



## APPLICATIONS UNDER EXAMINATION

## CANOLA

### CANOLA (*Brassica napus*)

**Proposed denomination:** 'PA7CN138'  
**Application number:** 19-9958  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PA1CN131', 'PPS01-140 A-Line' and '5440'

**Summary:** *The cotyledon of 'PA7CN138' is narrower and shorter than that of '5440'. The leaf margin of 'PA7CN138' has deep margin indentations whereas the leaf margin of the reference varieties has shallow to medium depth indentations. The leaf of 'PA7CN138' is longer than that of 'PA1CN131' whereas it is narrower than that of '5440'. The petal of 'PA7CN138' is longer and wider than that of 'PA1CN131' whereas it is shorter than that of '5440'. The silique attitude of 'PA7CN138' is horizontal whereas the attitude is erect for 'PA1CN131'. The silique of 'PA7CN138' is longer than the reference varieties. 'PA7CN138' has a longer silique beak than that of 'PPS01-140 A-Line'. The pedicel of 'PA7CN138' is longer than that of 'PA1CN131' whereas it is shorter than that of '5440'. 'PA7CN138' matures earlier than 'PA1CN131' and '5440'. The seed coat of 'PA7CN138' is black whereas it is brown for 'PA1CN131'.*

#### **Description:**

**PLANT:** male sterile inbred line, spring type, medium to tall at maturity

**COTYLEDON:** medium length and width

**LEAF:** medium green, medium to many lobes, rounded to sharp margin, medium to very dense density of deep margin indentations, short to medium length, narrow to medium width, very short to short petiole

**FLOWER PETAL:** yellow, short to medium length, medium width

**SILIQUE:** horizontal attitude, medium length, short beak, very short to short pedicel

**SEED COAT:** black

**AGRONOMIC CHARACTERISTICS:** medium resistance to lodging, good resistance to shattering

**QUALITY CHARACTERISTICS:** erucic acid is 0.03% of total fatty acids, oil content is 46.3% of whole dried seed, protein is 46.6% of dried oil free meal, medium concentration of glucosinolates (15.6 µmol/g)

**DISEASE REACTION:** resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and Clubroot (*Plasmodiophora brassicae*)

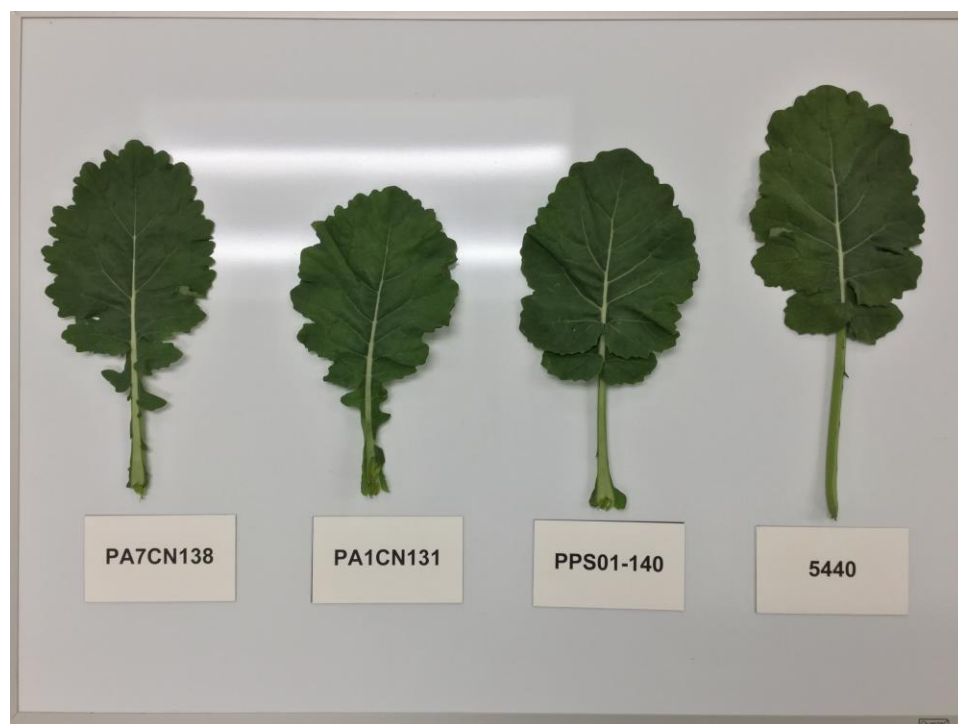
**Origin and Breeding:** 'PA7CN138' is a male sterile line which contains the Ms8 gene construct in the heterozygous state. The double haploid line was extracted in 2011 from a cross made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2010. 'PA7CN138' was selected in 2017 on the basis of male sterility stability, expression of tolerance to glufosinate-ammonium herbicide and good combining ability with numerous restorer lines. Other selection parameters included height, vigour, maturity, blackleg resistance, clubroot tolerance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content.

**Tests and Trials:** The comparative trials for 'PA7CN138' were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for 'PA7CN138'**

	'PA7CN138'	'PA1CN131'*	'PPS01-140 A-Line'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	12.0	12.8	12.3	16.2
std. deviation	1.1	0.9	1.1	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	23.7	24.0	24.5	30.4
std. deviation	2.2	2.1	2.1	2.5
<i>Leaf length (cm)</i>				
mean (LSD=3.8)	20.8	16.5	20.5	24.2
std. deviation	1.8	3.5	1.5	2.0
<i>Leaf width (cm)</i>				
mean (LSD=1.2)	9.7	10.1	9.3	10.9
std. deviation	0.8	0.9	1.1	1.5
<i>Petiole length (cm)</i>				
mean (LSD=1.6)	7.1	6.9	8.3	10.0
std. deviation	1.2	1.7	1.7	1.7
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	11.7	10.2	11.6	14.9
std. deviation	0.5	0.7	0.8	1.4
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	6.5	5.4	6.6	7.2
std. deviation	0.6	0.5	0.7	0.6
<i>Silique length (mm)</i>				
mean (LSD=6.0)	61.8	48.4	52.6	54.5
std. deviation	5.0	4.4	3.2	3.5
<i>Beak length (mm)</i>				
mean (LSD=2.0)	9.2	7.9	5.3	8.4
std. deviation	1.8	1.3	1.3	2.0
<i>Pedicle length (mm)</i>				
mean (LSD=2.3)	12.8	10.8	11.3	16.2
std. deviation	3.0	2.2	2.3	2.9
<i>Days to maturity</i>				
mean	88	93	91	93

\*reference varieties



Canola: 'PA7CN138' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

**Proposed denomination:** 'PA8CN149'  
**Application number:** 19-9959  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PA1CN131', 'PPS01-140 A-Line' and '5440'

**Summary:** *The cotyledon of 'PA8CN149' is shorter and narrower than that of '5440'. The leaf of 'PA8CN149' has a sharp margin whereas the leaf of the reference varieties has a rounded margin. The leaf and petiole of 'PA8CN149' are longer than that of 'PA1CN131'. 'PA8CN149' flowers later than 'PA1CN131'. The petal of 'PA8CN149' is shorter than that of '5440' whereas it is longer than that of 'PA1CN131'. The silique attitude of 'PA8CN149' is horizontal whereas the attitude is erect for 'PA1CN131'. The silique of 'PA8CN149' is longer than the reference varieties. 'PA8CN149' has a longer silique beak than 'PPS01-140 A-Line'. The pedicel of 'PA8CN149' is shorter than that of '5440'. 'PA8CN149' matures later than 'PPS01-140 A-Line'. At maturity, the plant of 'PA8CN149' is taller than that of 'PA1CN131'. The seed coat of 'PA8CN149' is brown whereas it is black for 'PPS01-140 A-Line' and '5440'.*

**Description:**

PLANT: male sterile inbred line, spring type, tall at maturity

COTYLEDON: medium length and width

LEAF: medium green, medium number to many lobes, sharp margin, medium to dense density of medium to deep margin indentations, medium length, narrow to medium width, short to medium length petiole

FLOWER PETAL: yellow, short to medium length and width

SILIQUE: horizontal attitude, long, short beak, very short pedicel

SEED COAT: brown

AGRONOMIC CHARACTERISTICS: medium resistance to lodging, good resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 48.6% of whole dried seed, protein is 44.2% of dried oil free meal, low concentration of glucosinolates (13.8  $\mu\text{mol/g}$ )

DISEASE REACTION: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*)

**Origin and Breeding:** 'PA8CN149' is a male sterile line which contains the Ms8 gene construct in the heterozygous state. It was derived by backcrossing a double haploid line, which was extracted in 2010, to a male sterile line containing the Ms8 gene. The initial cross was made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2009. 'PA8CN149' was selected in 2018 on the basis of male sterility stability, expression of tolerance to glufosinate-ammonium herbicide and good combining ability with numerous restorer lines. Other selection parameters included height, vigour, maturity, blackleg resistance, clubroot resistance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content.

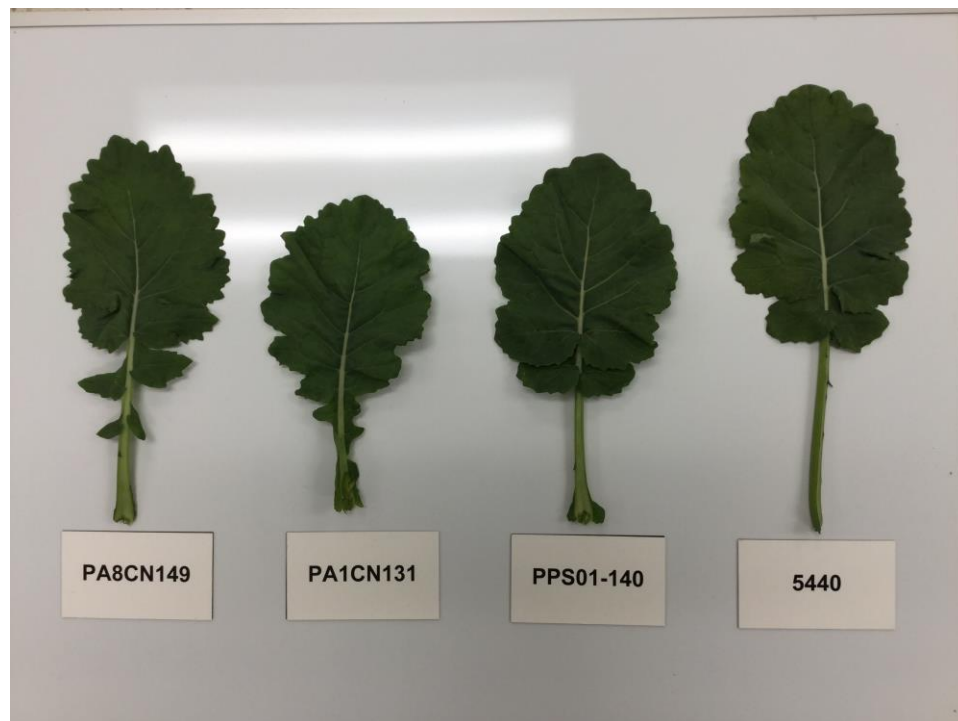
**Tests and Trials:** The comparative trials for 'PA8CN149' were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for 'PA8CN149'**

	'PA8CN149'	'PA1CN131'*	'PPS01-140 A-Line**	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	12.8	12.8	12.3	16.2
std. deviation	1.6	0.9	1.1	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	23.5	24.0	24.5	30.4
std. deviation	3.2	2.1	2.1	2.5
<i>Leaf length (cm)</i>				
mean (LSD=3.8)	21.6	16.5	20.5	24.2
std. deviation	2.6	3.5	1.5	2.0
<i>Petiole length (cm)</i>				
mean (LSD=1.6)	8.7	6.9	8.3	10.0
std. deviation	1.8	1.7	1.7	1.7
<i>Days to flowering</i>				
mean	44	40	42	42
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	13.0	10.2	11.6	14.9
std. deviation	1.5	0.7	0.8	1.4
<i>Silique length (mm)</i>				
mean (LSD=6.0)	69.8	48.4	52.6	54.5
std. deviation	6.1	4.4	3.2	3.5
<i>Beak length (mm)</i>				
mean (LSD=2.0)	8.6	7.9	5.3	8.4
std. deviation	1.5	1.3	1.3	2.0

<i>Pedicle length (mm)</i>				
mean (LSD=2.3)	12.1	10.8	11.3	16.2
std. deviation	2.6	2.2	2.3	2.9
<i>Days to maturity</i>				
mean	94	93	91	93
<i>Plant height at maturity (cm)</i>				
mean (LSD=7.8)	136	128	130	137
std. deviation	6	8	8	5

\*reference varieties



Canola: 'PA8CN149' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

**Proposed denomination:** 'PA8CN152'  
**Application number:** 19-9960  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PA1CN131', 'PPS01-140 A-Line' and '5440'

**Summary:** The cotyledon of 'PA8CN152' is shorter and narrower than that of '5440' whereas it is shorter than that of 'PA1CN131'. The leaf of 'PA8CN152' has very few to few lobes whereas the leaf of 'PPS01-140 A-Line' and '5440' have a medium number of lobes. The leaf of 'PA8CN152' is longer than that of 'PA1CN131' whereas it is shorter than that of

'5440'. 'PA8CN152' has a shorter petiole than that of '5440'. 'PA8CN152' flowers later than 'PA1CN131'. The petal of 'PA8CN152' is shorter and narrower than that of '5440'. 'PA8CN152' has a longer silique beak than that of 'PPS01-140 A-Line'. The pedicel of 'PA8CN152' is shorter than that of '5440'. 'PA8CN152' matures later than 'PPS01-140 A-Line'. The seed coat of 'PA8CN152' is black whereas it is brown for 'PA1CN131'.

**Description:**

PLANT: male sterile inbred line, spring type, medium to tall at maturity

COTYLEDON: medium length and width

LEAF: medium green, very few to few lobes, rounded margin, medium density of medium depth margin indentations, short to medium length, narrow to medium width, short petiole

FLOWER PETAL: yellow, short to medium length and width

SILIQUE: semi-erect attitude, short, short beak, very short pedicel

SEED COAT: black

AGRONOMIC CHARACTERISTICS: medium resistance to lodging, medium resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 52.0% of whole dried seed, protein is 43.8% of dried oil free meal, low concentration of glucosinolates (10.8 µmol/g)

DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and Clubroot (*Plasmodiophora brassicae*)

**Origin and Breeding:** 'PA8CN152' is a male sterile line which contains the Ms8 gene construct in the heterozygous state. It was derived by crossing an inbred line containing the Ms8 gene to a donor line, which was then crossed to a recurring parent in a backcrossing scheme. The initial cross was made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2012. 'PA8CN152' was selected in 2017 on the basis of male sterility stability, expression of tolerance to glufosinate-ammonium herbicides as well as good combining ability with numerous restorer lines. Other selection parameters included vigour, maturity, blackleg resistance, clubroot resistance, oil content, fatty acid profile and glucosinolate content.

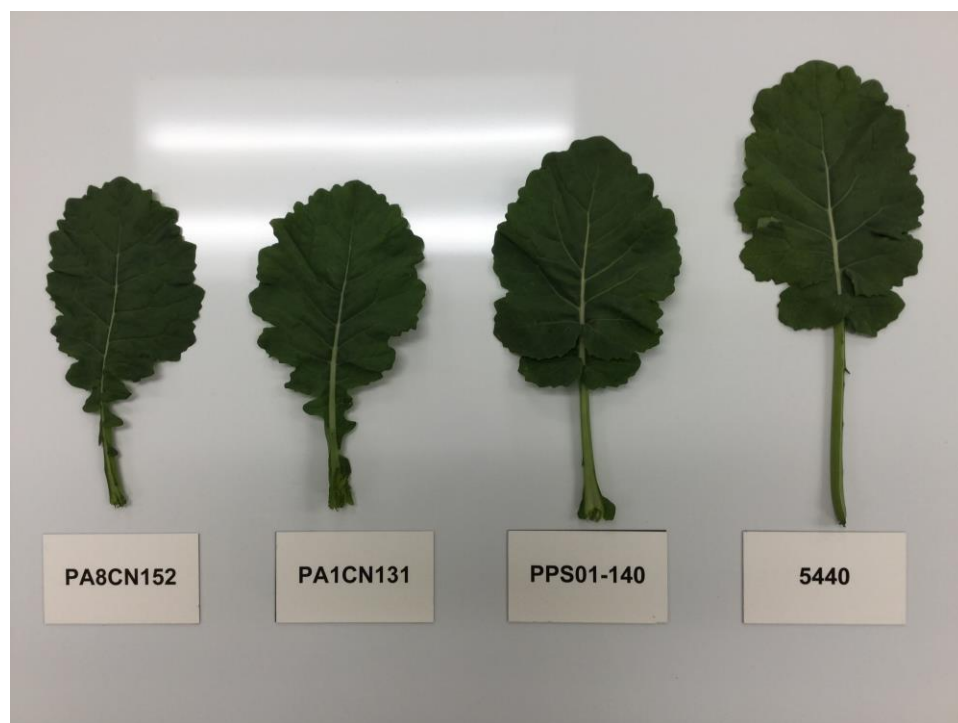
**Tests and Trials:** The comparative trials for 'PA8CN152' were conducted during the 2017 and 2018 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for 'PA8CN152'**

	'PA8CN152'	'PA1CN131'*	'PPS01-140 A-Line'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	11.9	12.8	12.3	16.2
std. deviation	1.0	0.9	1.1	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	22.9	24.0	24.5	30.4
std. deviation	1.7	2.1	2.1	2.5
<i>Leaf length (cm)</i>				
mean (LSD=3.8)	20.8	16.5	20.5	24.2
std. deviation	2.3	3.5	1.5	2.0
<i>Leaf width (cm)</i>				
mean (LSD=1.2)	9.9	10.1	9.3	10.9
std. deviation	1.0	0.9	1.1	1.5

<i>Petiole length (cm)</i>				
mean (LSD=1.6)	8.2	6.9	8.3	10.0
std. deviation	1.7	1.7	1.7	1.7
<i>Days to flowering</i>				
mean	43	40	42	42
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	11.1	10.2	11.6	14.9
std. deviation	0.7	0.7	0.8	1.4
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	5.9	5.4	6.6	7.2
std. deviation	0.6	0.5	0.7	0.6
<i>Siliqua length (mm)</i>				
mean (LSD=6.0)	53.9	48.4	52.6	54.5
std. deviation	3.4	4.4	3.2	3.5
<i>Beak length (mm)</i>				
mean (LSD=2.0)	8.1	7.9	5.3	8.4
std. deviation	1.3	1.3	1.3	2.0
<i>Pedicel length (mm)</i>				
mean (LSD=2.3)	12.4	10.8	11.3	16.2
std. deviation	2.1	2.2	2.3	2.9
<i>Days to maturity</i>				
mean	96	93	91	93

\*reference varieties



Canola: 'PA8CN152' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

**Proposed denomination:** 'PB7CN238'  
**Application number:** 19-9961  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PB1CN231', 'PPS01-140 B-Line' and '5440'

**Summary:** *The cotyledon of 'PB7CN238' is wider than that of 'PB1CN231' and 'PPS01-140 B-Line' whereas it is narrower and shorter than that of '5440'. The leaf of 'PB7CN238' has many to very many lobes whereas 'PB1CN231' has a few lobes and those of 'PPS01-140 B-Line' and '5440' have a medium number of lobes. The leaf of 'PB7CN238' is narrower than that of '5440'. 'PB7CN238' has a shorter petiole than that of 'PPS01-140 B-Line' and '5440'. 'PB7CN238' flowers earlier than '5440'. The petal of 'PB7CN238' is wider than that of 'PB1CN231'. The silique attitude of 'PB7CN238' is horizontal whereas the silique attitude is erect for 'PB1CN231'. The silique of 'PB7CN238' is longer than the reference varieties. The silique of 'PB7CN238' has a longer beak than that of 'PPS01-140 B-Line'. 'PB7CN238' matures earlier than 'PB1CN231' and '5440'. The seed coat of 'PB7CN238' is black whereas it is brown for 'PB1CN231'.*

**Description:**

PLANT: male fertile inbred line, spring type, medium to tall at maturity

COTYLEDON: medium to long, wide

LEAF: medium green, many to very many lobes, rounded to sharp margin, medium to dense density of medium depth margin indentations, medium length, narrow to medium width, very short to short petiole

FLOWER PETAL: yellow, medium length and width

SILIQUE: horizontal attitude, medium length, short to medium length beak, short pedicel

SEED COAT: black

AGRONOMIC CHARACTERISTICS: medium resistance to lodging, good resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 46.3% of whole dried seed, protein is 46.6% of dried oil free meal, medium concentration of glucosinolates (15.6 µmol/g)

HERBICIDE REACTION: susceptible to glufosinate ammonium herbicides

DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and Clubroot (*Plasmodiophora brassicae*)

**Origin and Breeding:** 'PB7CN238' is the male fertile maintainer line of 'PA7CN138'. It is a non-transgenic double haploid line, which was extracted in 2011, from a cross conducted at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2010. 'PB7CN238' was selected in 2017 on the basis of per se performance, height, vigour, maturity, blackleg resistance, clubroot resistance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content.

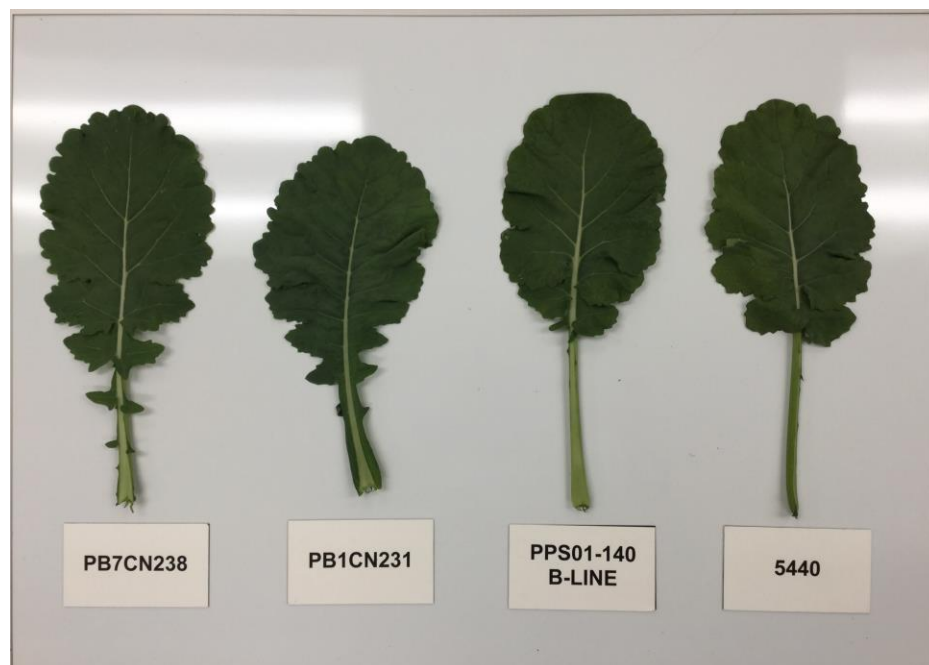
**Tests and Trials:** The comparative trials for 'PB7CN238' were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.



Comparison table for 'PB7CN238'

	'PB7CN238'	'PB1CN231'*	'PPS01-140 B-Line'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	13.8	14.6	13.8	16.2
std. deviation	0.8	1.3	1.3	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	28.0	24.8	25.4	30.4
std. deviation	1.7	1.8	2.4	2.5
<i>Leaf width (cm)</i>				
mean (LSD=1.2)	9.7	10.2	9.5	10.9
std. deviation	0.8	0.9	1.0	1.5
<i>Petiole length (cm)</i>				
mean (LSD=1.6)	7.0	7.7	10.1	10.0
std. deviation	1.8	2.0	1.7	1.7
<i>Days to flowering</i>				
mean	39	40	41	42
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	7.7	6.7	7.4	7.2
std. deviation	0.5	0.5	0.6	0.6
<i>Silique length (mm)</i>				
mean (LSD=6.0)	63.5	48.8	57.2	54.5
std. deviation	5.8	3.6	3.5	3.5
<i>Beak length (mm)</i>				
mean (LSD=2.0)	9.8	8.3	6.9	8.4
std. deviation	1.7	1.5	2.3	2.0
<i>Days to maturity</i>				
mean	88	93	91	93

\*reference varieties



Canola: 'PB7CN238' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

**Proposed denomination:** 'PB8CN249'  
**Application number:** 19-9962  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PB1CN231', 'PPS01-140 B-Line' and '5440'

**Summary:** *The cotyledon of 'PB8CN249' is wider and longer than that of 'PPS01-140 B-Line' whereas it is longer than that of 'PB1CN231'. The leaf of 'PB8CN249' has a sharp margin whereas the leaf of the reference varieties has a rounded margin. 'PB8CN249' has a longer petiole than that of 'PB1CN231'. The petal of 'PB8CN249' is longer than that of 'PB1CN231' and wider than the reference varieties. The silique of 'PB8CN249' is longer than that of the reference varieties. 'PB8CN249' has a longer silique beak than that of 'PPS01-140 B-Line'. The pedicel of 'PB8CN249' is longer than that of 'PB1CN231'. 'PB8CN249' matures later than 'PPS01-140 B-Line'. At maturity, the plant of 'PB8CN249' is taller than that of 'PB1CN231'. The seed coat of 'PB8CN249' is brown whereas it is black for 'PPS01-140 B-Line' and '5440'.*

**Description:**

PLANT: male fertile inbred line, spring type, tall at maturity

COTYLEDON: medium to long, wide to very wide

LEAF: medium green, many lobes, sharp margin, medium density of medium to deep margin indentations, medium to long, medium width, short to medium petiole

FLOWER PETAL: yellow, medium length and width

SILIQUE: horizontal to semi-drooping attitude, long to very long, short beak and pedicel

SEED COAT: brown

AGRONOMIC CHARACTERISTICS: medium resistance to lodging, good resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 48.6% of whole dried seed, protein is 44.2% of dried oil free meal, low concentration of glucosinolates (13.8 µmol/g)

HERBICIDE REACTION: susceptible to glufosinate ammonium herbicides

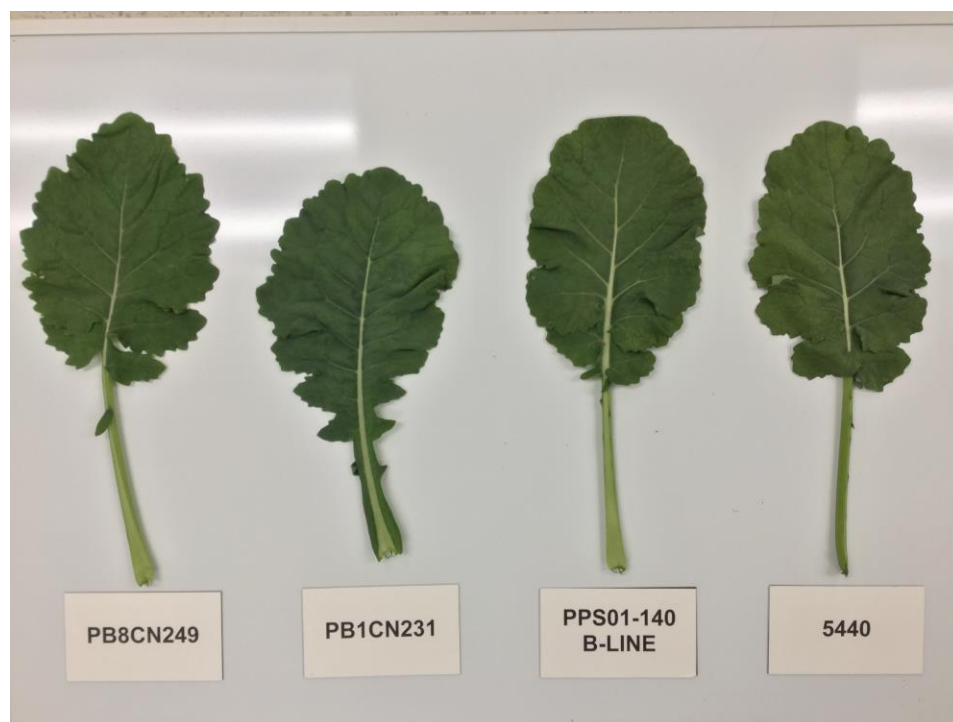
DISEASE REACTION: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*)

**Origin and Breeding:** 'PB8CN249' is the male fertile maintainer line of 'PA8CN149'. It is a non-transgenic double haploid line, which was extracted in 2010, from a cross conducted at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2009. 'PB8CN249' was selected in 2018 on the basis of per se performance, height, vigour, maturity, blackleg resistance, clubroot resistance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content.

**Tests and Trials:** The comparative trials for 'PB8CN249' were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

Comparison table for 'PB8CN249'

	'PB8CN249'	'PB1CN231'**	'PPS01-140 B-Line**	'5440**
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	15.4	14.6	13.8	16.2
std. deviation	1.0	1.3	1.3	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	28.6	24.8	25.4	30.4
std. deviation	2.0	1.8	2.4	2.5
<i>Petiole length (cm)</i>				
mean (LSD=1.6)	9.4	7.7	10.1	10.0
std. deviation	1.8	2.0	1.7	1.7
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	17.3	14.3	14.7	14.9
std. deviation	0.8	0.7	0.7	1.4
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	8.1	6.7	7.4	7.2
std. deviation	0.6	0.5	0.6	0.6
<i>Siliqua length (mm)</i>				
mean (LSD=6.0)	73.3	48.8	57.2	54.5
std. deviation	4.5	3.6	3.5	3.5
<i>Beak length (mm)</i>				
mean (LSD=2.0)	9.3	8.3	6.9	8.4
std. deviation	1.4	1.5	2.3	2.0
<i>Pediceal length (mm)</i>				
mean (LSD=2.3)	18.5	15.7	16.4	16.2
std. deviation	2.4	2.9	3.0	2.9
<i>Days to maturity</i>				
mean	94	93	91	93
<i>Plant height at maturity (cm)</i>				
mean (LSD=7.8)	136	128	130	137
std. deviation	6	8	8	5
*reference varieties				



Canola: 'PB8CN249' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

**Proposed denomination:** 'PB8CN252'  
**Application number:** 19-9963  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PB1CN231', 'PPS01-140 B-Line' and '5440'

**Summary:** *The cotyledon of 'PB8CN252' is wider and longer than that of 'PPS01-140 B-Line' and wider than that of 'PB1CN231'. The leaf of 'PB8CN252' has a few lobes whereas the leaf of 'PPS01-140 B-Line' and '5440' have a medium number of lobes. 'PB8CN252' has a shorter petiole than that of 'PPS01-140 B-Line' and '5440'. 'PB8CN252' flowers later than 'PB1CN231'. 'PB8CN252' has a shorter silique than that of 'PPS01-140 B-Line'. 'PB8CN252' matures later than 'PPS01-140 B-Line'. The seed coat of 'PB8CN252' is black whereas it is brown for 'PB1CN231'.*

**Description:**

PLANT: male fertile inbred line, spring type, medium to tall at maturity

COTYLEDON: medium to long, wide

LEAF: medium to dark green, few lobes, rounded margin, medium density of shallow to medium depth margin indentations, short to medium length, narrow to medium width, short petiole

FLOWER PETAL: yellow, medium length and width

SILIQUE: semi-erect attitude, very short to short, short beak, short pedicel  
SEED COAT: black

AGRONOMIC CHARACTERISTICS: medium resistance to lodging, fair resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 52.0% of whole dried seed, protein is 43.8% of dried oil free meal, low concentration of glucosinolates (10.8  $\mu\text{mol/g}$ )

HERBICIDE REACTION: susceptible to glufosinate ammonium herbicides

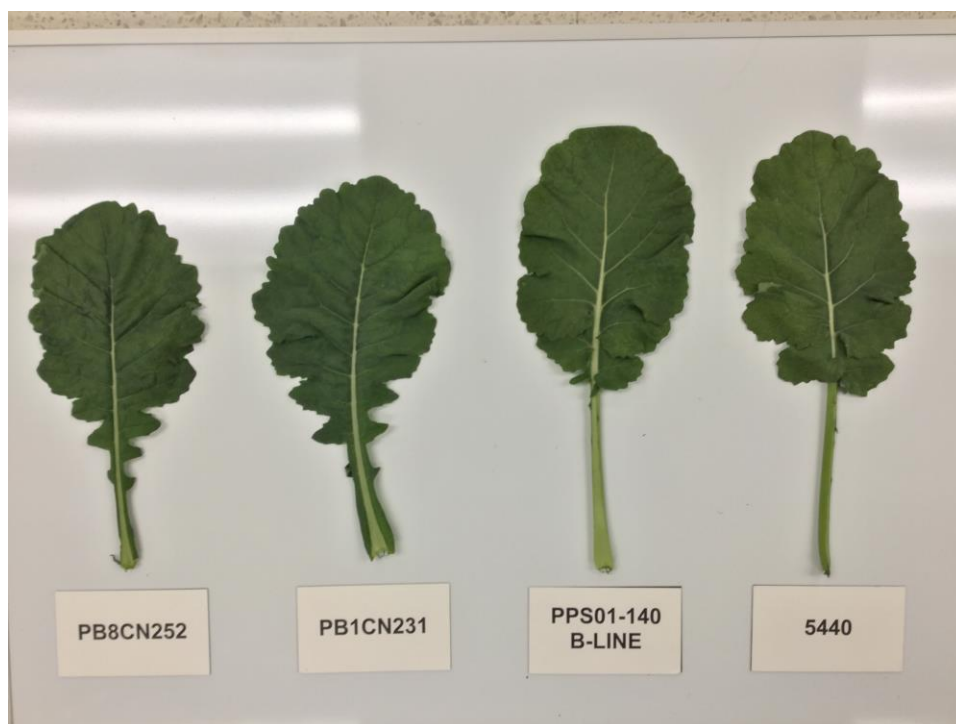
DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and Clubroot (*Plasmodiophora brassicae*)

**Origin and Breeding:** 'PB8CN252' is the male fertile maintainer line of 'PA8CN152'. It is a non-transgenic selected line which was derived by crossing an inbred line to a donor line, which was then crossed to a recurring parent in a backcrossing scheme. The initial cross was made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2012. 'PB8CN252' was selected in 2017 on the basis of per se performance, vigour, maturity, blackleg resistance, clubroot resistance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content.

**Tests and Trials:** The comparative trials for 'PB8CN252' were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for 'PB8CN252'**

	'PB8CN252'	'PB1CN231**	'PPS01-140 B-Line**	'5440**
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	15.0	14.6	13.8	16.2
std. deviation	1.2	1.3	1.3	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	28.4	24.8	25.4	30.4
std. deviation	1.7	1.8	2.4	2.5
<i>Petiole length (cm)</i>				
mean (LSD=1.6)	7.5	7.7	10.1	10.0
std. deviation	1.5	2.0	1.7	1.7
<i>Days to flowering</i>				
mean	42	40	41	42
<i>Silique length (mm)</i>				
mean (LSD=6.0)	49.4	48.8	57.2	54.5
std. deviation	2.6	3.6	3.5	3.5
<i>Days to maturity</i>				
mean	96	93	91	93
*reference varieties				



Canola: 'PB8CN252' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

**Proposed denomination:** 'PR7CN681'  
**Application number:** 19-9964  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PPS02-364', 'PPS04-205' and '5440'

**Summary:** *The cotyledon of 'PR7CN681' is longer than that of 'PPS04-205' and narrower than that of '5440'. The leaf of 'PR7CN681' has a rounded margin with very shallow to shallow indentations whereas the leaf of 'PPS02-364' has a sharp margin with indentations of medium depth. 'PR7CN681' has a shorter siliqua beak than that of 'PPS02-364'. 'PR7CN681' matures earlier than 'PPS02-364'. At maturity, the plant of 'PR7CN681' is shorter than that of '5440'. The seed coat of 'PR7CN681' is brown whereas it is black for the reference varieties.*

**Description:**

PLANT: male fertile inbred line, spring type, medium height at maturity

COTYLEDON: medium to long, medium width

LEAF: medium green, medium number to many lobes, rounded margin, low density of very shallow to shallow margin indentations, medium length and width, short petiole

FLOWER PETAL: yellow, medium length and width

SILIQUA: horizontal attitude, short, short to medium length beak, short pedicel

SEED COAT: brown

AGRONOMIC CHARACTERISTICS: good resistance to lodging and shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 51.5% of whole dried seed, protein is 42.4% of dried oil free meal, very low concentration of glucosinolates (8.4 µmol/g)

HERBICIDE REACTION: resistant to glufosinate ammonium herbicides

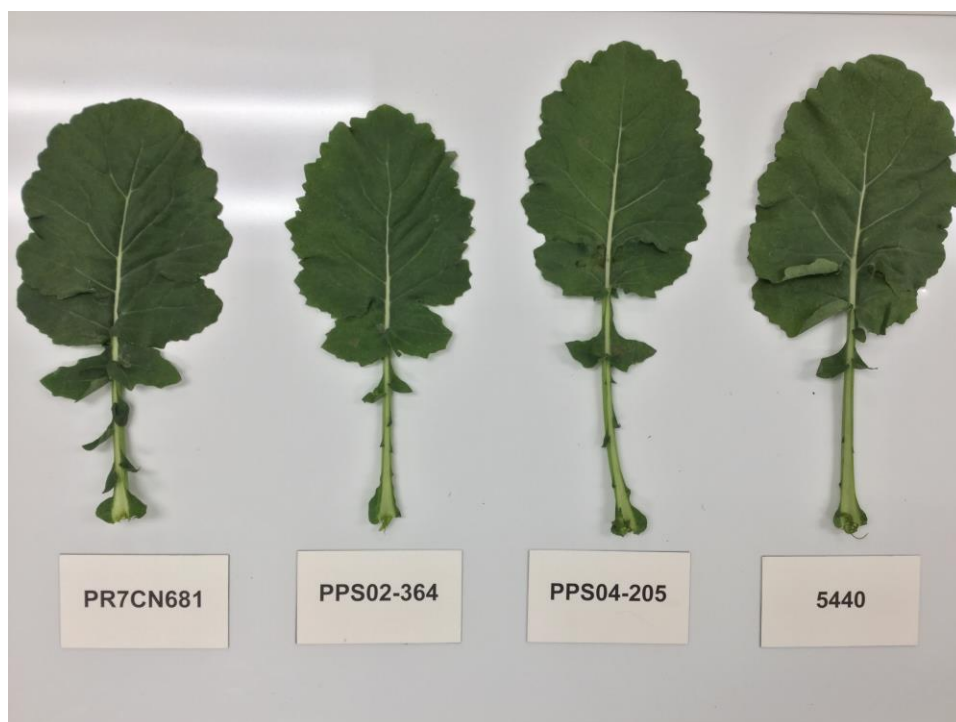
DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*)

**Origin and Breeding:** 'PR7CN681' is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross was made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2013 and the subsequent double haploid line extraction was made in 2014. 'PR7CN681' was selected in 2017 on the basis of fertility restoration of numerous male sterile lines and expression of tolerance to glufosinate-ammonium herbicide. Other selection parameters included height, vigour, maturity, blackleg resistance, seed pod shattering resistance, oil content, fatty acid profile, glucosinolate content and combining ability.

**Tests and Trials:** The comparative trials for 'PR7CN681' were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for 'PR7CN681'**

	'PR7CN681'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	14.4	13.0	12.7	14.7
std. deviation	0.9	1.6	1.1	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.0)	23.2	23.2	24.2	27.7
std. deviation	1.4	2.2	2.2	2.2
<i>Beak length (mm)</i>				
mean (LSD=1.8)	9.6	11.1	9.8	9.4
std. deviation	1.4	1.6	1.7	1.8
<i>Days to maturity</i>				
mean	95	99	99	95
<i>Plant height at maturity (cm)</i>				
mean (LSD=5.4)	121	126	121	133
std. deviation	9	4	6	7
*reference varieties				



Canola: 'PR7CN681' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

**Proposed denomination:** 'PR8CN736'  
**Application number:** 19-9965  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PPS02-364', 'PPS04-205' and '5440'

**Summary:** *The cotyledon of 'PR8CN736' is narrower than that of '5440'. The leaf of 'PR8CN736' has a rounded margin whereas the leaf of 'PPS02-364' has a sharp margin. The petiole of 'PR8CN736' are longer than that of 'PPS02-364'. 'PR8CN736' flowers later than 'PPS02-364' and '5440'. The petal of 'PR8CN736' is shorter than that of 'PPS02-364'. The silique of 'PR8CN736' is shorter than that of 'PPS02-364' and '5440'. 'PR8CN736' has a shorter beak than that of 'PPS02-364'. 'PR8CN736' matures later than '5440'. At maturity, the plant of 'PR8CN736' is taller than that of 'PPS04-205'.*

**Description:**

PLANT: male fertile inbred line, spring type, medium to tall at maturity

COTYLEDON: medium length and width

LEAF: medium green, medium number of lobes, rounded margin, medium density of medium depth margin indentations, medium to long, narrow to medium width, short to medium length petiole

FLOWER PETAL: yellow, medium length and width



SILIQUE: horizontal attitude, very short, short beak, very short to short pedicel  
SEED COAT: black

AGRONOMIC CHARACTERISTICS: medium to good resistance to lodging, good resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.01% of total fatty acids, oil content is 50.0% of whole dried seed, protein is 42.7% of dried oil free meal, low concentration of glucosinolates (8.9  $\mu\text{mol/g}$ )

HERBICIDE REACTION: resistant to glufosinate ammonium herbicides

DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*)

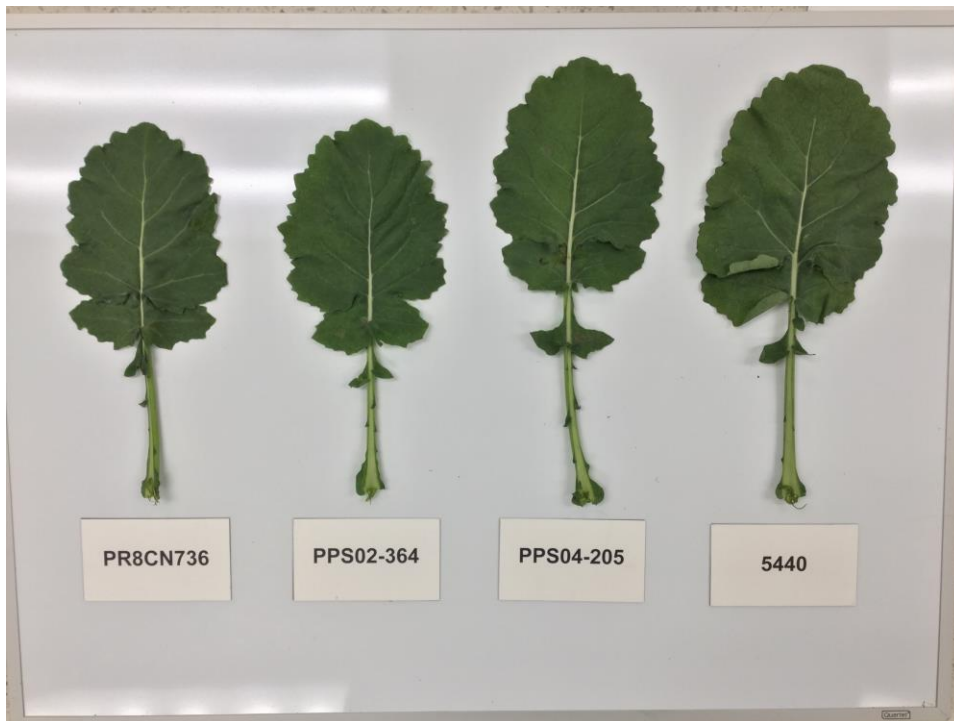
**Origin and Breeding:** 'PR8CN736' is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross was made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2013 and the subsequent double haploid line extraction was made in 2014. 'PR8CN736' was selected in 2017 on the basis of fertility restoration of numerous male sterile lines and expression of tolerance to glufosinate-ammonium herbicide. Other selection parameters included height, vigour, maturity, blackleg resistance, seed pod shatter resistance, oil content, fatty acid profile, glucosinolate content and combining ability.

**Tests and Trials:** The comparative trials for 'PR8CN736' were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for 'PR8CN736'**

	'PR8CN736'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.0)	23.0	23.2	24.2	27.7
std. deviation	1.6	2.2	2.2	2.2
<i>Petiole length (cm)</i>				
mean (LSD=1.7)	9.4	6.5	8.9	8.9
std. deviation	1.7	1.7	1.8	1.7
<i>Days to flowering</i>				
mean	44	41	43	42
<i>Flower petal length (mm)</i>				
mean (LSD=1.0)	14.6	16.1	14.5	15.5
std. deviation	0.7	0.8	0.7	0.9
<i>Silique length (mm)</i>				
mean (LSD=4.8)	47.6	55.3	50.9	55.9
std. deviation	2.9	4.4	4.1	5.0
<i>Beak length (mm)</i>				
mean (LSD=1.8)	8.8	11.1	9.8	9.4
std. deviation	1.4	1.6	1.7	1.8
<i>Days to maturity</i>				
mean	100	99	99	95
<i>Plant height at maturity (cm)</i>				
mean (LSD=5.4)	131	126	121	133
std. deviation	5	4	6	7

\*reference varieties



Canola: 'PR8CN736' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

**Proposed denomination:** 'PR8CN738'  
**Application number:** 19-9966  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PPS02-364', 'PPS04-205' and '5440'

**Summary:** *The cotyledon of 'PR8CN738' is narrower and shorter than that of '5440'. The leaf of 'PR8CN738' has a rounded margin whereas the leaf of 'PPS02-364' has a sharp margin. 'PR8CN738' has a shorter petiole than that of 'PPS04-205' and '5440'. 'PR8CN738' flowers earlier than 'PPS04-205'. The petal of 'PR8CN738' is wider than that of 'PPS02-364'. 'PR8CN738' has a longer silique than that of 'PPS04-205' and a longer pedicel than the reference varieties. 'PR8CN738' matures earlier than the reference varieties. At maturity, the plant of 'PR8CN738' is shorter than that of '5440'.*

**Description:**

PLANT: male fertile inbred line, spring type, medium height at maturity

COTYLEDON: medium length and width

LEAF: medium green, medium number of lobes, rounded margin, low to medium density of shallow margin indentations, short to medium length, narrow to medium width, very short to short petiole

FLOWER PETAL: yellow, medium length and width

SILIQUE: horizontal attitude, short to medium length, short to medium length beak, short to medium length pedicel  
SEED COAT: black

AGRONOMIC CHARACTERISTICS: medium to good resistance to lodging, good resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 49.6% of whole dried seed, protein is 46.1% of dried oil free meal, low concentration of glucosinolates (10.4  $\mu\text{mol/g}$ )

HERBICIDE REACTION: resistant to glufosinate ammonium herbicides

DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*)

**Origin and Breeding:** ‘PR8CN738’ is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross and subsequent double haploid line extraction were made in 2014 at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada. ‘PR8CN738’ was selected in 2017 on the basis of fertility restoration of numerous male sterile lines and expression of tolerance to glufosinate-ammonium herbicide. Other selection parameters included height, vigour, maturity, blackleg resistance, seed pod shatter resistance, oil content, fatty acid profile, glucosinolate content and combining ability.

**Tests and Trials:** The comparative trials for ‘PR8CN738’ were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

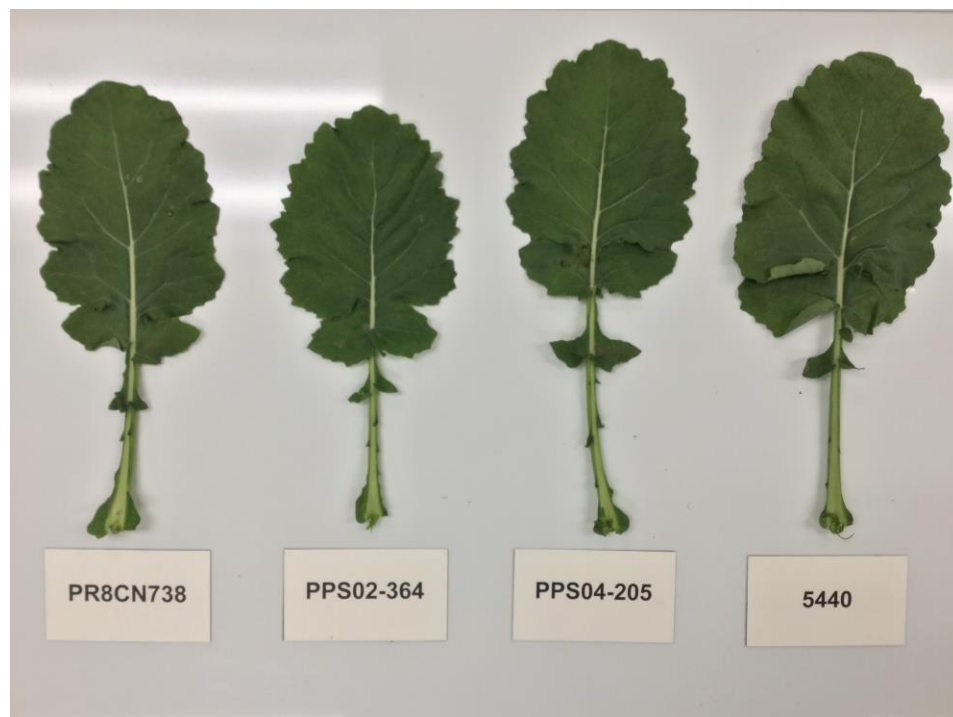
**Comparison table for ‘PR8CN738’**

	‘PR8CN738’	‘PPS02-364’*	‘PPS04-205’*	‘5440’*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	12.5	13.0	12.7	14.7
std. deviation	1.3	1.6	1.1	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.0)	24.0	23.2	24.2	27.7
std. deviation	2.3	2.2	2.2	2.2
<i>Petiole length (cm)</i>				
mean (LSD=1.7)	7.0	6.5	8.9	8.9
std. deviation	1.8	1.7	1.8	1.7
<i>Days to flowering</i>				
mean	41	41	43	42
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	7.5	6.6	7.6	7.5
std. deviation	0.6	0.7	0.6	0.7
<i>Silique length (mm)</i>				
mean (LSD=4.8)	58.1	55.3	50.9	55.9
std. deviation	4.3	4.4	4.1	5.0
<i>Pedicel length (mm)</i>				
mean (LSD=3.0)	22.4	16.0	16.4	18.2
std. deviation	2.8	1.9	2.4	2.8
<i>Days to maturity</i>				
mean	93	99	99	95

*Plant height at maturity (cm)*

mean (LSD=5.4)	121	126	121	133
std. deviation	6	4	6	7

\*reference varieties



Canola: 'PR8CN738' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

**Proposed denomination:** 'PR8CN741'

**Application number:** 19-9967

**Application date:** 2019/07/03

**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America

**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan

**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PPS02-364', 'PPS04-205' and '5440'

**Summary:** *The cotyledon of 'PR8CN741' is wider than that of 'PPS02-364'. The petal of 'PR8CN741' is longer than that of 'PPS04-205'. The silique of 'PR8CN741' is longer than that of 'PPS04-205'. 'PR8CN741' matures earlier than that of 'PPS02-364' and 'PPS04-205'. At maturity, the plant of 'PR8CN741' is shorter than that of '5440'.*

**Description:**

PLANT: male fertile inbred line, spring type, medium height at maturity

COTYLEDON: medium length, medium to wide

LEAF: medium green, medium number of lobes, rounded to sharp margin, medium density of medium to deep margin indentations, medium length, narrow to medium width, short petiole

FLOWER PETAL: yellow, medium length and width

SILIQUE: horizontal attitude, short to medium length, short to medium length beak, short pedicel

SEED COAT: black

AGRONOMIC CHARACTERISTICS: medium resistance to lodging, good resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 48.3% of whole dried seed, protein is 46.1% of dried oil free meal, low concentration of glucosinolates (10.8  $\mu\text{mol/g}$ )

HERBICIDE REACTION: resistant to glufosinate ammonium herbicides

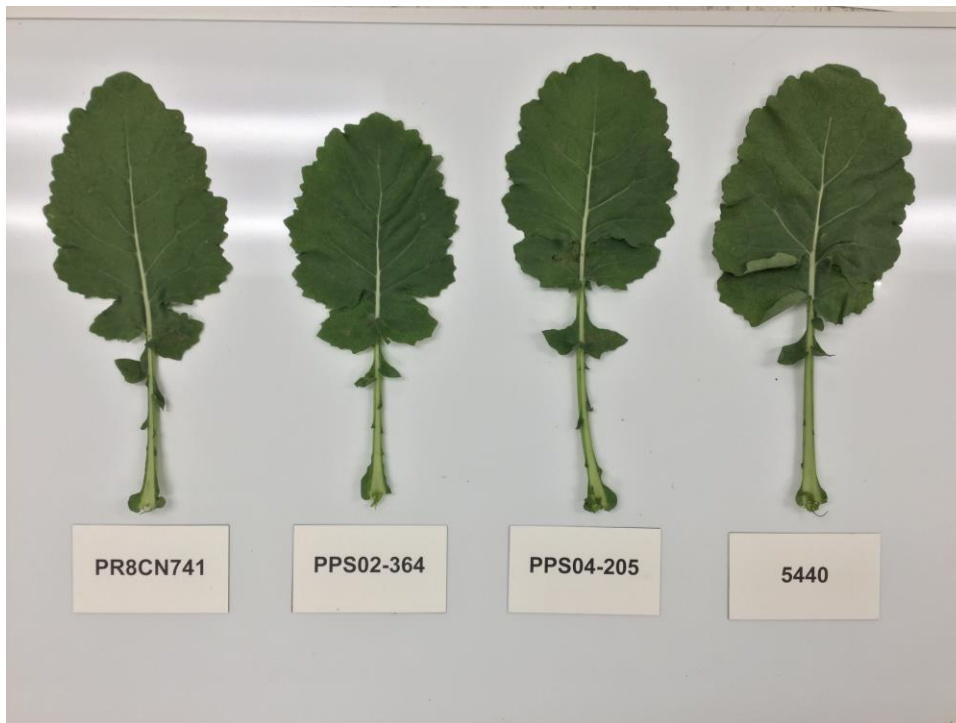
DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*)

**Origin and Breeding:** 'PR8CN741' is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross and subsequent double haploid line extraction were made in 2016 at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada. 'PR8CN741' was selected in 2017 on the basis of fertility restoration of numerous male sterile lines and expression of tolerance to glufosinate-ammonium herbicide. Other selection parameters included height, vigour, maturity, blackleg resistance, seed pod shatter resistance, oil content, fatty acid profile, glucosinolate content and combining ability.

**Tests and Trials:** The comparative trials for 'PR8CN741' were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for 'PR8CN741'**

	'PR8CN741'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.0)	26.3	23.2	24.2	27.7
std. deviation	2.1	2.2	2.2	2.2
<i>Flower petal length (mm)</i>				
mean (LSD=1.0)	15.6	16.1	14.5	15.5
std. deviation	0.8	0.8	0.7	0.9
<i>Silique length (mm)</i>				
mean (LSD=4.8)	58.0	55.3	50.9	55.9
std. deviation	4.4	4.4	4.1	5.0
<i>Days to maturity</i>				
mean	94	99	99	95
<i>Plant height at maturity (cm)</i>				
mean (LSD=5.4)	122	126	121	133
std. deviation	5	4	6	7
*reference varieties				



Canola: 'PR8CN741' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

**Proposed denomination:** 'PR8CN745'  
**Application number:** 19-9968  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PPS02-364', 'PPS04-205' and '5440'

**Summary:** *The cotyledon of 'PR8CN745' is wider than that of 'PPS02-364' and 'PPS04-205' and it is longer than that of all reference varieties. The leaf of 'PR8CN745' has a rounded margin whereas the leaf of 'PPS02-364' has a sharp margin. The petiole of 'PR8CN745' is longer than that of 'PPS02-364'. The petal of 'PR8CN745' is shorter than that of 'PPS02-364'. The silique of 'PR8CN745' is longer than the reference varieties. 'PR8CN745' matures earlier than that of 'PPS02-364'. At maturity, the plant of 'PR8CN745' is taller than that of 'PPS04-205'.*

**Description:**

PLANT: male fertile inbred line, spring type, medium to tall at maturity

COTYLEDON: long to very long, wide to very wide

LEAF: medium green, many to very many lobes, rounded margin, low to medium density of shallow to medium depth margin indentations, medium length and width, short petiole

FLOWER PETAL: yellow, medium length and width

SILIQUE: horizontal attitude, medium length, short to medium length beak, short pedicel  
SEED COAT: black

AGRONOMIC CHARACTERISTICS: medium resistance to lodging, medium to good resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 51.6% of whole dried seed, protein is 48.0% of dried oil free meal, low concentration of glucosinolates (11.8 µmol/g)

HERBICIDE REACTION: resistant to glufosinate ammonium herbicides

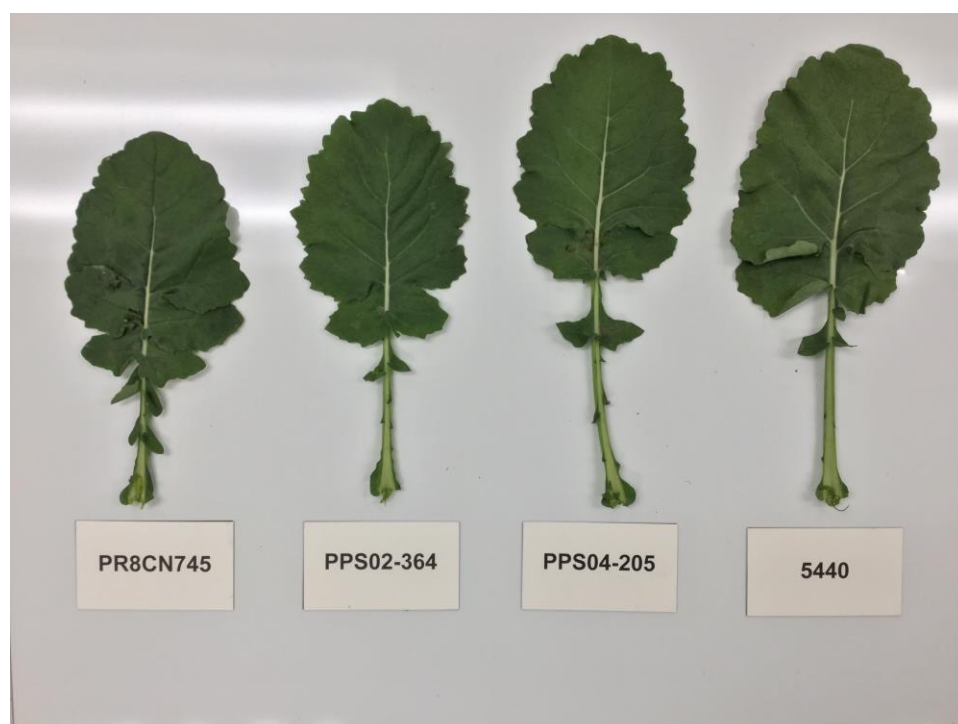
DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and Clubroot (*Plasmodiophora brassicae*)

**Origin and Breeding:** ‘PR8CN745’ is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross was made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2015 and the subsequent double haploid line extraction was made in 2016. ‘PR8CN745’ was selected in 2017 on the basis of fertility restoration of numerous male sterile lines and expression of tolerance to glufosinate-ammonium herbicide. Other selection parameters included height, vigour, maturity, blackleg resistance, clubroot resistance, seed pod shatter resistance, oil content, fatty acid profile, glucosinolate content and combining ability.

**Tests and Trials:** The comparative trials for ‘PR8CN745’ were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for ‘PR8CN745’**

	‘PR8CN745’	‘PPS02-364’**	‘PPS04-205’**	‘5440’**
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	17.5	13.0	12.7	14.7
std. deviation	1.0	1.6	1.1	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.0)	28.5	23.2	24.2	27.7
std. deviation	1.9	2.2	2.2	2.2
<i>Petiole length (cm)</i>				
mean (LSD=1.7)	8.2	6.5	8.9	8.9
std. deviation	1.7	1.7	1.8	1.7
<i>Flower petal length (mm)</i>				
mean (LSD=1.0)	13.8	16.1	14.5	15.5
std. deviation	1.0	0.8	0.7	0.9
<i>Silique length (mm)</i>				
mean (LSD=4.8)	60.9	55.3	50.9	55.9
std. deviation	4.5	4.4	4.1	5.0
<i>Days to maturity</i>				
mean	96	99	99	95
<i>Plant height at maturity (cm)</i>				
mean (LSD=5.4)	129	126	121	133
std. deviation	7	4	6	7
*reference varieties				



Canola: 'PR8CN745' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

**Proposed denomination:** 'PR8CN747'  
**Application number:** 19-9969  
**Application date:** 2019/07/03  
**Applicant:** BASF Agricultural Solutions Seed US LLC, Florham Park, New Jersey, United States of America  
**Agent in Canada:** BASF Canada Inc., Saskatoon, Saskatchewan  
**Breeder:** Jeffrey Mansiere, BASF Canada Inc., Saskatoon, Saskatchewan

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

**Varieties used for comparison:** 'PPS02-364', 'PPS04-205' and '5440'

**Summary:** *The cotyledon of 'PR8CN747' is longer than that of 'PPS04-205' and narrower than that of '5440'. The leaf of 'PR8CN747' has a rounded margin whereas the leaf of 'PPS02-364' has a sharp margin. The petiole of 'PR8CN747' is longer than that of 'PPS02-364'. The petal of 'PR8CN747' is shorter than that of 'PPS02-364' and '5440'. The silique of 'PR8CN747' is longer than that of 'PPS04-205'. 'PR8CN747' matures later than that of '5440'. At maturity, the plant of 'PR8CN747' is taller than that of 'PPS02-364' and 'PPS04-205'. The seed coat of 'PR8CN747' is brown whereas it is black for the reference varieties.*

**Description:**

PLANT: male fertile inbred line, spring type, medium to tall at maturity

COTYLEDON: medium to long, medium to wide

LEAF: medium green, medium number to many lobes, rounded margin, medium density of shallow to medium depth margin indentations, medium length, narrow to medium width, short to medium length petiole

FLOWER PETAL: yellow, medium length and width



SILIQUE: horizontal attitude, short to medium length, short to medium length beak, short pedicel  
SEED COAT: brown

AGRONOMIC CHARACTERISTICS: medium resistance to lodging, medium to good resistance to shattering

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 49.9% of whole dried seed, protein is 44.3% of dried oil free meal, low concentration of glucosinolates (10.1  $\mu\text{mol/g}$ )

HERBICIDE REACTION: resistant to glufosinate ammonium herbicides

DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*)

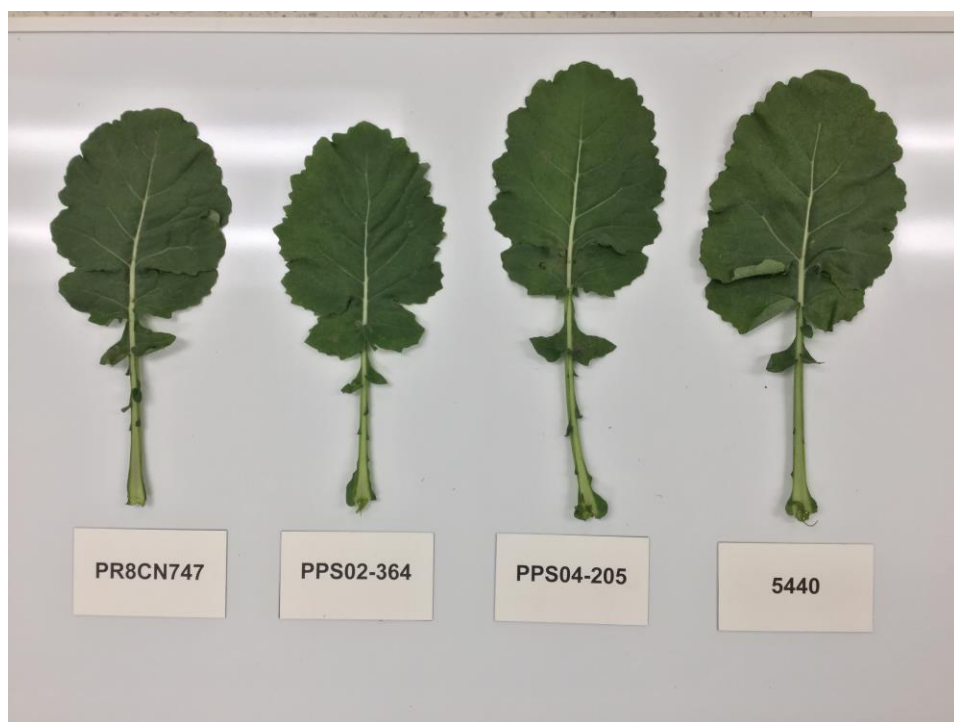
**Origin and Breeding:** ‘PR8CN747’ is a restorer line in the process of F1 hybrid production. It was derived by crossing an inbred line containing the Rf3 gene in a homozygous state to a donor line, which was then crossed to a recurring parent in a backcrossing scheme. The initial cross was made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2012. ‘PR8CN747’ was selected in 2017 on the basis of fertility restoration of numerous male sterile lines and expression of tolerance to glufosinate-ammonium herbicide. Other selection parameters included height, vigour, maturity, blackleg resistance, seed pod shatter resistance, oil content, fatty acid profile, glucosinolate content and combining ability.

**Tests and Trials:** The comparative trials for ‘PR8CN747’ were conducted during the 2018 and 2019 growing seasons in Saskatoon, Saskatchewan. They were set up in a RCB Design with 3 replications per variety. Each year, the plots consisted of 3 rows that were 6 metres in length with a spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in a total of approximately 1300 plants per variety. The measured characteristics were based on 30 measurements of the cotyledon, leaf, flower and plant height and 60 measurements of the silique. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

**Comparison table for ‘PR8CN747’**

	‘PR8CN747’	‘PPS02-364’*	‘PPS04-205’*	‘5440’*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	14.7	13.0	12.7	14.7
std. deviation	1.4	1.6	1.1	1.2
<i>Cotyledon width (mm)</i>				
mean (LSD=1.0)	24.9	23.2	24.2	27.7
std. deviation	2.3	2.2	2.2	2.2
<i>Petiole length (cm)</i>				
mean (LSD=1.7)	8.9	6.5	8.9	8.9
std. deviation	1.5	1.7	1.8	1.7
<i>Flower petal length (mm)</i>				
mean (LSD=1.0)	14.2	16.1	14.5	15.5
std. deviation	0.8	0.8	0.7	0.9
<i>Silique length (mm)</i>				
mean (LSD=4.8)	57.9	55.3	50.9	55.9
std. deviation	4.6	4.4	4.1	5.0
<i>Days to maturity</i>				
mean	100	99	99	95
<i>Plant height at maturity (cm)</i>				
mean (LSD=5.4)	132	126	121	133
std. deviation	6	4	6	7

\*reference varieties



Canola: 'PR8CN747' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)