100 index)	Premature ripening %
PT303	**52.0**	**32.6**	**40.1**
Quartz	81.0	71.2	72.8
Campus	69.0	42.0	48.5
Flamingo	54.0	30.2	35.3

Source: ADAS 2021

Verticillium stem stripe results

	Ground cover (% of area) Scored 20/10/2020	Vigour 20/10/21 (0-10 index*) Scored 20/10/2020	Vigour 20/10/21 (0-10 index) Scored 29/03/2021	Verticillium stem stripe trial rating
PT303	**83.80**	**7.5**	**7.5**	**Partially resistant**
Quartz	60.00	5.6	5.1	Susceptible
Campus	65.00	6.1	6.3	Moderately susceptible
Flamingo	71.20	6.4	7.6	Partially resistant

Source: ADAS 2021 *0 = lowest; 10 = highest

Stem health

PT303 stem health at maturity reduces premature senescence and its damaging effect on yield.

PT303 **Leading competitor**

Light leaf spot and stem canker

PT303 has broad agronomic strengths. It provides a resistance score of 7 light leaf spot and 6 for stem canker. Its good base disease resistance package makes it suited to any location.

Phoma resistance is derived from both Rlm 7 and broad-based genetic sources ensuring it is appropriate for high pressure situations.

Turnip yellows virus (TuYV) resistance

PT303 has TuYV resistance as confirmed by GEVES testing in France.

PT312

PT312 provides a very high gross output yield with a very high oil content combined with turnip yellows virus resistance and Sclerotinia tolerance.

- Gross Output of 109% in NIAB Trials
- Very high oil content of 47.6% in National List Trials
- Turnip Yellows Virus (TuYV) resistance
- Sclerotinia tolerance
- Stem Canker 7, Light Leaf Spot 5
- Large stature hybrid that has scored 9 for lodging and 8 for stem stiffness
- Pod shatter tolerant

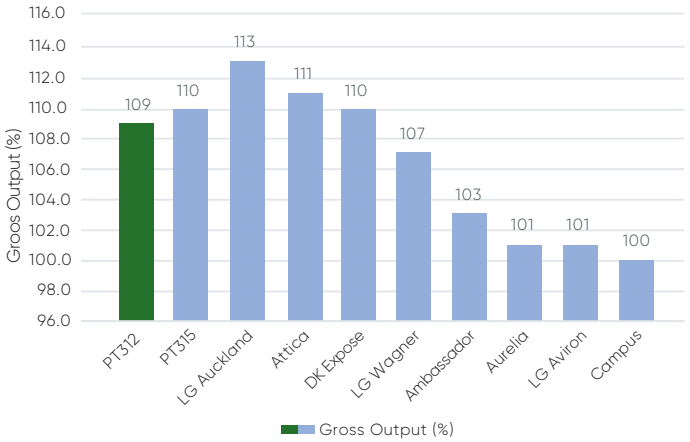
Top level gross output and Agronomics

PT312 has given a very high gross output yield of 109% in NIAB trials.

This top-level yield performance comes with a unique agronomic package including turnip yellows virus resistance and sclerotinia tolerance.

PT312 scores 7 for stem canker resistance and 5 for light leaf spot

2022/23 NIAB WOSR Variety Trials - Top Gross Output Varieties, 5 Locations



High Oil

PT312 gave the highest oil content of any variety in 2020-22 UK National List Trials. This level of oil content is likely to generate significant oil bonus payments. An illustration of the type of oil bonus payments that may be achieved can be seen in the table below.

PT312 potential oil bonus payment based on UK National List Trial Results

Variety	Seed Yield* %	Seed Yield t/ha	Oil Content %	Oil Bonus Payment £ per tonne	Oil Bonus Payment £ per ha
PT312	**101**	**5.28**	**47.6**	**£45.60**	**£240.87**
Campus	100	5.23	46.0	£36.00	£188.28
DK Expansion	101	5.28	46.0	£36.00	£190.16
Aurelia	104	5.44	45.4	£32.40	£176.23
Aspire	97	5.07	45.6	£33.60	£170.46

* 100% Control Seed Yield, t/ha 5.23

Figures based on a crop value of £400/tonne and an oil bonus payment of 1.5% for every % above 40%

Grain price £400/tonne

PT315

PT315 has given a high gross output yield with a very high oil content. It combines pod shatter resistance with turnip yellows virus resistance.

- High Gross Output of 106%
- Very High oil content of 46.8%
- Pod shatter resistance
- Turnip yellows virus (TuYV) resistance
- High rating of 6.9 for early autumn vigour
- Light Leaf Spot 6, Stem Canker 6
- Phoma resistance based on RlmE and horizontal quantitative genetic resistance
- Large stature hybrid that has scored 9 for lodging and 8 for stem stiffness

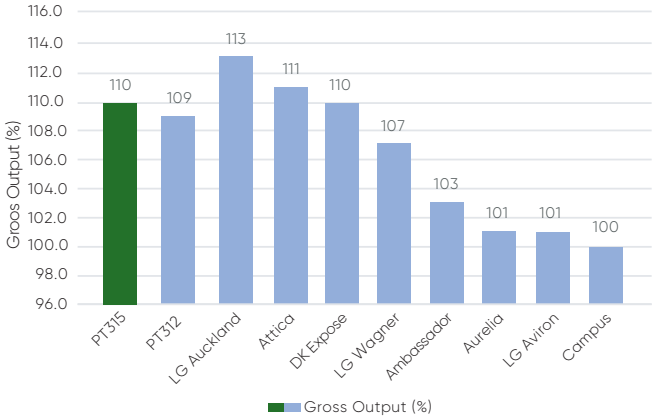
Top level gross output and Agronomics

PT315 has given a very high gross output yield of 106% across DEFRA National List Trials harvested in 2021 and 2022, and 110% in NIAB Trials harvested in 2023.

This top-level yield performance comes with a unique agronomic package including pod shatter resistance, turnip yellows virus resistance and the highest autumn vigour score of any hybrid in the Pioneer range.

PT315 scores 6 for both light leaf spot and phoma resistance. The phoma resistance is based on the RlmE resistance gene combined with broad horizontal quantitative resistance.

2022/23 NIAB WOSR Variety Trials - Top Gross Output Varieties, 5 Locations



High Oil

PT315 has given one of the highest oil contents of any variety in both 2021 and 2022 UK National List Trials. This level of oil content is likely to generate significant oil bonus payments. An illustration of the type of oil bonus payments that may be achieved can be seen in the table below.

PT315 potential oil bonus payment based on UK National List Trial Results

Variety	Seed Yield* %	Seed Yield t/ha	Oil Content %	Oil Bonus Payment £ per tonne	Oil Bonus Payment £ per ha
PT315	**105**	**5.49**	**46.8**	**£40.80**	**£224.05**
Campus	100	5.23	46.0	£36.00	£188.28
DK Expansion	101	5.28	46.0	£36.00	£190.16
Aurelia	104	5.44	45.4	£32.40	£176.23
Aspire	97	5.07	45.6	£33.60	£170.46

* 100% Control Seed Yield, t/ha 5.23

Figures based on a crop value of £400/tonne and an oil bonus payment of 1.5% for every % above 40%

Grain price £400/tonne

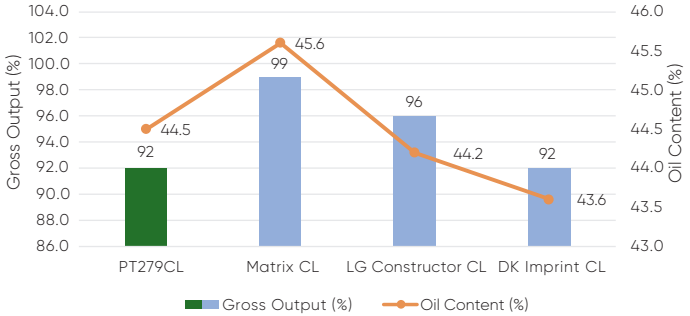
PT279CL

The first Clearfield hybrid to be added to the AHDB Recommended List.

With a high oil content and stiff straw PT279CL has provided growers with high harvestable yields every year since it was first added to the AHDB Recommended List.

A Clearfield hybrid with a strong combination of agronomic traits including a score of 8 for both lodging resistance and stem strength.

Gross output and oil content of PT279CL versus other Clearfield hybrids



Comparative agronomic scores
PT279CL and other Clearfield® hybrids 2023 AHDB RL

	PT279CL	Matrix CL	LG Constructor CL	DK Imprint CL
Oil Content (%)	**44.5**	45.6	44.2	43.6
Light Leaf Spot Resistance	**5**	6	6	6
Stem Canker Resistance	**5**	8	6	7
Turnip Yellows Virus Resistance	**-**	R	R	-
Resistance to Lodging	**8**	8	8	8
Stem Stiffness	**8**	8	8	7
Plant Height (cm)	**147**	152	143	153
Earliness of Flowering	**6**	7	6	6
Earliness of Maturity	**6**	6	6	6

Source: AHDB 2022 UK RL

On the 1-9 scales, high figures indicate that a hybrid shows the character to a higher degree; R = Resistance

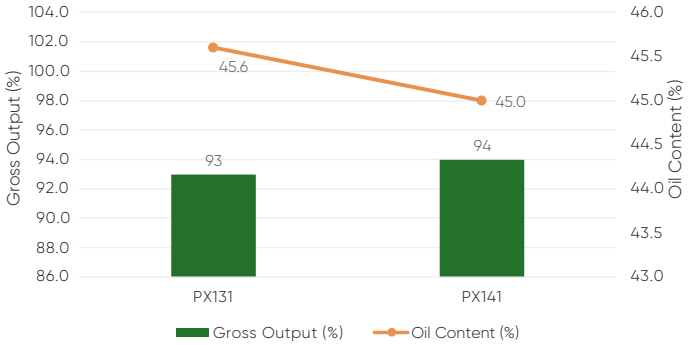
PX131

PX131 is the only semi-dwarf hybrid on the 2024 AHDB Descriptive List.

This unique product type provides growers with the highest level of standing power and the greatest ease of combining.

- Maximus® semi-dwarf hybrids such as PX131 are suited to sowing in high fertility situations where the risk of lodging is high.
- Harvesting is fast and efficient due to the lower level of biomass
- Their low spreading growth habit in the autumn significantly reduces the chance of winter kill

Gross Output & Oil Content of PX131 versus PX141 - UK Official Trials 2019-2021



Comparative agronomic scores
PX131 vs PX141

	PX131	PX141
Oil Content (%)	**45.2**	43.5
Light Leaf Spot Resistance	**7**	6
Stem Canker Resistance	**6**	7
Turnip Yellows Virus Resistance	**R**	-
Resistance to Lodging	**9**	9
Stem Stiffness	**8**	9
Plant Height (cm)	**101**	114
Earliness of Flowering	**4**	2
Earliness of Maturity	**56**	6

Source: UK Official Trial Results 2019-2021

On the 1-9 scales, high figures indicate that a hybrid shows the character to a higher degree; R = Resistance

Pioneer Winter Oilseed Rape seed is available treated with Lumigen™ Premium or Lumigen™ Insecticide Premium Powered by Lumiposa™.

Both options include the nutrient growth promoter Lumidapt Optima™ and the fungicide Scenic Gold™.

LumiGEN™

Lumiposa®

SEED APPLIED INSECTICIDE

The best crop protection for your OSR selection.

Belkar®

Arylex™ active

HERBICIDE

Post-emergence autumn applied herbicide for superior control of broad-leaved weeds especially cleavers, cranesbill, fumitory, poppies and shepherd's purse.

Astrokerb®

HERBICIDE

Powerful dual-action control that is exceptional against blackgrass and key broad-leaved weeds such as poppies and mayweed.

Kerb® FLO 500

HERBICIDE

Long-standing consistent control of blackgrass and other grass and broad-leaved weeds in oilseed rape and pre-emergence in winter beans.

Korvetto®

Arylex™ active

HERBICIDE

Wide-spectrum, spring applied herbicide for use in winter oilseed rape. Highly effective on a range of problem broad-leaved weeds, with outstanding control of key weeds such as cleavers, mayweeds and thistles.

Whatever Pioneer hybrid variety you choose for the season ahead, our range of herbicides will control problem weeds and maximise the potential of your OSR crop.

Discover more at:
www.corteva.co.uk/osr

CORTEVA™
agriscience

OSR £200 CASHBACK OFFER

There are plenty of reasons to choose Pioneer and Corteva oilseed rape products this season. Order both **PT303 Protector® Sclerotinia** OSR and **Belkar®** herbicide and get **£200 cashback***.

Find out more at: **www.corteva.co.uk/osroffer**

*T&C's apply. See website for details.

Your key Pioneer contacts

For all enquiries about Pioneer Winter Oilseed Rape contact your local Corteva Representative. Their experience and local advice is available to help you maximise your success.

Beckie Cartwright
Northern England & Scotland

Mobile: **07917 520707**
Email: **rebecca.cartwright@corteva.com**

Chris Pashby
North West Promoter

Mobile: **07737 612318**

Andy Stainthorpe
UK & Ireland

Mobile: **07801 183234**
Email: **andy.stainthorpe@corteva.com**

Tom Carey
West Midlands Promoter

Mobile: **07432 154981**

Jonathan Bellamy
Northern Wales,
Central England &
Northern Ireland

Mobile: **07801 183233**
Email: **jonathan.bellamy@corteva.com**

Pieter Botha
South East Promoter

Mobile: **07915 127965**

PIONEER®

MADE TO GROW™

Bred for strength.

Pioneer's Next Generation of Oilseed Rape Hybrids. Power your crops.

PT312
PT315

Visit www.corteva.co.uk/pioneer

Notes

PIONEER®

MADE TO GROW™

www.corteva.co.uk/pioneer

CORTEVA™ agriscience

Discover more at corteva.co.uk

Technical Hotline: 0800 689 8899 E-mail: ukhotline@corteva.com

USE PLANT PROTECTION PRODUCTS SAFELY. Always read the label and product information before use. For further information including warning phrases and symbols refer to label.

Corteva Agriscience UK Limited, Unit H4, Building H, Melbourn Science Park, Cambridge Road, Melbourn, Cambridgeshire, SG8 6HB. Tel: 01462 457272.

Belkar® contains halauxifen-methyl (Arylex™ active) and picloram. Astrokerb® contains aminopyralid and propyzamide. Kerb® Flo 500 contains propyzamide. Korvetto® contains halauxifen-methyl (Arylex™ active) and clopyralid.