DUPONT PIONEER

Secure your highest rape seed yields

High Yields & Proven Reliability
PT275 (NEW) & PT256
Normal straw hybrids

X-tra yield potential
PX126, PX113
PIONEER MAXIMUS RAPESEED HYBRIDS

Solutions for improved weed control
PT279CL (NEW), PT240CL & PT200CL
Clearfield Production System for Oilseed Rape

Protection against clubroot
PT242
PROTECTOR

Winter Oilseed Rape Hybrid Range 2018

Table of Contents

For further information about Pioneer Winter Oilseed Rape hybrids please visit: **www.pioneer.com/uk**

Pioneer hybrids in this leaflet contain OG-INRA Technology from INRA, France

NEW

PT275
Normal Straw Hybrid

AHDB CANDIDATE

PIONEER BRAND • PRODUCTS

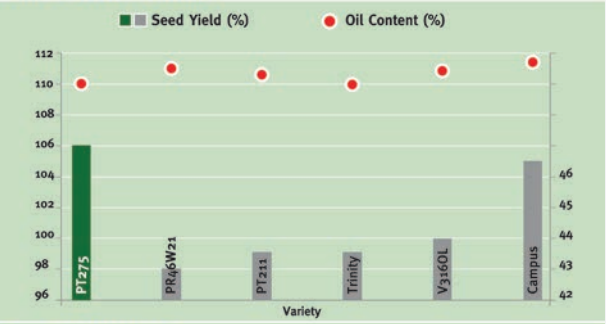
PT275

A new very high yielding AHDB RL Candidate hybrid that has a relatively short plant height for its type and very good light leaf spot resistance

PT275 is a NEW very high yielding Pioneer normal straw hybrid selected as a Candidate for the AHDB Recommended List in the East/West region.

- Very high gross output yield in UK trials.
- Very good light leaf spot resistance.
- A relatively short hybrid with good agronomics.
- Consistent yields across very different years.

PT275 - Gross Output Yield and Oil Content (%)
AHDB East/West Region



Source: AHDB RL Database

Comparative Agronomic Scores

Variety	Oil Content (%)	Res. to Lodging	Stem Stiffness	Height (cm)	Earliness of Flowering	Earliness of Maturity	Res. to Light Leaf Spot	Res. to Stem Canker
PT275	**45.5**	**8**	**7**	**154**	**4**	**6**	**7**	**5**
PR46W21	45.7	8	8	154	5	6	4	3
PT211	45.6	9	8	160	4	6	6	5
Trinity	45.2	8	7	153	4	6	6	6
V316OL	45.4	8	8	158	5	6	6	5
Campus	45.6	8	7	161	4	6	6	5

Source: AHDB Recommended List Database
On the 1 – 9 scale a higher figure indicates the character is shown to a higher degree

NEW

PT275
Normal Straw Hybrid

AHDB CANDIDATE

Management

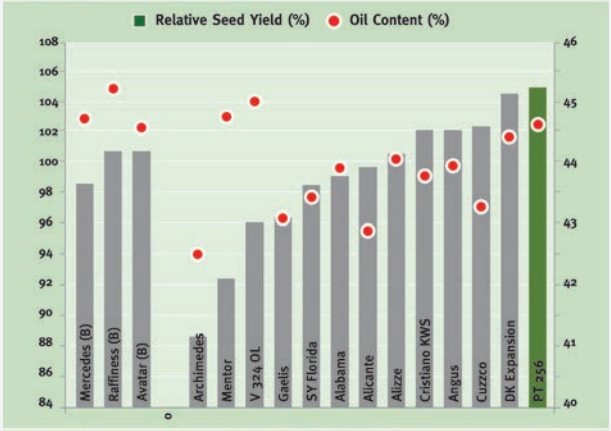
- Pioneer winter oilseed rape seed is usually supplied in bags containing 1.5 million seeds. A 1.5 million seed bag will sow three hectares at a typical seeding rate of 50 seeds per square metre. PT275 has a very high yield potential which is most likely to be obtained with an established spring time plant population around 25 plants per square metre. If establishment losses are expected to be greater, or lower, than allowed for by this typical seeding rate, i.e. establishment losses of 50%, then adjust the sowing rate accordingly.
- Whatever the method of sowing ensure that seed is planted into a fine tilth with adequate moisture before the latest safe sowing date for the field being sown. The latest safe sowing date will vary according to different factors such as the latitude of the location, the height above sea level and field exposure.
- PT275 has a light leaf spot resistance score of 7 which indicates severe infections are less likely than with many other varieties.
- Growth regulator and fungicide applications may enhance yield. Please take advice from a suitably qualified agronomist and follow rates recommended by the product manufacturer.

PT256
Normal Straw Hybrid

A high yielding Pioneer normal straw hybrid

- PT256 has excellent inherited stem canker resistance based not on only one major gene but on many which confer resistance to different races of the pathogen.
- PT256 has a relatively short plant height.
- PT256 has very good lodging resistance.

PT256: EU Trials 1 and 2, Germany, 2016-2017
Average of Two Years of Trials



Source: Official Trials of the Länder / SFG / LK SH / UFOP; As of: 09.10.2017; Two years of results.
B = Reference varieties; Oil yield: Pioneer calculation where 100 = 1.99 t / ha, 25 locations

DuPont Pioneer UK Winter Oilseed Rape PACTS® Strip Trials Summary
Harvests 2016 and 2017

Variety	Number of Locations	Seed Yield Tonnes/Hectare at 9% Grain Moisture	Oil Content Percentage at 9% Grain Moisture	Gross Output Tonnes Per Hectare - adjusted for oil content (%)	Gross Output Yield Index - adjusted for oil content (%)
PT211	7	3.830	44.6%	4.284	100.3%
PT256 (C)	**7**	**3.776**	**45.2%**	**4.272**	**100.0%**
PT234	6	3.588	44.6%	4.013	93.9%
PX126*	4	3.593	44.7%	4.012	93.9%
PX113*	6	3.589	43.3%	3.892	91.1%
PT242**	5	3.554	43.5%	3.868	90.5%
PT235**	5	3.511	43.4%	3.808	89.1%

* MAXIMUS® SEMI-DWARF
**PROTECTOR® CLUBROOT
C = Control Hybrid

PT256
Normal Straw Hybrid

Comparative Agronomic Scores

Variety	Oil Content (%) Dry Matter	Resistance to Lodging	Earliness of Maturity	Resistance to Stem Canker
PT256	**48.4**	**6.5**	**5.8**	**6.9**
PR46W21	48.4	6.6	5.1	3.8
DK Explicit*	48.6	5.9	5.3	7.3
DK Exstorm*	47.9	5.5	5.6	7

Source: Pioneer European Research Trials and French Official Trials
On the 1 – 9 scale a higher figure indicates the character is shown to a higher degree
* = Competitor hybrid

Management

- PT256 has been independently tested for light leaf spot resistance in the high light leaf spot infection area of Scotland and achieved a score of 6.0.
- PT256 achieved an excellent stem canker resistance score of 6.9 in French Official Trials. PT256 stem canker resistance is a horizontal quantitative type of resistance providing protection against different races of phoma.
- The overall disease resistance package of PT256 is likely to lead to reduced leaf infection levels which may lessen the need for extra fungicide applications, or provide extra time to make planned fungicide applications.
- PT256 has very good resistance to lodging and has proven itself in commercial high lodging pressure situations. PT256 stands well and retains yield potential in situations where some other varieties will lodge and lose yield.

NEW

PT279CL

Normal Straw Clearfield® Hybrid

AHDB CANDIDATE

PIONEER BRAND • PRODUCTS

PT279CL

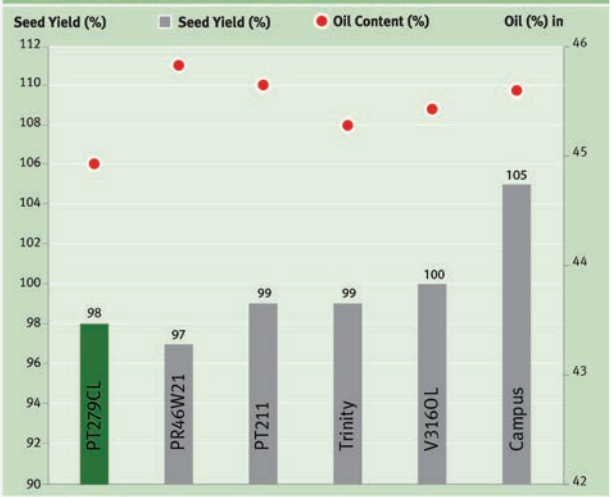
Clearfield Production System

The only Clearfield® hybrid selected as a Candidate for the next AHDB Recommended List in the key East/West region

A NEW very high yielding Pioneer normal straw Clearfield® hybrid selected as a Candidate for the AHDB Recommended List in both the East/West and North regions.

- PT279CL is a new very high gross output Clearfield® hybrid.
- PT279CL is the only Clearfield® hybrid selected as a Candidate for the next AHDB Recommended List in the key East/West region.
- PT279CL scores a 6 for both light leaf spot and stem canker resistance.
- PT279CL scores an 8 for lodging resistance protecting yield in high lodging risk situations.
- In UK trials PT279CL has given a gross output that matches or exceeds that of many non-Clearfield® hybrids, even though in such trials no Clearfield® herbicides are used.

Treated Seed Yield and Oil Content (%)
PT279CL versus Non-Clearfield® Control Varieties



Source: AHDB RL Database, East/West Region

PT279CL

Normal Straw Clearfield® Hybrid

AHDB CANDIDATE

NEW

Comparative Agronomic Scores

Variety	Oil Content (%)	Res. to Lodging	Stem Stiffness	Height (cm)	Earliness of Flowering	Earliness of Maturity	Res. to Light Leaf Spot	Res. to Stem Canker
PT279CL	**44.9**	**8**	**7**	**157**	**5**	**6**	**6**	**6**
PR46W21	45.7	8	8	154	5	6	4	3
PT211	45.6	9	8	160	4	6	6	5
Trinity	45.2	8	7	153	4	6	6	6
V316OL	45.4	8	8	158	5	6	6	5
Campus	45.6	8	7	161	4	6	6	5

Source: AHDB Recommended List Database
On the 1 – 9 scale a higher figure indicates the character is shown to a higher degree

Management

- PT279CL is approved for treatment with Clearfield® herbicides and its selection for AHDB trials in the East/West region shows the genetic yield potential of Clearfield® hybrids is now in line with that of current non-Clearfield hybrids.
- PT279CL does not have any notable agronomic weaknesses and trials have clearly shown it is widely adapted to the different parts of the UK.
- Good disease resistance for both light leaf spot and stem canker in PT279CL should ensure any disease progression occurs at typical rates and minimises the likelihood of having to bring forward planned fungicide applications.
- The good lodging resistance of PT279CL means that even in fertile situations only normal growth regulator applications are likely to be needed.

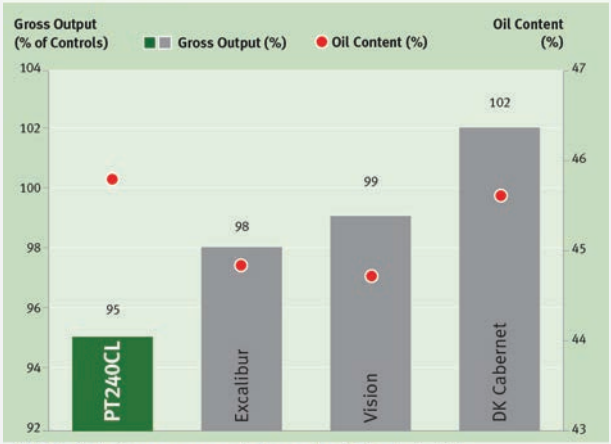
PT240CL
Normal Straw Hybrid

Clearfield® Production System for Oilseed Rape

Improved Stem Canker Resistance

- PT240CL is a normal straw Clearfield® hybrid first registered in the United Kingdom in 2014.
- PT240CL combines a high seed yield with a high oil percentage and a high stem canker resistance score.

Gross Output Yield



PT240CL yield performance compared to the non Clearfield® control varieties
Source: UK Official Trial Results 2012 & 2013

Comparative Agronomic Scores

Variety	Oil Content (%)	Res. to Lodging	Stem Stiffness	Height (cm)	Earliness of Flowering	Earliness of Maturity	Res. to Light Leaf Spot	Res. to Stem Canker
PT240CL	**45.8**	**8**	**7**	**152**	**5**	**6**	**5**	**7**
Excalibur	44.8	7	7	142	7	6	6	6
Vision	44.7	8	8	143	5	6	6	6
DK Cabernet	45.6	9	8	145	4	5	6	7

Source: UK Official Trials
On the 1 – 9 scale a higher figure indicates the character is shown to a higher degree

Management

Fungicide and growth regulator applications may enhance yield. Please take advice from a suitably qualified agronomist and follow rates recommended by the product manufacturer.

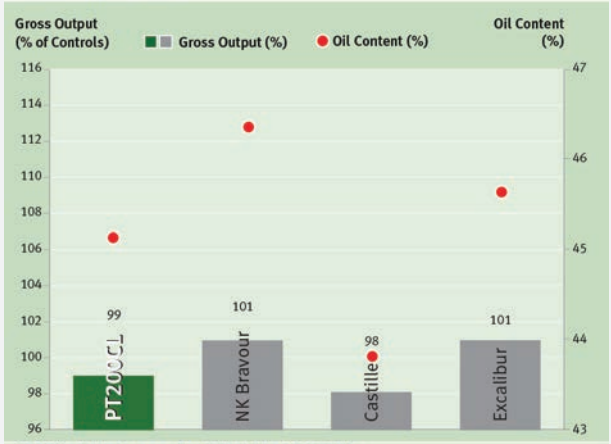
PT200CL
Normal Straw Hybrid

Clearfield® Production System for Oilseed Rape

High Yield Potential

- PT200CL was the first normal structure Clearfield® hybrid to be registered in the UK.
- PT200CL has good all round resistance to stem canker (6) and light leaf spot (6).
- PT200CL is the tallest Pioneer Clearfield® hybrid currently available.

Gross Output Yield



PT200CL yield performance in Official Trials 2009 & 2010
Source: DEFRA

Comparative Agronomic Scores

Variety	Oil Content (%)	Res. to Lodging	Stem Stiffness	Height (cm)	Earliness of Flowering	Earliness of Maturity	Res. to Light Leaf Spot	Res. to Stem Canker
PT200CL	**45.1**	**8**	**7**	**166**	**5**	**6**	**6**	**6**
NK Bravour	46.3	8	7	153	5	6	4	6
Castille	43.7	8	8	143	8	6	6	7
Excalibur	45.6	8	7	158	7	7	7	4

On the 1 – 9 scale a higher figure indicates the character is shown to a higher degree

Management

Growth regulator and fungicide applications may enhance yield. Please take advice from a suitably qualified agronomist and follow rates recommended by the product manufacturer.

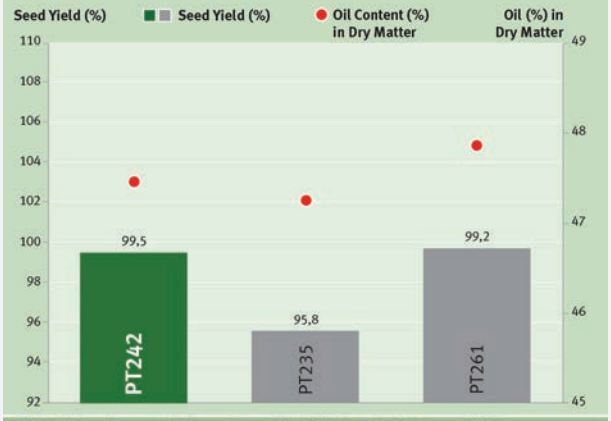
Suitable for the application of Clearfield© herbicides.

PT242
Normal Straw Hybrid

Hybrid with Pioneer Protector® Clubroot Resistance

- PT242 is a normal straw hybrid with Pioneer Protector® Clubroot resistance.
- PT242 has good stem canker resistance.
- PT242 is relatively fast ripening at harvest.

Seed Yield & Oil Percentage in Dry Matter



PT242 yield performance in Pioneer Europe North Maritime Region Research Trials
Source: Pioneer Research Trials 2015

DuPont Pioneer UK Winter Oilseed Rape PACTS® Strip Trials Summary Harvests 2016 and 2017

Variety	Number of Locations	Seed Yield Tonnes/Hectare at 9% Grain Moisture	Oil Content Percentage at 9% Grain Moisture	Gross Output Tonnes Per Hectare - adjusted for oil content (%)	Gross Output Yield Index - adjusted for oil content (%)
PT211	7	3.830	44.6%	4.284	100.3%
PT256 (C)	7	3.776	45.2%	4.272	100.0%
PT234	6	3.588	44.6%	4.013	93.9%
PX126*	4	3.593	44.7%	4.012	93.9%
PX113*	6	3.589	43.3%	3.892	91.1%
PT242**	**5**	**3.554**	**43.5%**	**3.868**	**90.5%**
PT235**	5	3.511	43.4%	3.808	89.1%

* MAXIMUS® SEMI-DWARF
**PROTECTOR® CLUBROOT
C = Control Hybrid

PT242
Normal Straw Hybrid

Comparative Agronomic Scores

Variety	Oil Content (%) Dry Matter	Resistance to Lodging	Earliness of Maturity	Resistance to Stem Canker
PT242	**47.5**	**6.6**	**5.5**	**6.0**
PT235	47.2	6.4	5.2	5.7
PT261	47.9	6.4	5.8	5.0

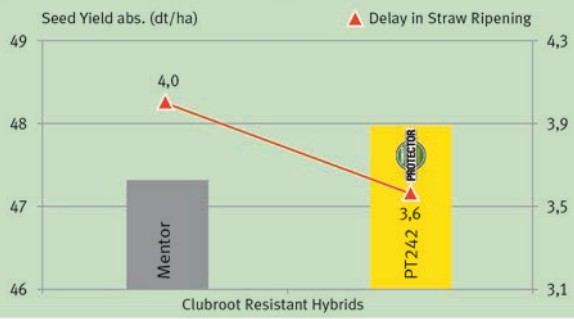
Source: Pioneer Research Trials
On the 1 – 9 scale a higher figure indicates the character is shown to a higher degree

Management

Fungicide and growth regulator applications may enhance yield. Please take advice from a suitably qualified agronomist and follow rates recommended by the product manufacturer.

PT242
Normal Straw Hybrid

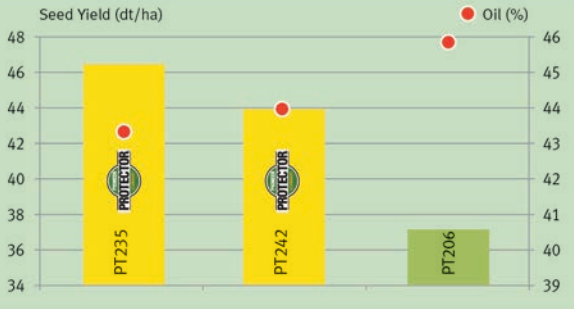
PT242 in BSV trial Germany, harvest 2015



Comparison of all Clubroot resistant hybrids in the BSV trial Germany, 2015.
Source: Amtliches Versuchswesen/SFG/LK SH/UFOP. 14.09.15. Seed yield: n = 18, ripening straw: n = 13.

In this chart all clubroot resistant hybrids are shown which have been tested in „Bundessortenversuch 2015", Germany. The Pioneer Protector® Clubroot resistant normal straw hybrid PT242 outperformed the comparison hybrid in seed yield and is earlier in straw ripening. With the score of 3.6 (13 locations) PT242 is exactly on average of the 23 tested hybrids.

Testing of hybrids on Clubroot infected location



Source: Landesforschungsanstalt für Landwirtschaft und Fischerei, Mecklenburg Vorpommern, Germany. Testing of 7 Clubroot resistant hybrids and 5 non Clubroot resistant hybrids on a field with Clubroot infection (location Glashagen in North-East Germany) 2014/2015.

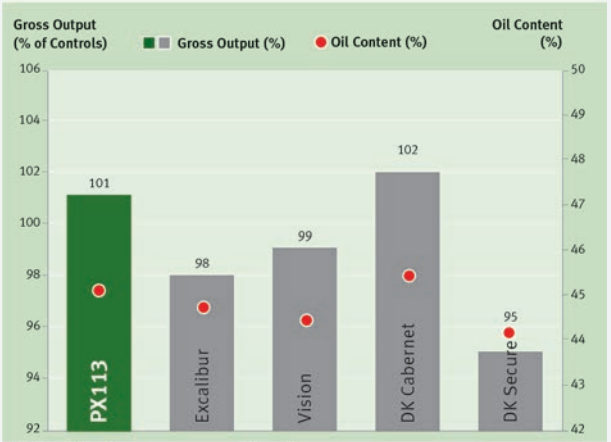
At the location Glashagen, Germany, clubroot resistant hybrids have been tested at conditions with infection from the „Landesanstalt Mecklenburg-Vorpommern". Although the clubroot resistant hybrids PT235 and PT242 outperformed the non clubroot resistant hybrid PT206 in seed yield by 9.4 dt/ha respectively 9.9 dth/ha.

PX113
Maximus® Semi-Dwarf Hybrid

A Maximus® Semi-Dwarf Hybrid

- PX113 is a Pioneer Maximus® semi-dwarf hybrid first commercialised in the UK in 2014.
- PX113 is one the biggest selling Maximus® semi-dwarf hybrids.
- PX113 has outstanding all around agronomic strength with a standing ability score of 9, a stem canker resistance score of 8 and a light leaf spot resistance score of 7.
- PX113 is typically 124cm tall.
- PX113 provides oilseed rape growers with all the agronomic advantages and harvesting benefits associated with a Pioneer Maximus® hybrid.

Gross Output & Oil Percentage



PX113 yield performance versus control varieties
Source: UK Official Trials Harvest 2012 & 2013

Comparative Agronomic Scores

Variety	Oil Content (%)	Res. to Lodging	Stem Stiffness	Height (cm)	Earliness of Flowering	Earliness of Maturity	Res. to Light Leaf Spot	Res. to Stem Canker
PX113	**45.0**	**9**	**8**	**124**	**5**	**6**	**7**	**8**
Excalibur	44.7	7	7	142	7	6	6	6
Vision	44.4	8	8	143	5	6	6	6
DK Cabernet	45.4	9	8	145	4	5	6	7
DK Secure	44.1	9	9	136	4	6	7	7

Source: UK Official Trials
On the 1 – 9 scale a higher figure indicates the character is shown to a higher degree

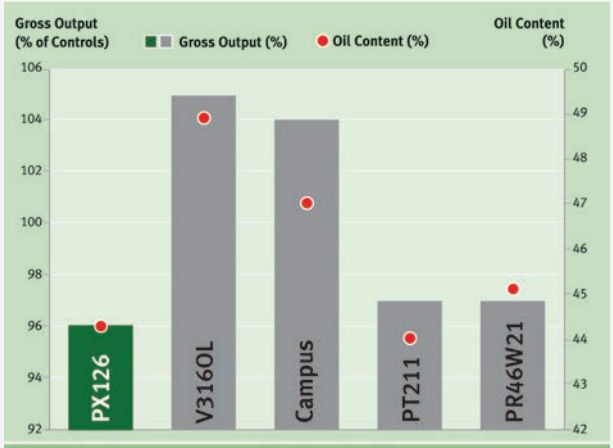
Management

Fungicide applications may enhance yield. Please take advice from a suitably qualified agronomist and follow rates recommended by the product manufacturer.

A Maximus® Semi-Dwarf Hybrid

- PX126 is sown in 2018 AHDB Recommended List trials.
- PX126 has a high oil content.
- PX126 is comparatively later flowering but not late to mature.
- In PACTS® Trials, where plots are much larger than in Official or AHDB Recommended List Trials, PX126 has given impressive comparative yields.
- The yield and agronomic benefits of Maximus® hybrids, such as PX126, are often missed when they are tested in small plot trials.

Gross Output & Oil %



PX126 yield performance versus non semi-dwarf control varieties
Source: AHDB RL Database

DuPont Pioneer UK Winter Oilseed Rape PACTS® Strip Trials Summary Harvests 2016 and 2017

Variety	Number of Locations	Seed Yield Tonnes/Hectare at 9% Grain Moisture	Oil Content Percentage at 9% Grain Moisture	Gross Output Tonnes Per Hectare - adjusted for oil content (%)	Gross Output Yield Index - adjusted for oil content (%)
PT211	7	3.830	44.6%	4.284	100.3%
PT256 (C)	7	3.776	45.2%	4.272	100.0%
PT234	6	3.588	44.6%	4.013	93.9%
PX126*	**4**	**3.593**	**44.7%**	**4.012**	**93.9%**
PX113*	6	3.589	43.3%	3.892	91.1%
PT242**	5	3.554	43.5%	3.868	90.5%
PT235**	5	3.511	43.4%	3.808	89.1%

* MAXIMUS® SEMI-DWARF
**PROTECTOR® CLUBROOT
C = Control Hybrid

Comparative Agronomic Scores

Variety	Oil Content (%)	Res. to Lodging	Stem Stiffness	Height (cm)	Earliness of Flowering	Earliness of Maturity	Res. to Light Leaf Spot	Res. to Stem Canker
PX126	**45.8**	**8**	**9**	**9**	**5**	**5**	**7**	**5**
V316OL	45.7	8	8	6	7	5	6	5
Campus	45.7	8	8	6	6	5	6	6
PT211	45.6	8	8	6	6	5	6	5
PR46W21	45.8	8	8	6	7	6	4	3

Source: AHDB Recommended List Database
On the 1-9 scale a higher figure indicates the character is shown to a higher degree

Management

Fungicide applications may enhance yield. Please take advice from a suitably qualified agronomist and follow rates recommended by the product manufacturer.

PX111CL

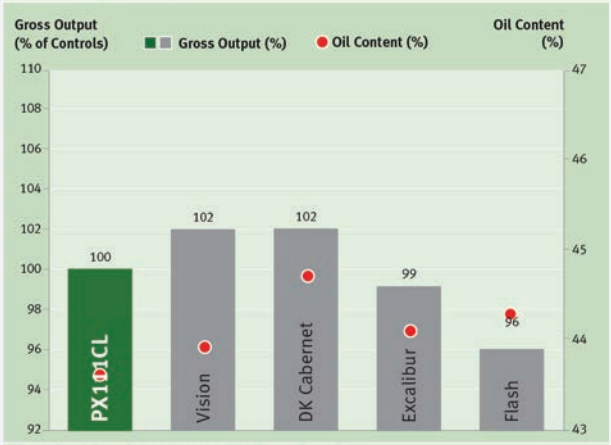
Maximus® Semi-Dwarf Hybrid

PIONEER MAXIMUS® RAPESEED HYBRIDS Clearfield® Production System for Oilseed Rape

Clearfield® Tolerant Hybrid Developed from Conventional Breeding

- PX111CL is a Clearfield® MAXIMUS® semi-dwarf hybrid first registered in the United Kingdom in 2013.
- PX111CL was a candidate hybrid for the 2014/2015 AHDB (formerly HGCA) Recommended List in the East/West Region.

Gross Output Yield



PX111CL yield performance compared to control varieties.
Source: AHDB Recommended List Database, 2016

Comparative Agronomic Scores

Variety	Oil Content (%)	Res. to Lodging	Stem Stiffness	Height (cm)	Earliness of Flowering	Earliness of Maturity	Res. to Light Leaf Spot	Res. to Stem Canker
PX111CL	**43.6**	**9**	**8**	**127**	**5**	**7**	**5**	**6**
Vision	43.9	7	7	146	5	6	5	6
DK Cabernet	44.7	8	8	148	4	6	6	7
Excalibur	44.1	6	5	147	7	7	6	6
Flash	44.3	7	5	157	5	6	5	5

Data obtained from the AHDB Recommended List Database, 2016
On the 1–9 scale a higher figure indicates the character is shown to a higher degree

Management

Fungicide applications may enhance yield. Please take advice from a suitably qualified agronomist and follow rates recommended by the product manufacturer.

Suitable for the application of Clearfield® herbicides.

DuPont Pioneer Winter Oilsed Rape Comparative Agronomic Descriptions 2018

Hybrid	Year of introduction	Oil content (%)	Lodging resistance	Stem stiffness	Height (cm)	Light leaf spot resistance	Stem canker resistance	Earliness of flowering	Earliness of maturity	Data Source
Normal Straw Hybrids										
PT275 NEW FOR 2018	2018	45.5	8	7	154	7	5	4	6	1
PT256	2016	45.7	8	8	168	6	8	6	5	3/4
Normal Straw Clearfield® Hybrids										
PT279CL NEW FOR 2018	2018	44.9	8	7	157	6	6	5	6	1
PT240CL	2015	45.8	8	7	152	5	7	5	6	4
PT200CL	2011	45.1	8	7	167	6	6	5	6	2
Normal Straw Protector® Clubroot Resistant Hybrid										
PT242	2016	44.7	8	7	155	6	6	5	5	3/4
Maximus® Semi-Dwarf Hybrids										
PX126	2017	45.8	8	9	123	7	5	5	5	1
PX113	2014	45.6	9	8	124	7	8	5	6	2
Maximus Semi-Dwarf Clearfield® Hybrid										
PX111CL	2012	43.6	9	8	126	5	6	5	7	1/2

Data Sources: 1 AHDB RL Database - www.cereals.ahdb.org.uk; 2 UK Official Trials; 3 Other EU located Official Trials; 4 Pioneer Trials
On the 1-9 scales, high figures indicate that a hybrid shows the character to a high degree (e.g. high resistance)

Pioneer Hi-Bred Northern Europe
Corteva Agriscience, Agriculture Division
of DowDuPont

CPC2 Capital Park
Fulbourn
Cambridge
CB21 5XE
Tel: 01462 426670
Email: piouk@pioneer.com