



APPLICATIONS UNDER EXAMINATION

CANOLA

CANOLA (*Brassica napus*)

Proposed denomination: 'PA0CN173'
Application number: 22-11014
Application date: 2022/07/05
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 'PA0CN173' is longer than that of 'PPS01-140 A-Line' and shorter and narrower than that of '5440'. 'PA0CN173' has a shorter leaf than '5440'. The petiole of 'PA0CN173' is longer than that of 'PA1CN131' and shorter than that of '5440'. The plants of 'PA0CN173' flower later than those of 'PA1CN131'. The petal of 'PA0CN173' is shorter than that of '5440'. 'PA0CN173' has a longer silique than 'PA1CN131'. The silique beak of 'PA0CN173' is shorter than that of '5440' and longer than that of 'PPS01-140 A-Line'. 'PA0CN173' has a shorter pedicel than '5440'. At maturity, the plants of 'PA0CN173' are taller than the plants of 'PA1CN131' and shorter than those of '5440'. The seed coat of 'PA0CN173' is black whereas it is brown for 'PA1CN131'.*

Description:

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

COTYLEDON: medium length and width

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

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

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 43.0% of whole dried seed, protein is 45.9% of dried oil free meal, low concentration of glucosinolates (11.6 µmol/g)

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

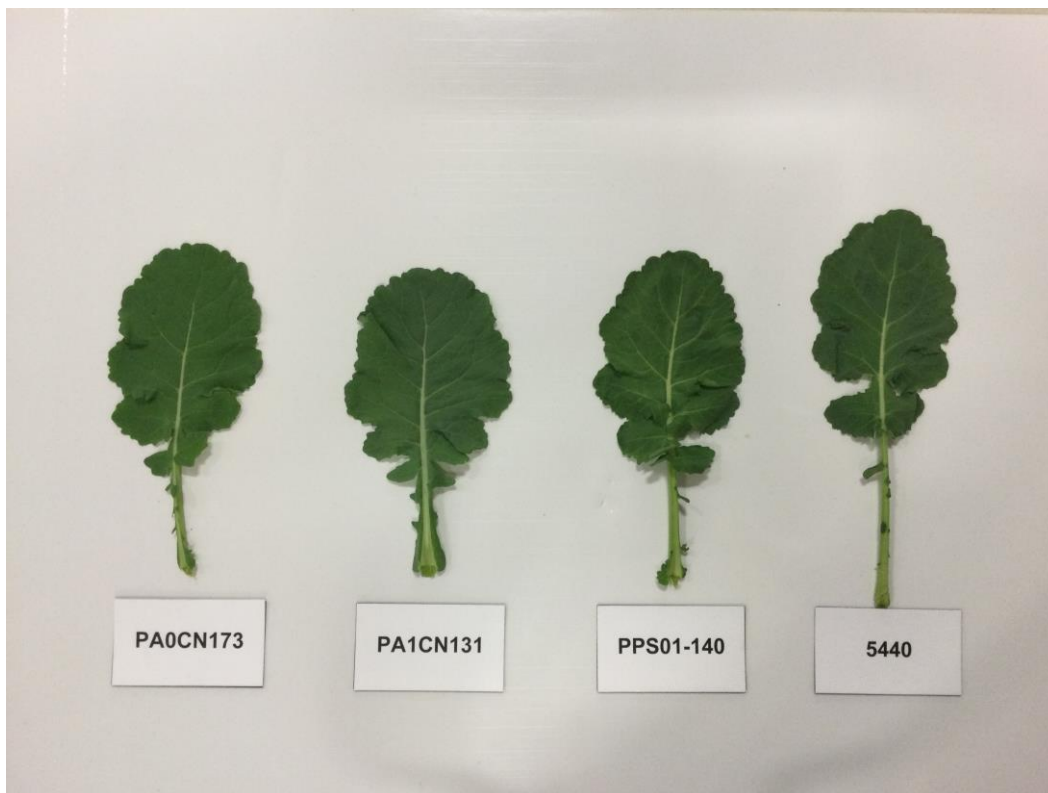
Origin and Breeding: 'PA0CN173' is a male sterile line which contains the Ms8 gene construct in the heterozygous state. It was derived by backcrossing a double haploid line to a male sterile line used as the source of the Ms8 gene. The double haploid line was extracted from the F1 generation derived from a cross made in 2014 in Saskatoon, Saskatchewan, Canada and was produced in 2015. 'PA0CN173' was selected in 2016 on the basis of male sterility stability, expression of resistance to glufosinate-ammonium herbicide and good combining ability with numerous restorer lines. Other selection parameters included height, vigour, maturity, blackleg resistance, clubroot resistance, resistance to seed pod shattering, oil content, fatty acid profile and glucosinolate content.

Tests and Trials: The comparative trials for 'PA0CN173' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PA0CN173'

	'PA0CN173'	'PA1CN131'*	'PPS01-140 A-Line'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.8)	12.0	11.4	9.6	14.3
std. deviation	1.4	1.0	1.1	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	23.1	20.1	20.5	26.3
std. deviation	1.6	1.3	2.1	1.5
<i>Leaf length (cm)</i>				
mean (LSD=3.5)	21.2	19.4	20.5	24.9
std. deviation	2.4	2.4	2.4	3.3
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	7.7	5.2	8.5	10.1
std. deviation	1.8	1.3	1.6	2.4
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	41	39	41	39
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	10.6	9.5	10.3	14.4
std. deviation	0.8	0.6	0.9	1.3
<i>Silique length (mm)</i>				
mean (LSD=4.5)	52.9	45.6	49.3	55.9
std. deviation	4.2	3.6	4.7	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	6.4	7.5	4.7	8.4
std. deviation	1.2	1.3	1.0	1.3
<i>Pediceal length (mm)</i>				
mean (LSD=1.5)	12.3	12.4	12.0	17.6
std. deviation	2.0	1.8	2.0	2.0
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	114	106	111	122
std. deviation	4	5	6	7

*reference varieties



Canola: 'PA0CN173' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

Proposed denomination: 'PA1CN183'
Application number: 22-11015
Application date: 2022/07/05
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 'PA1CN183' is shorter and narrower than that of '5440'. The leaf of 'PA1CN183' is shorter than that of '5440'. The petiole of 'PA1CN183' is shorter than those of 'PPS01-140 A-Line' and '5440'. The petal of 'PA1CN183' is shorter and narrower than that of '5440'. 'PA1CN183' has a shorter silique and pedicel than '5440'. The silique beak of 'PA1CN183' is longer than that of 'PPS01-140 A-Line'. The plants of 'PA1CN183' mature later than those of 'PPS01-140 A-Line' and '5440'. At maturity, the plants of 'PA1CN183' are shorter than the plants of '5440'. The seed coat of 'PA1CN183' is brown whereas it is black for 'PPS01-140 A-Line' and '5440'. Based on the root symptoms observed, 'PA1CN183' is resistant to Clubroot (*Plasmodiophora brassicae*) whereas the reference varieties are highly susceptible.*

Description:

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

COTYLEDON: medium length, narrow to medium width

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

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

SILIQUE: erect attitude, very short, very short to short beak, very short pedicel

SEED COAT: brown

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

QUALITY CHARACTERISTICS: erucic acid is 0.01% of total fatty acids, oil content is 45.5% of whole dried seed, protein is 47.3% of dried oil free meal, low concentration of glucosinolates (14.1 $\mu\text{mol/g}$)

DISEASE REACTIONS: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*); resistant to Clubroot (*Plasmodiophora brassicae*)

Origin and Breeding: ‘PA1CN183’ 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 conducted in Saskatoon, Saskatchewan, Canada in 2018. ‘PA1CN183’ was selected in 2019 on the basis of male sterility stability, its expression of resistance to glufosinate-ammonium herbicide and good combining ability with numerous restorer lines. Other selection parameters included vigour, maturity, blackleg resistance, clubroot resistance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

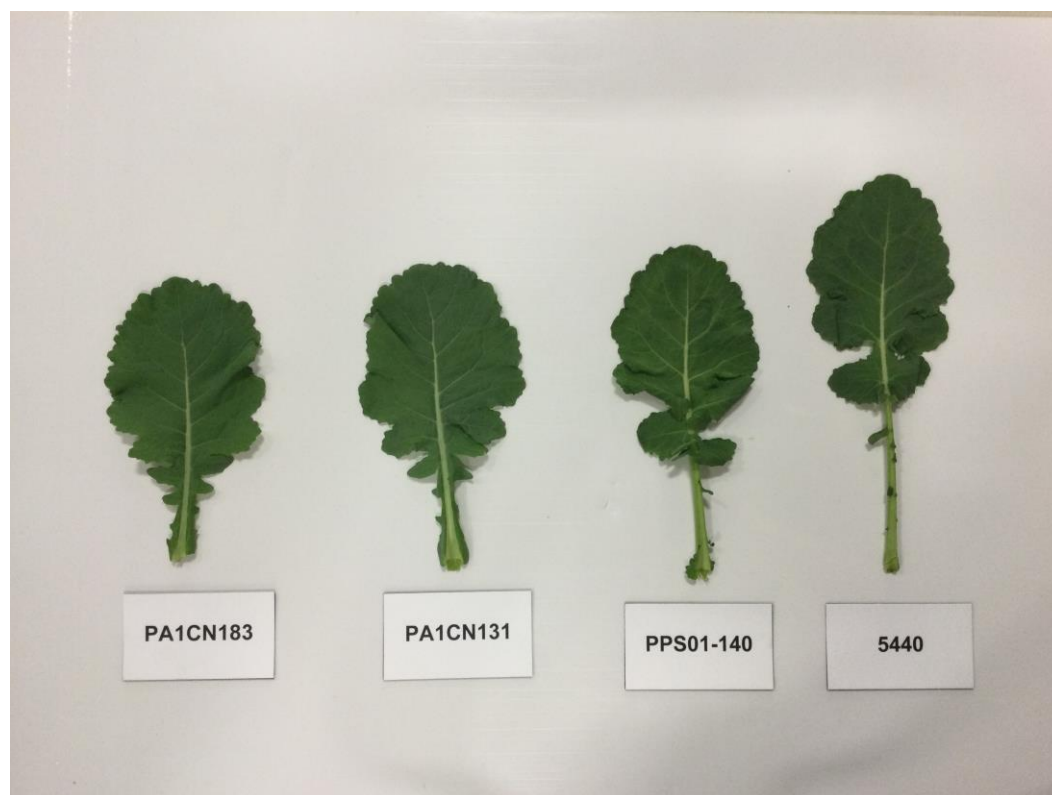
Tests and Trials: The comparative trials for ‘PA1CN183’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values. Clubroot resistance was evaluated in-house at BASF Canada Inc. in 2020 in a controlled environment using ‘PPS02-144’ and ‘PR6CN441’ as the susceptible control varieties. The Clubroot resistance assessment protocol used was developed by the University of Alberta and Nutrien Ag Solutions Canada with input from Agriculture and Agri-Food Canada and the University of Guelph.

Comparison table for ‘PA1CN183’

	‘PA1CN183’	‘PA1CN131’*	‘PPS01-140 A-Line’*	‘5440’*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.8)	12.2	11.4	9.6	14.3
std. deviation	0.8	1.0	1.1	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	20.6	20.1	20.5	26.3
std. deviation	1.5	1.3	2.1	1.5
<i>Leaf length (cm)</i>				
mean (LSD=3.5)	19.4	19.4	20.5	24.9
std. deviation	2.4	2.4	2.4	3.3
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	5.8	5.2	8.5	10.1
std. deviation	2.0	1.3	1.6	2.4
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	10.0	9.5	10.3	14.4
std. deviation	0.9	0.6	0.9	1.3
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	5.2	5.0	5.4	6.5
std. deviation	0.6	0.6	0.7	0.8

<i>Siliqua length (mm)</i>				
mean (LSD=4.5)	46.4	45.6	49.3	55.9
std. deviation	2.9	3.6	4.7	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	7.1	7.5	4.7	8.4
std. deviation	1.5	1.3	1.0	1.3
<i>Pedicle length (mm)</i>				
mean (LSD=1.5)	12.2	12.4	12.0	17.6
std. deviation	1.8	1.8	2.0	2.0
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	87	86	84	84
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	108	106	111	122
std. deviation	6	5	6	7

*reference varieties



Canola: 'PA1CN183' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

Proposed denomination: 'PA1CN184'
Application number: 22-11016
Application date: 2022/07/05
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 'PA1CN184' is longer than that of 'PPS01-140 A-Line' and shorter and narrower than that of '5440'. The leaf of 'PA1CN184' is shorter than that of '5440'. The petiole of 'PA1CN184' is shorter than those of 'PPS01-140 A-Line' and '5440'. The petal of 'PA1CN184' is shorter than that of '5440'. 'PA1CN184' has a shorter silique and pedicel than '5440'. The silique beak of 'PA1CN184' is longer than that of 'PPS01-140 A-Line'. The plants of 'PA1CN184' mature later than those of 'PPS01-140 A-Line' and '5440'. At maturity, the plants of 'PA1CN184' are shorter than the plants of '5440'. The seed coat of 'PA1CN184' is black whereas it is brown for 'PA1CN131'.

Description:

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

COTYLEDON: medium length, narrow to medium width

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

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

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 45.8% of whole dried seed, protein is 47.6% of dried oil free meal, low concentration of glucosinolates (14.1 µmol/g)

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

Origin and Breeding: 'PA1CN184' 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 conducted in Saskatoon, Saskatchewan, Canada in 2018. 'PA1CN184' was selected in 2019 on the basis of male sterility stability, its expression of resistance to glufosinate-ammonium herbicide and good combining ability with numerous restorer lines. Other selection parameters included vigour, maturity, blackleg resistance, clubroot resistance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

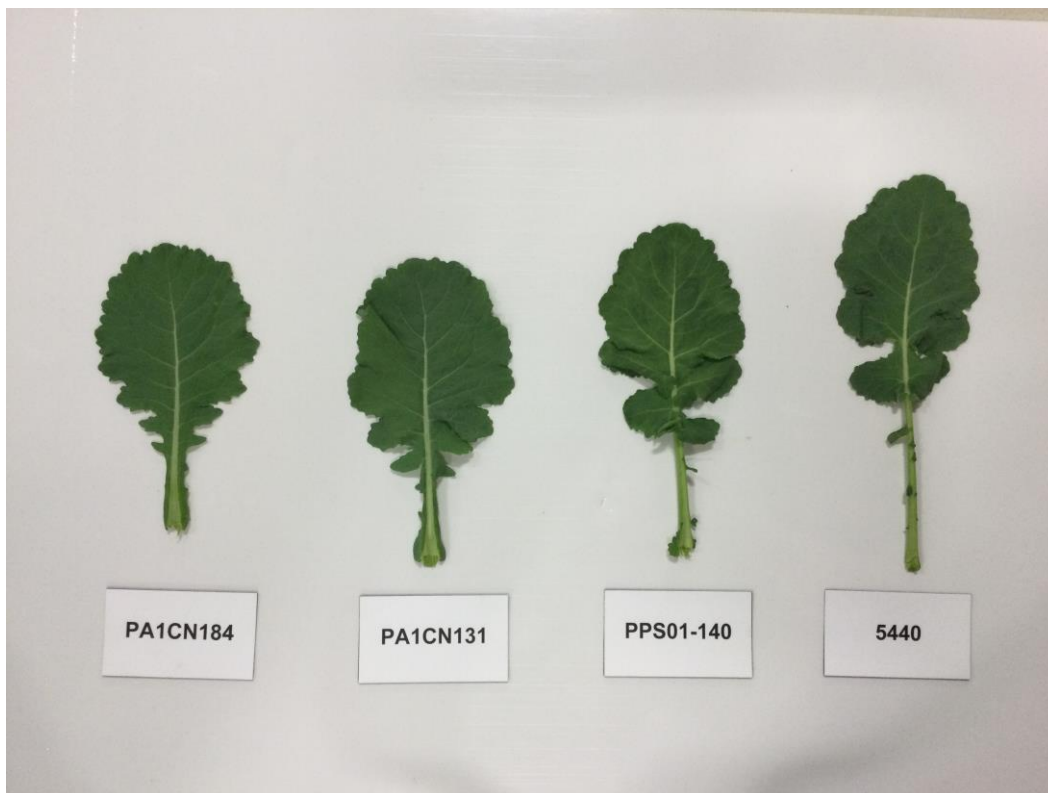
Tests and Trials: The comparative trials for 'PA1CN184' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PA1CN184'

	'PA1CN184'	'PA1CN131'*	'PPS01-140 A-Line'*	'5440'*
Cotyledon length (mm)				
mean (LSD=1.8)	11.7	11.4	9.6	14.3
std. deviation	0.9	1.0	1.1	1.4

<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	21.1	20.1	20.5	26.3
std. deviation	1.6	1.3	2.1	1.5
<i>Leaf length (cm)</i>				
mean (LSD=3.5)	19.0	19.4	20.5	24.9
std. deviation	2.1	2.4	2.4	3.3
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	5.5	5.2	8.5	10.1
std. deviation	1.8	1.3	1.6	2.4
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	9.9	9.5	10.3	14.4
std. deviation	1.0	0.6	0.9	1.3
<i>Silique length (mm)</i>				
mean (LSD=4.5)	45.3	45.6	49.3	55.9
std. deviation	3.4	3.6	4.7	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	7.4	7.5	4.7	8.4
std. deviation	1.3	1.3	1.0	1.3
<i>Pediceal length (mm)</i>				
mean (LSD=1.5)	11.7	12.4	12.0	17.6
std. deviation	1.5	1.8	2.0	2.0
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	86	86	84	84
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	107	106	111	122
std. deviation	5	5	6	7

*reference varieties



Canola: 'PA1CN184' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

Proposed denomination: 'PA1CN185'
Application number: 22-11017
Application date: 2022/07/05
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 'PA1CN185' is shorter than that of 'PA1CN131' and shorter and narrower than that of '5440'. The plants of 'PA1CN185' flower later than those of '5440'. The petal of 'PA1CN185' is shorter than that of '5440'. 'PA1CN185' has a shorter silique and pedicel than '5440'. The silique beak of 'PA1CN185' is longer than that of 'PPS01-140 A-Line'. The plants of 'PA1CN185' mature later than those of 'PPS01-140 A-Line' and '5440'. At maturity, the plants of 'PA1CN185' are shorter than those of '5440'. The seed coat of 'PA1CN185' is brown whereas it is black for 'PPS01-140 A-Line' and '5440'.*

Description:

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

COTYLEDON: short to medium length, narrow to medium width

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

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

SILIQUE: erect attitude, very short, short beak, very short to short pedicel

SEED COAT: brown

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 45.3% of whole dried seed, protein is 48.5% of dried oil free meal, low concentration of glucosinolates (10.4 $\mu\text{mol/g}$)

DISEASE REACTIONS: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*); resistant to Clubroot (*Plasmodiophora brassicae*)

Origin and Breeding: ‘PA1CN185’ is a male sterile line which contains the Ms8 gene construct in the heterozygous state. It was derived by crossing a donor line containing the Ms8 gene to an inbred line, with the inbred line used as a recurring parent in a backcrossing scheme. The initial cross was conducted in Saskatoon, Saskatchewan, Canada in 2017. ‘PA1CN185’ was selected in 2019 on the basis of male sterility stability, expression of resistance to glufosinate-ammonium herbicide and good combining ability with numerous restorer lines. Other selection parameters included vigour, maturity, blackleg resistance, clubroot resistance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

Tests and Trials: The comparative trials for ‘PA1CN185’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

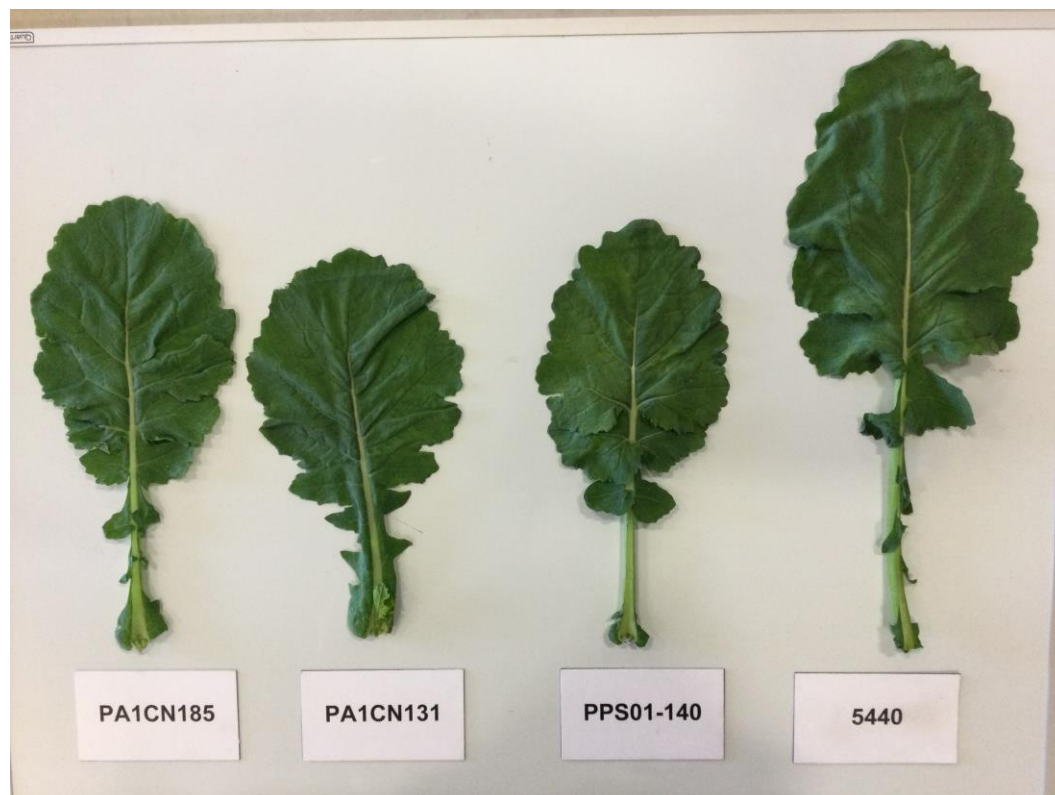
Comparison table for ‘PA1CN185’

	‘PA1CN185’	‘PA1CN131’*	‘PPS01-140 A-Line’*	‘5440’*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.8)	9.5	11.4	9.6	14.3
std. deviation	0.9	1.0	1.1	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	20.7	20.1	20.5	26.3
std. deviation	2.0	1.3	2.1	1.5
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	42	39	41	39
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	10.3	9.5	10.3	14.4
std. deviation	0.9	0.6	0.9	1.3
<i>Silique length (mm)</i>				
mean (LSD=4.5)	47.8	45.6	49.3	55.9
std. deviation	3.1	3.6	4.7	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	7.8	7.5	4.7	8.4
std. deviation	1.4	1.3	1.0	1.3
<i>Pedicel length (mm)</i>				
mean (LSD=1.5)	13.0	12.4	12.0	17.6
std. deviation	1.4	1.8	2.0	2.0

Days to maturity (number of days from planting to maturity)

mean	89	86	84	84
Plant height (at maturity) (cm)				
mean (LSD=7)	111	106	111	122
std. deviation	8	5	6	7

*reference varieties



Canola: 'PA1CN185' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

Proposed denomination: 'PA1CN186'
Application number: 22-11018
Application date: 2022/07/05
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 'PA1CN186' is shorter and narrower than that of '5440'. 'PA1CN186' has a shorter leaf and petiole than '5440'. The plants of 'PA1CN186' flower later than those of the reference varieties. The petal of 'PA1CN186' is shorter and narrower than that of '5440'. 'PA1CN186' has shorter siliques and pedicels than that of '5440'. The siliqua beak of 'PA1CN186' is longer than that of 'PPS01-140 A-Line'. The plants of 'PA1CN186' mature later than those of the

reference varieties. At maturity, the plants of 'PA1CN186' are shorter than those of '5440'. The seed coat of 'PA1CN186' is brown whereas it is black for 'PPS01-140 A-Line' and '5440'.

Description:

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

COTYLEDON: short to medium length, narrow

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

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

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

SEED COAT: brown

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 47.4% of whole dried seed, protein is 49.4% of dried oil free meal, low concentration of glucosinolates (14.4 µmol/g)

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

Origin and Breeding: 'PA1CN186' is a male sterile line which contains the Ms8 gene construct in the heterozygous state. It was derived by crossing a donor line containing the Ms8 gene to an inbred line, with the inbred line used as a recurring parent in a backcrossing scheme. The initial cross was conducted in Saskatoon, Saskatchewan, Canada in 2017. 'PA1CN186' was selected in 2019 on the basis of male sterility stability, expression of resistance to glufosinate-ammonium herbicide and good combining ability with numerous restorer lines. Other selection parameters included vigour, maturity, blackleg resistance, clubroot resistance, seed pod shattering resistance, oil content, fatty acid profile and glucosinolate content. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

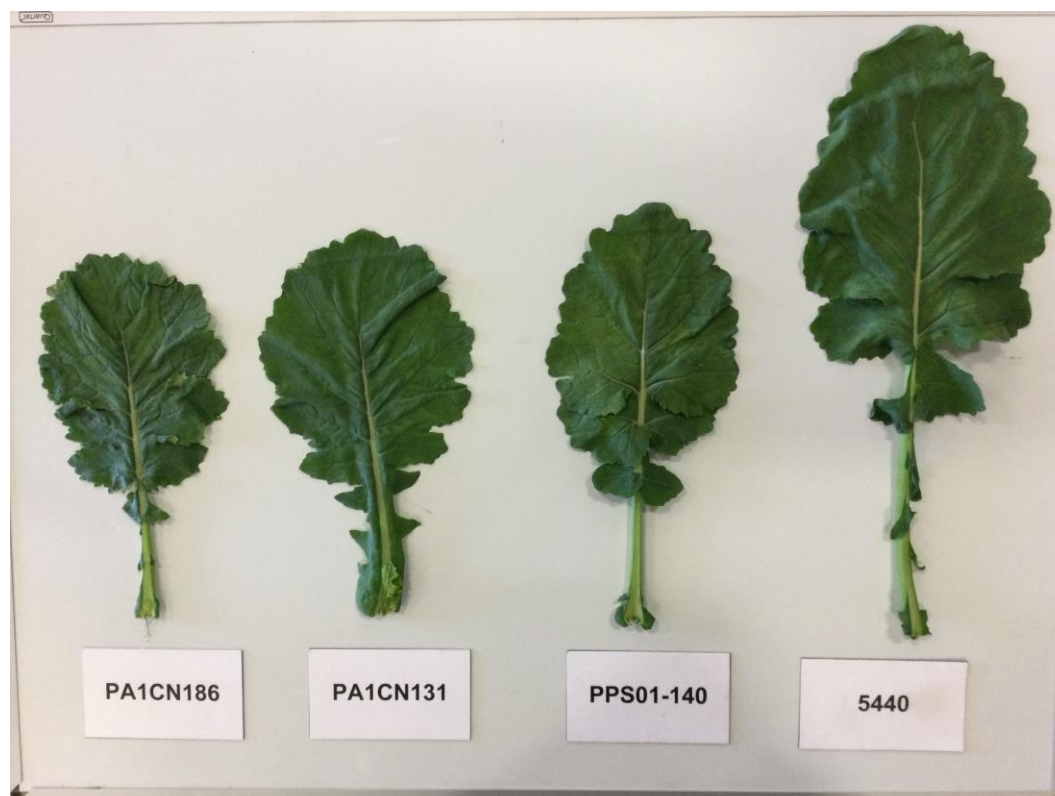
Tests and Trials: The comparative trials for 'PA1CN186' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PA1CN186'

	'PA1CN186'	'PA1CN131'*	'PPS01-140 A-Line'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.8)	10.4	11.4	9.6	14.3
std. deviation	1.5	1.0	1.1	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	19.7	20.1	20.5	26.3
std. deviation	1.7	1.3	2.1	1.5
<i>Leaf length (cm)</i>				
mean (LSD=3.5)	20.9	19.4	20.5	24.9
std. deviation	1.9	2.4	2.4	3.3
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	7.2	5.2	8.5	10.1
std. deviation	1.6	1.3	1.6	2.4
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	44	39	41	39

<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	10.2	9.5	10.3	14.4
std. deviation	1.0	0.6	0.9	1.3
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	5.3	5.0	5.4	6.5
std. deviation	0.8	0.6	0.7	0.8
<i>Siliqua length (mm)</i>				
mean (LSD=4.5)	46.5	45.6	49.3	55.9
std. deviation	3.0	3.6	4.7	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	7.4	7.5	4.7	8.4
std. deviation	1.6	1.3	1.0	1.3
<i>Pedicel length (mm)</i>				
mean (LSD=1.5)	13.0	12.4	12.0	17.6
std. deviation	1.7	1.8	2.0	2.0
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	89	86	84	84
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	113	106	111	122
std. deviation	6	5	6	7

*reference varieties



Canola: 'PA1CN186' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

Proposed denomination: 'PA1CN187'
Application number: 22-11019
Application date: 2022/07/05
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 'PA1CN187' is shorter and narrower than that of '5440'. The petiole of 'PA1CN187' is shorter than that of '5440'. The plants of 'PA1CN187' flower later than those of 'PA1CN131' and '5440'. The petal of 'PA1CN187' is longer and wider than the petal of 'PA1CN131' and shorter than that of '5440'. The silique of 'PA1CN187' is longer than those of 'PA1CN131' and 'PPS01-140 A-Line'. The silique beak of 'PA1CN187' is longer than those of the reference varieties. 'PA1CN187' has a shorter pedicel than '5440'. The plants of 'PA1CN187' mature later than those of the reference varieties. At maturity, the plants of 'PA1CN187' are taller than those of 'PA1CN131' and 'PPS01-140 A-Line'. The seed coat of 'PA1CN187' is black whereas it is brown for 'PA1CN131'.*

Description:

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

COTYLEDON: short to medium length, narrow to medium width

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

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

SILIQUE: semi-erect attitude, short, short to medium length beak, very short to short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 44.8% of whole dried seed, protein is 49.9% of dried oil free meal, low concentration of glucosinolates (12.1 µmol/g)

DISEASE REACTIONS: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*); resistant to Clubroot (*Plasmodiophora brassicae*)

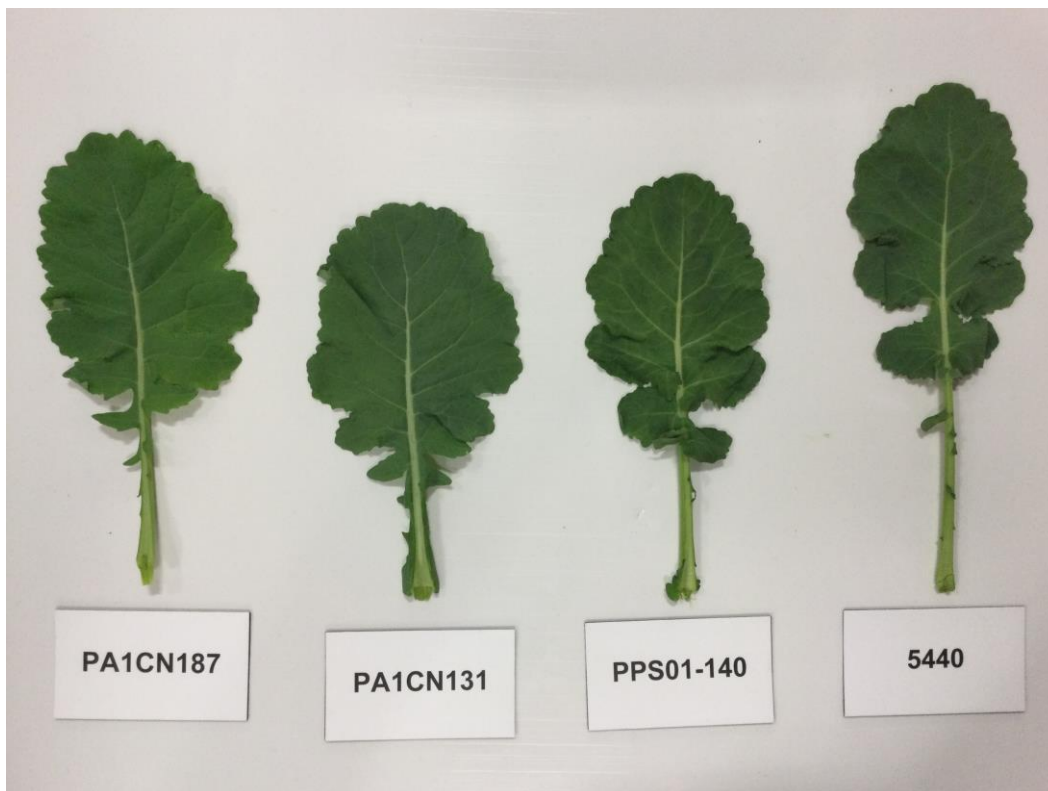
Origin and Breeding: 'PA1CN187' is a male sterile line which contains the Ms8 gene construct in the heterozygous state. It was derived by backcrossing a double haploid line, which was extracted in 2015, to a male sterile line which contained the Ms8 gene. The initial cross was made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2015. 'PA1CN187' was selected in 2019 on the basis of male sterility stability, expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

Tests and Trials: The comparative trials for 'PA1CN187' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PA1CN187'

	'PA1CN187'	'PA1CN131'*	'PPS01-140 A-Line'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.8)	11.1	11.4	9.6	14.3
std. deviation	0.8	1.0	1.1	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	20.6	20.1	20.5	26.3
std. deviation	1.7	1.3	2.1	1.5
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	7.0	5.2	8.5	10.1
std. deviation	1.3	1.3	1.6	2.4
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	42	39	41	39
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	11.6	9.5	10.3	14.4
std. deviation	0.8	0.6	0.9	1.3
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	6.2	5.0	5.4	6.5
std. deviation	0.4	0.6	0.7	0.8
<i>Siliqua length (mm)</i>				
mean (LSD=4.5)	56.2	45.6	49.3	55.9
std. deviation	3.8	3.6	4.7	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	9.8	7.5	4.7	8.4
std. deviation	1.6	1.3	1.0	1.3
<i>Pediceal length (mm)</i>				
mean (LSD=1.5)	13.2	12.4	12.0	17.6
std. deviation	1.9	1.8	2.0	2.0
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	91	86	84	84
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	122	106	111	122
std. deviation	8	5	6	7

*reference varieties



Canola: 'PA1CN187' (left) with reference varieties 'PA1CN131' (centre left), 'PPS01-140 A-Line' (centre right) and '5440' (right)

Proposed denomination: 'PB0CN273'
Application number: 22-11020
Application date: 2022/07/05
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 'PB0CN273' is shorter than that of 'PB1CN231'. 'PB0CN273' has a shorter leaf than '5440'. The petiole of 'PB0CN273' is shorter than those of 'PPS01-140 B-Line' and '5440'. The petal of 'PB0CN273' is shorter than that of '5440'. 'PB0CN273' has a longer silique than 'PB1CN231'. The silique beak of 'PB0CN273' is longer than that of 'PPS01-140 B-Line'. 'PB0CN273' has a longer pedicel than 'PB1CN231' and 'PPS01-140 B-Line'. At maturity, the plants of 'PB0CN273' are taller than the plants of 'PB1CN231' and shorter than those of '5440'. The seed coat of 'PB0CN273' is black whereas it is brown for 'PB1CN231'.*

Description:

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

COTYLEDON: medium length and width

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

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

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 43.0% of whole dried seed, protein is 45.9% of dried oil free meal, low concentration of glucosinolates (11.6 $\mu\text{mol/g}$)

CHEMICAL REACTION: susceptible to glufosinate ammonium herbicides

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

Origin and Breeding: 'PB0CN273' is a male fertile maintainer line of 'PA0CN173'. It is a non-transgenic double haploid line, which was produced in 2015 from a cross made at BASF Canada Inc. in Saskatoon, Saskatchewan, Canada in 2014. 'PB0CN273' was selected in 2016 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2018.

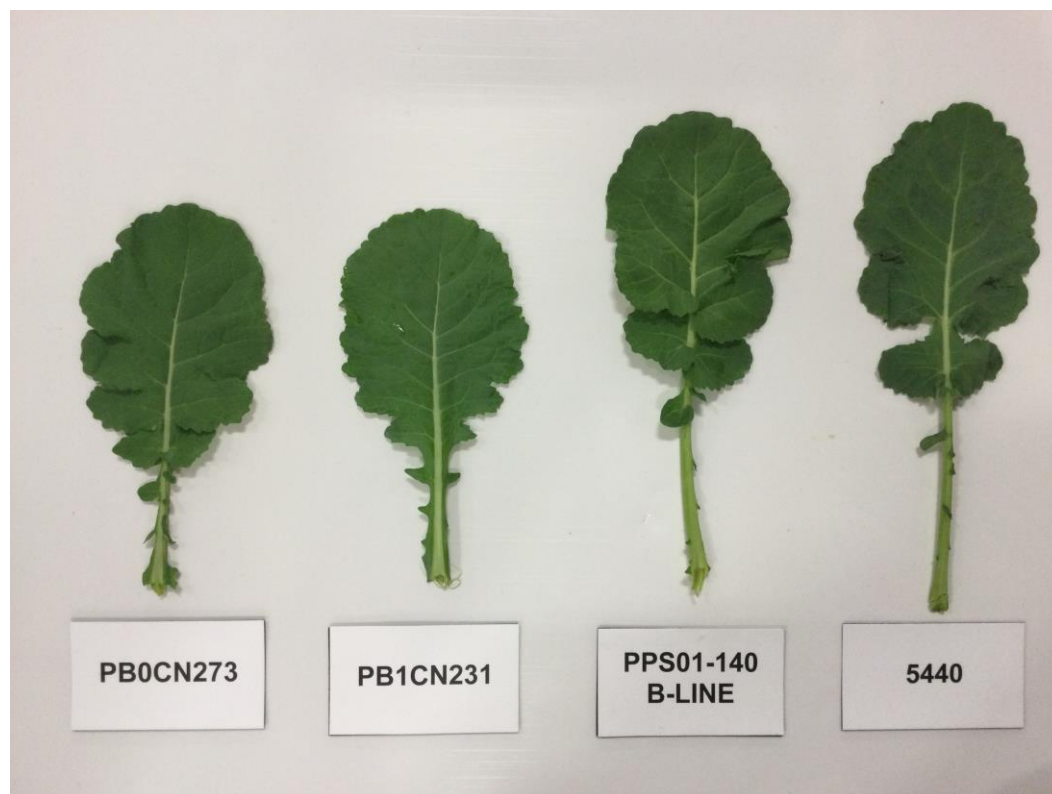
Tests and Trials: The comparative trials for 'PB0CN273' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PB0CN273'

	'PB0CN273'	'PB1CN231'*	'PPS01-140 B-Line'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.8)	12.4	15.0	13.2	14.3
std. deviation	2.1	1.7	1.1	1.4
<i>Leaf length (cm)</i>				
mean (LSD=3.5)	20.0	18.4	23.1	24.9
std. deviation	3.4	3.0	2.7	3.3
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	6.8	5.4	9.7	10.1
std. deviation	1.8	1.6	1.9	2.4
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	12.8	13.5	14.0	14.4
std. deviation	1.6	1.3	0.9	1.3
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	5.8	6.0	6.9	6.5
std. deviation	0.9	1.1	0.6	0.8
<i>Silique length (mm)</i>				
mean (LSD=4.5)	54.8	47.4	51.8	55.9
std. deviation	3.5	2.6	3.6	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	7.2	7.7	5.2	8.4
std. deviation	1.1	1.2	1.2	1.3

<i>Pedicle length (mm)</i>				
mean (LSD=1.5)	17.9	16.3	16.0	17.6
std. deviation	2.4	1.8	2.0	2.0
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	114	106	111	122
std. deviation	4	5	6	7

*reference varieties



Canola: 'PB0CN273' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

Proposed denomination: 'PB1CN283'
Application number: 22-11021
Application date: 2022/07/05
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 'PB1CN283' is shorter than that of 'PB1CN231'. 'PB1CN283' has a shorter leaf than 'PPS01-140 B-Line' and '5440'. The petiole of 'PB1CN283' is shorter than those of 'PPS01-140 B-Line' and '5440'. 'PB1CN283' has a shorter silique and pedicel than '5440'. The silique beak of 'PB1CN283' is longer than that of 'PPS01-140 B-Line'.*

The plants of 'PB1CN283' mature later than those of 'PPS01-140 B-Line' and '5440'. At maturity, the plants of 'PB1CN283' are shorter than the plants of '5440'. The seed coat of 'PB1CN283' is brown whereas it is black for 'PPS01-140 B-Line' and '5440'.

Description:

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

COTYLEDON: medium length and width

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

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

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

SEED COAT: brown

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

QUALITY CHARACTERISTICS: erucic acid is 0.01% of total fatty acids, oil content is 45.5% of whole dried seed, protein is 47.3% of dried oil free meal, low concentration of glucosinolates (14.1 µmol/g)

CHEMICAL REACTION: susceptible to glufosinate ammonium herbicides

DISEASE REACTIONS: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*); resistant to Clubroot (*Plasmodiophora brassicae*)

Origin and Breeding: 'PB1CN283' is the male fertile maintainer line of 'PA1CN183'. It is a non-transgenic selected line which 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 conducted in Saskatoon, Saskatchewan, Canada in 2018. 'PB1CN283' was selected in 2019 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

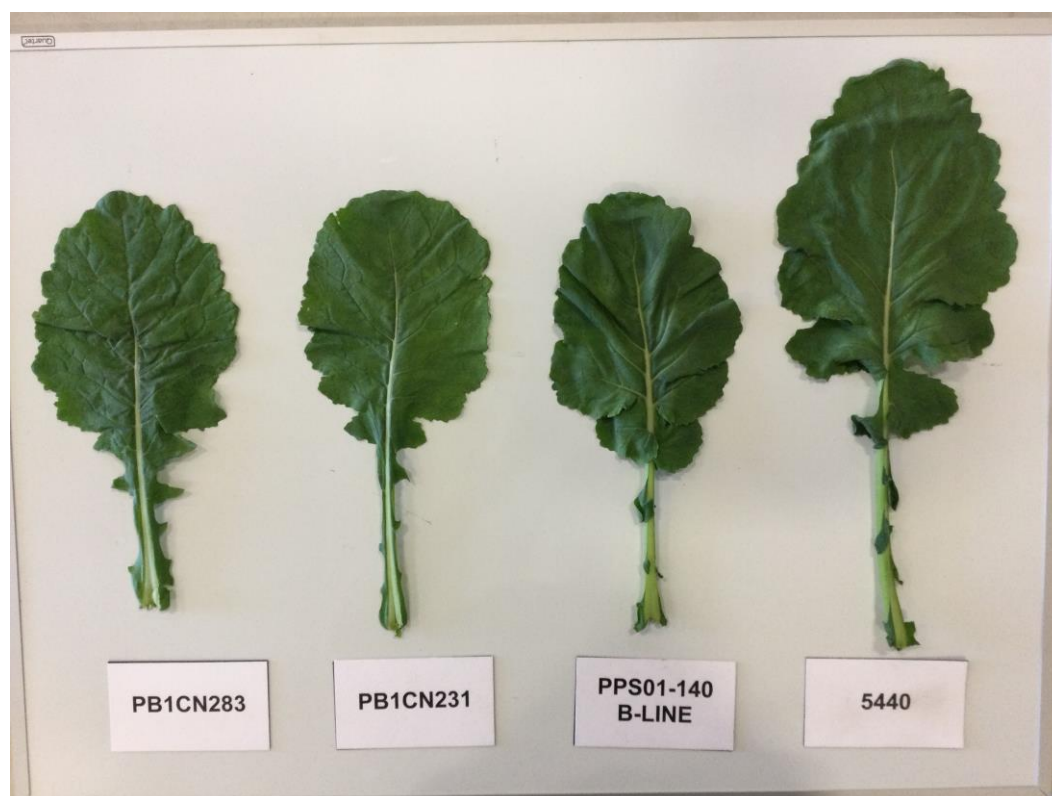
Tests and Trials: The comparative trials for 'PB1CN283' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for siliqua characteristics which were based on 60 measurements. 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 'PB1CN283'

	'PB1CN283'	'PB1CN231'*	'PPS01-140 B-Line'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.8)	13.1	15.0	13.2	14.3
std. deviation	1.9	1.7	1.1	1.4
<i>Leaf length (cm)</i>				
mean (LSD=3.5)	18.7	18.4	23.1	24.9
std. deviation	2.9	3.0	2.7	3.3
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	5.2	5.4	9.7	10.1
std. deviation	1.4	1.6	1.9	2.4
<i>Siliqua length (mm)</i>				
mean (LSD=4.5)	47.3	47.4	51.8	55.9
std. deviation	3.6	2.6	3.6	3.0

<i>Beak length (mm)</i>				
mean (LSD=1.3)	7.8	7.7	5.2	8.4
std. deviation	1.3	1.2	1.2	1.3
<i>Pedicle length (mm)</i>				
mean (LSD=1.5)	15.0	16.3	16.0	17.6
std. deviation	1.5	1.8	2.0	2.0
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	87	86	84	84
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	108	106	111	122
std. deviation	6	5	6	7

*reference varieties



Canola: 'PB1CN283' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

Proposed denomination: 'PB1CN284'

Application number: 22-11022

Application date: 2022/07/05

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 leaf of ‘PB1CN284’ is shorter than that of ‘5440’. ‘PB1CN284’ has a wider leaf than ‘PB1CN231’. The petiole of ‘PB1CN284’ is shorter than those of ‘PPS01-140 B-Line’ and ‘5440’. ‘PB1CN284’ has a shorter silique than ‘PPS01-140 B-Line’ and ‘5440’. The silique beak of ‘PB1CN284’ is longer than that of ‘PPS01-140 B-Line’. The plants of ‘PB1CN284’ mature later than those of ‘PPS01-140 B-Line’ and ‘5440’. At maturity, the plants of ‘PB1CN284’ are shorter than the plants of ‘5440’. The seed coat of ‘PB1CN284’ is brown whereas it is black for ‘PPS01-140 B-Line’ and ‘5440’.

Description:

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

COTYLEDON: medium to long, medium to wide

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

FLOWER PETAL: yellow, medium length and width

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

SEED COAT: brown

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 45.8% of whole dried seed, protein is 47.6% of dried oil free meal, low concentration of glucosinolates (14.1 $\mu\text{mol/g}$)

CHEMICAL REACTION: susceptible to glufosinate ammonium herbicides

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

Origin and Breeding: ‘PB1CN284’ is the male fertile maintainer line of ‘PA1CN184’. It is a non-transgenic selected line which 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 conducted in Saskatoon, Saskatchewan, Canada in 2018. ‘PB1CN284’ was selected in 2019 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

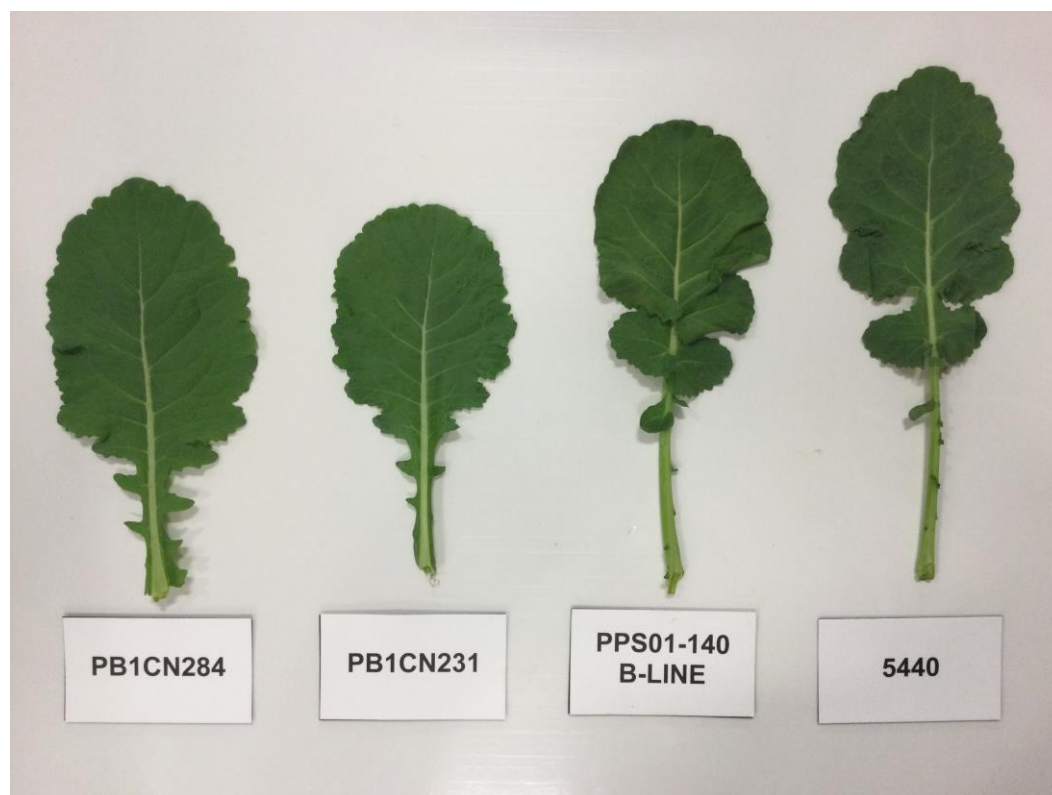
Tests and Trials: The comparative trials for ‘PB1CN284’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 ‘PB1CN284’

	‘PB1CN284’	‘PB1CN231’*	‘PPS01-140 B-Line’*	‘5440’*
<i>Leaf length (cm)</i>				
mean (LSD=3.5)	21.1	18.4	23.1	24.9
std. deviation	2.7	3.0	2.7	3.3
<i>Leaf width (cm)</i>				
mean (LSD=1.3)	10.9	9.5	9.9	9.9
std. deviation	1.3	1.3	1.1	1.6

<i>Petiole length (cm)</i>				
mean (LSD=2.0)	6.1	5.4	9.7	10.1
std. deviation	1.7	1.6	1.9	2.4
<i>Siliqua length (mm)</i>				
mean (LSD=4.5)	46.3	47.4	51.8	55.9
std. deviation	2.6	2.6	3.6	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	8.1	7.7	5.2	8.4
std. deviation	1.4	1.2	1.2	1.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	86	86	84	84
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	107	106	111	122
std. deviation	5	5	6	7

*reference varieties



Canola: 'PB1CN284' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

Proposed denomination: 'PB1CN285'
Application number: 22-11023
Application date: 2022/07/05
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 'PB1CN285' is wider than those of 'PB1CN231' and 'PPS01-140 B-Line'. 'PB1CN285' has a shorter leaf than '5440'. The petiole of 'PB1CN285' is shorter than those of 'PPS01-140 B-Line' and '5440'. 'PB1CN285' has a shorter silique than '5440'. The silique beak of 'PB1CN285' is longer than that of 'PPS01-140 B-Line'. The plants of 'PB1CN285' mature later than those of 'PPS01-140 B-Line' and '5440'. At maturity, the plants of 'PB1CN285' are shorter than the plants of '5440'. The seed coat of 'PB1CN285' is brown whereas it is black for 'PPS01-140 B-Line' and '5440'.

Description:

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

COTYLEDON: medium to long, wide

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

FLOWER PETAL: yellow, medium length and width

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

SEED COAT: brown

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 45.3% of whole dried seed, protein is 48.5% of dried oil free meal, low concentration of glucosinolates (10.4 µmol/g)

CHEMICAL REACTION: susceptible to glufosinate ammonium herbicides

DISEASE REACTIONS: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*); resistant to Clubroot (*Plasmodiophora brassicae*)

Origin and Breeding: 'PB1CN285' is the male fertile maintainer line of 'PA1CN185'. It is a non-transgenic selected line which was derived by crossing a donor line containing the Ms8 gene to an inbred line, with the inbred line used as a recurring parent in a backcrossing scheme. The initial cross was conducted in Saskatoon, Saskatchewan, Canada in 2017. 'PB1CN285' was selected in 2019 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

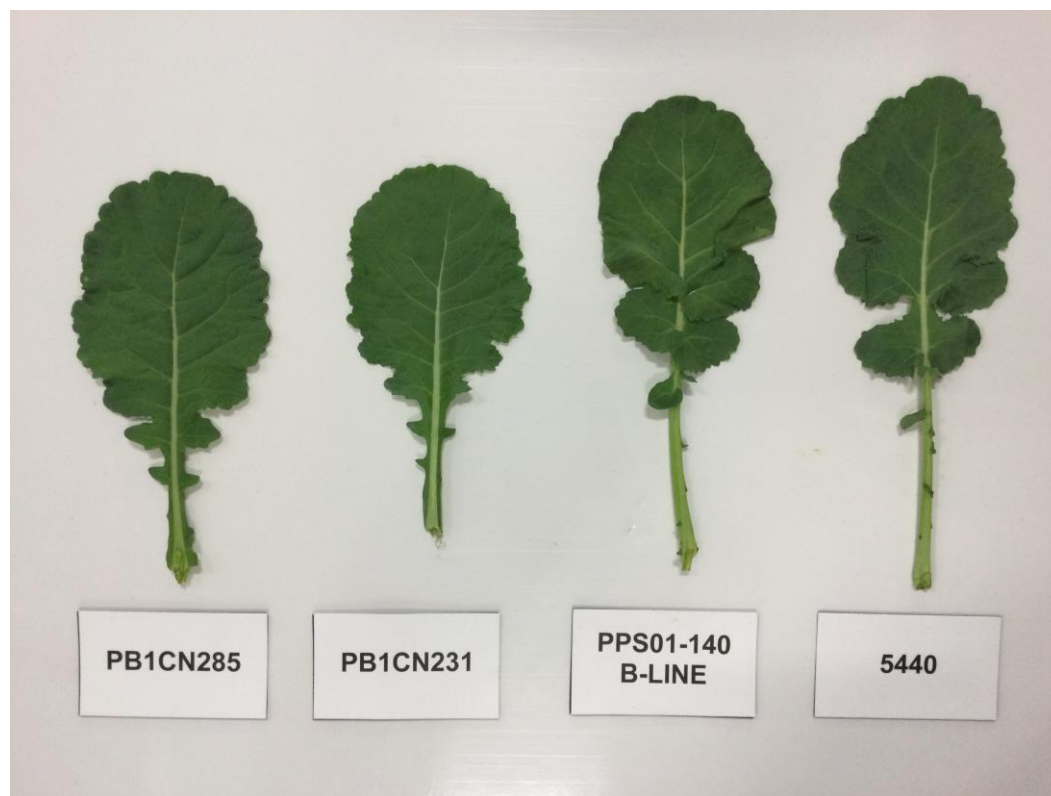
Tests and Trials: The comparative trials for 'PB1CN285' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PB1CN285'

	'PB1CN285'	'PB1CN231'*	'PPS01-140 B-Line'*	'5440'*
Cotyledon width (mm)				
mean (LSD=1.5)	27.8	24.5	24.1	26.3
std. deviation	2.0	2.2	1.8	1.5

<i>Leaf length (cm)</i>				
mean (LSD=3.5)	19.6	18.4	23.1	24.9
std. deviation	2.1	3.0	2.7	3.3
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	6.0	5.4	9.7	10.1
std. deviation	2.1	1.6	1.9	2.4
<i>Silique length (mm)</i>				
mean (LSD=4.5)	48.1	47.4	51.8	55.9
std. deviation	3.6	2.6	3.6	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	8.1	7.7	5.2	8.4
std. deviation	1.2	1.2	1.2	1.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	89	86	84	84
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	111	106	111	122
std. deviation	8	5	6	7

*reference varieties



Canola: 'PB1CN285' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

Proposed denomination: 'PB1CN286'
Application number: 22-11024
Application date: 2022/07/05
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 'PB1CN286' is wider than that of 'PPS01-140 B-Line'. The petiole of 'PB1CN286' is longer than that of 'PB1CN231'. The plants of 'PB1CN286' flower later than those of the reference varieties. The petal of 'PB1CN286' is wider than that of 'PB1CN231'. 'PB1CN286' has a shorter silique than '5440'. The silique beak of 'PB1CN286' is longer than that of 'PPS01-140 B-Line'. 'PB1CN286' has a longer pedicel than 'PB1CN231' and 'PPS01-140 B-Line'. The plants of 'PB1CN286' mature later than those of the reference varieties. At maturity, the plants of 'PB1CN286' are shorter than the plants of '5440'. The seed coat of 'PB1CN286' is brown whereas it is black for 'PPS01-140 B-Line' and '5440'.*

Description:

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

COTYLEDON: medium to long, medium to wide

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

FLOWER PETAL: yellow, medium length and width

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

SEED COAT: brown

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 47.4% of whole dried seed, protein is 49.4% of dried oil free meal, low concentration of glucosinolates (14.4 µmol/g)

CHEMICAL REACTION: susceptible to glufosinate ammonium herbicides

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

Origin and Breeding: 'PB1CN286' is the male fertile maintainer line of 'PA1CN186'. It is a non-transgenic selected line which was derived by crossing a donor line containing the Ms8 gene to an inbred line, with the inbred line used as a recurring parent in a backcrossing scheme. The initial cross was conducted in Saskatoon, Saskatchewan, Canada in 2017. 'PB1CN286' was selected in 2019 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

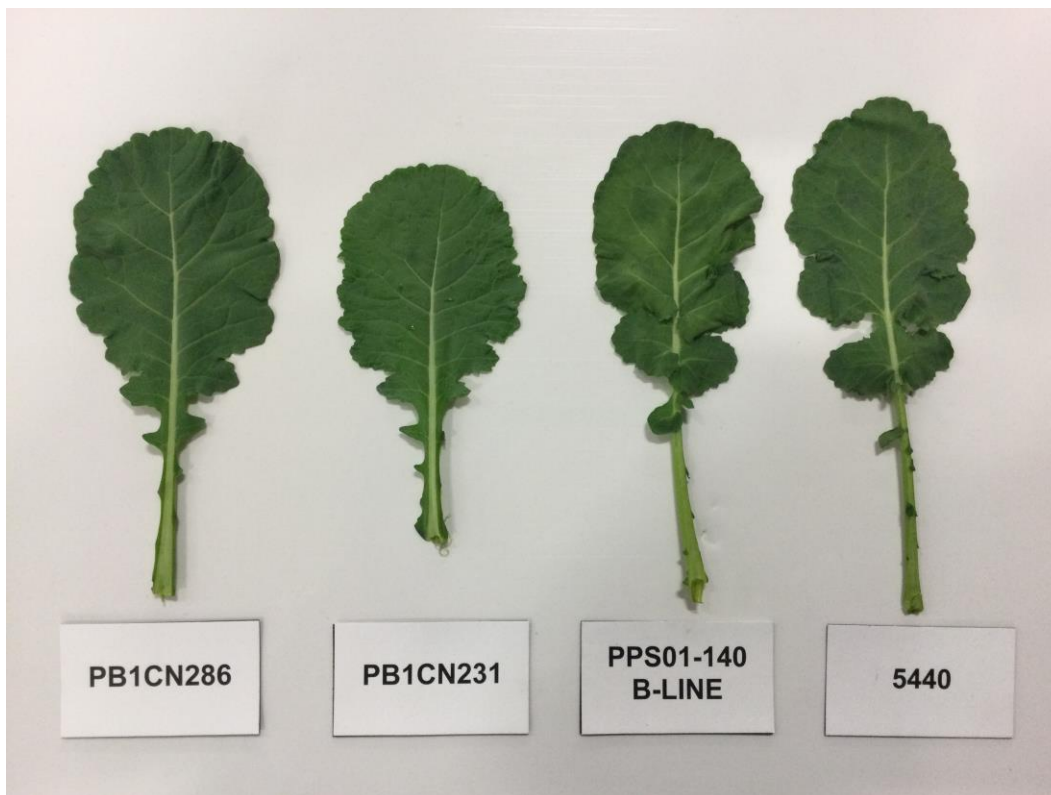
Tests and Trials: The comparative trials for 'PB1CN286' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for

siliques characteristics which were based on 60 measurements. 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 'PB1CN286'

	'PB1CN286'	'PB1CN231'*	'PPS01-140 B-Line'*	'5440'*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	25.8	24.5	24.1	26.3
std. deviation	2.1	2.2	1.8	1.5
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	7.8	5.4	9.7	10.1
std. deviation	2.0	1.6	1.9	2.4
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	41	38	39	39
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	7.2	6.0	6.9	6.5
std. deviation	0.8	1.1	0.6	0.8
<i>Siliques length (mm)</i>				
mean (LSD=4.5)	47.6	47.4	51.8	55.9
std. deviation	2.7	2.6	3.6	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	7.6	7.7	5.2	8.4
std. deviation	1.1	1.2	1.2	1.3
<i>Pedicle length (mm)</i>				
mean (LSD=1.5)	18.6	16.3	16.0	17.6
std. deviation	2.6	1.8	2.0	2.0
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	89	86	84	84
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=7)	113	106	111	122
std. deviation	6	5	6	7

*reference varieties



Canola: 'PB1CN286' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

Proposed denomination: 'PB1CN287'
Application number: 22-11025
Application date: 2022/07/05
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 'PB1CN287' is wider than those of 'PB1CN231' and 'PPS01-140 B-Line'. The petiole of 'PB1CN287' is shorter than those of 'PPS01-140 B-Line' and '5440'. The plants of 'PB1CN287' flower later than those of 'PPS01-140 B-Line' and '5440'. The petal of 'PB1CN287' is longer than those of 'PB1CN231' and 'PPS01-140 B-Line'. The petal of 'PB1CN287' is wider than those of 'PB1CN231' and '5440'. 'PB1CN287' has a longer silique than 'PB1CN231'. The silique beak of 'PB1CN287' is longer than those of the reference varieties. The plants of 'PB1CN287' mature later than those of the reference varieties. At maturity, the plants of 'PB1CN287' are taller than the plants of 'PB1CN231' and 'PPS01-140 B-Line'. The seed coat of 'PB1CN287' is black whereas it is brown for 'PB1CN231'.*

Description:

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

COTYLEDON: medium to long, wide

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

FLOWER PETAL: yellow, medium length and width

SILIQUE: semi-erect attitude, short, short to medium length beak, short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 44.8% of whole dried seed, protein is 49.9% of dried oil free meal, low concentration of glucosinolates (12.1 $\mu\text{mol/g}$)

CHEMICAL REACTION: susceptible to glufosinate ammonium herbicides

DISEASE REACTIONS: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*); resistant to Clubroot (*Plasmodiophora brassicae*)

Origin and Breeding: ‘PB1CN287’ is a male fertile maintainer line of ‘PA1CN187’. It is a non-transgenic double haploid line, which was produced in 2015 from a cross made in Saskatoon, Saskatchewan, Canada in 2015. ‘PB1CN287’ was selected in 2019 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2020.

Tests and Trials: The comparative trials for ‘PB1CN287’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

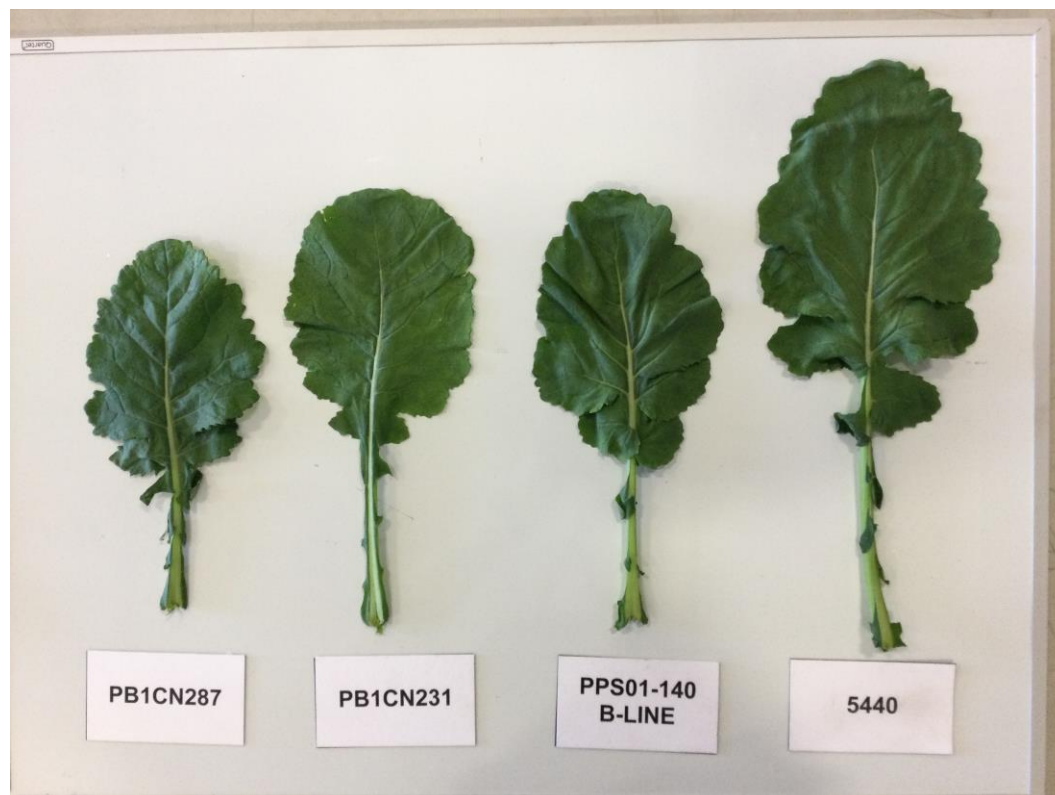
Comparison table for ‘PB1CN287’

	‘PB1CN287’	‘PB1CN231’*	‘PPS01-140 B-Line’*	‘5440’*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.5)	27.1	24.5	24.1	26.3
std. deviation	2.0	2.2	1.8	1.5
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	6.5	5.4	9.7	10.1
std. deviation	1.6	1.6	1.9	2.4
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	41	38	39	39
<i>Flower petal length (mm)</i>				
mean (LSD=1.3)	15.6	13.5	14.0	14.4
std. deviation	0.9	1.3	0.9	1.3
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	7.8	6.0	6.9	6.5
std. deviation	0.6	1.1	0.6	0.8
<i>Silique length (mm)</i>				
mean (LSD=4.5)	55.2	47.4	51.8	55.9
std. deviation	6.5	2.6	3.6	3.0
<i>Beak length (mm)</i>				
mean (LSD=1.3)	10.0	7.7	5.2	8.4
std. deviation	1.2	1.2	1.2	1.3

Days to maturity (number of days from planting to maturity)

mean	91	86	84	84
Plant height (at maturity) (cm)				
mean (LSD=7)	122	106	111	122
std. deviation	8	5	6	7

*reference varieties



Canola: 'PB1CN287' (left) with reference varieties 'PB1CN231' (centre left), 'PPS01-140 B-Line' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN809'
Application number: 22-11026
Application date: 2022/07/05
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 'PR1CN809' is narrower than that of '5440'. The petiole of 'PR1CN809' is shorter than those of 'PPS04-205' and '5440'. The plants of 'PR1CN809' flower earlier than those of the reference varieties. The petal of 'PR1CN809' is shorter than that of '5440'. 'PR1CN809' has a longer silique than 'PPS04-205'. The plants of 'PR1CN809'

mature earlier than those of the reference varieties. At maturity, the plants of 'PR1CN809' are shorter than the plants of '5440'.

Description:

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

COTYLEDON: medium length and width

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

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

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 41.9% of whole dried seed, protein is 45.9% of dried oil free meal, low concentration of glucosinolates (11.0 µmol/g)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

Origin and Breeding: 'PR1CN809' 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 2018 and the subsequent double haploid line extraction was made in 2018. 'PR1CN809' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

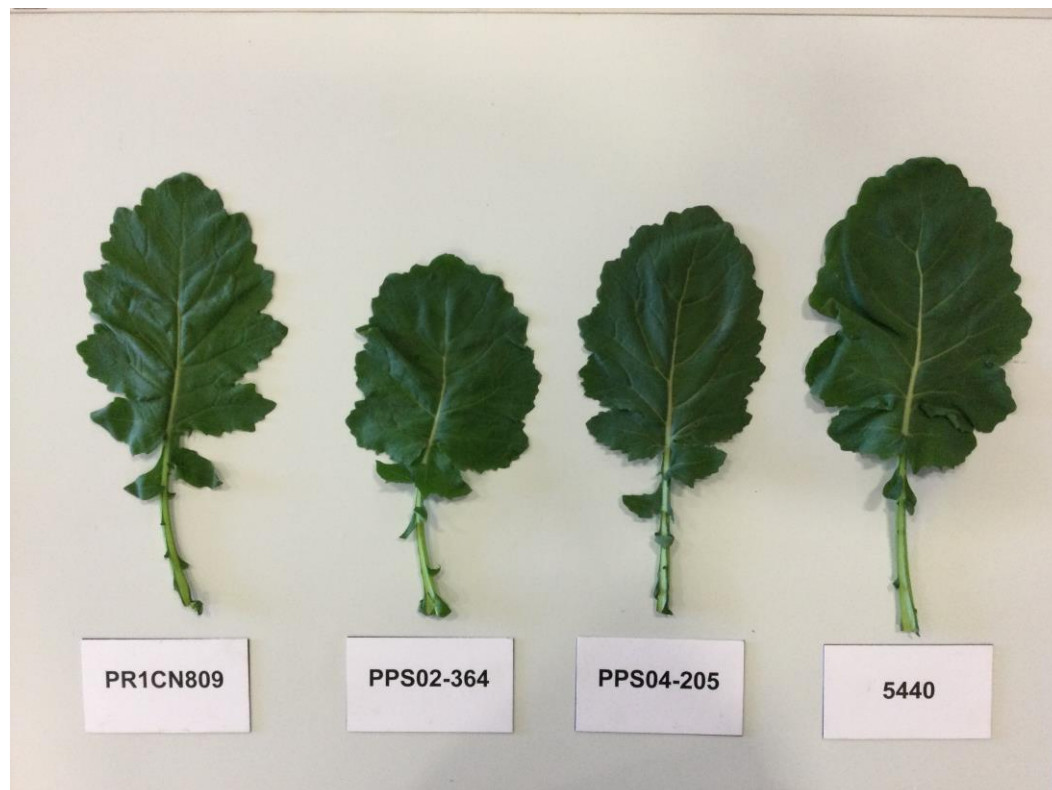
Tests and Trials: The comparative trials for 'PR1CN809' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN809'

	'PR1CN809'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	23.2	23.8	22.3	26.6
std. deviation	3.3	3.2	2.1	2.7
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	6.7	6.5	8.9	8.9
std. deviation	1.6	1.6	1.7	1.4
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	37	39	40	39
<i>Flower petal length (mm)</i>				
mean (LSD=1.0)	13.2	14.2	13.1	14.4
std. deviation	1.1	1.4	1.3	1.3

<i>Siliqua length (mm)</i>				
mean (LSD=4.3)	58.3	56.9	51.7	58.3
std. deviation	3.3	3.8	3.2	3.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	80	83	86	85
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	104	112	104	119
std. deviation	7	5	8	8

*reference varieties



Canola: 'PR1CN809' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN810'
Application number: 22-11027
Application date: 2022/07/05
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 'PR1CN810' is narrower than that of '5440'. 'PR1CN810' has a longer leaf than 'PPS02-364'. The plants of 'PR1CN810' flower later than those of 'PPS02-364' and '5440'. 'PR1CN810' has a longer silique than 'PPS04-205'. The silique beak of 'PR1CN810' is shorter than that of 'PPS02-364'. The plants of 'PR1CN810' matures later than those of 'PPS02-364'. At maturity, the plants of 'PR1CN810' are shorter than the plants of '5440'.

Description:

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

COTYLEDON: medium length and width

LEAF: medium to dark green, very many lobes, rounded margin, medium density of medium to deep margin indentations, medium to long, narrow to medium width, short petiole

FLOWER PETAL: yellow, medium length, narrow to medium width

SILIQUE: semi-erect to horizontal attitude, short, short beak, short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 39.3% of whole dried seed, protein is 49.0% of dried oil free meal, low concentration of glucosinolates (11.7 µmol/g)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

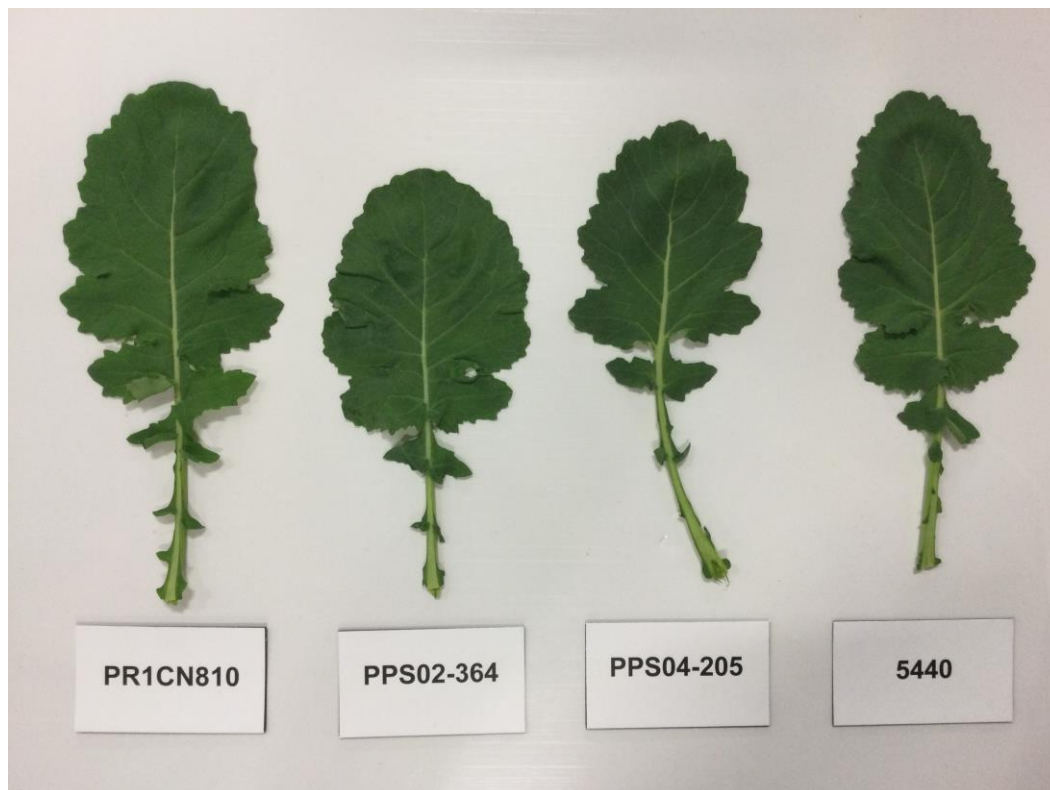
Origin and Breeding: 'PR1CN810' is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross was made in Saskatoon, Saskatchewan, Canada in 2018 and the subsequent double haploid line extraction was made in 2018. 'PR1CN810' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

Tests and Trials: The comparative trials for 'PR1CN810' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN810'

	'PR1CN810'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	22.7	23.8	22.3	26.6
std. deviation	2.9	3.2	2.1	2.7
<i>Leaf length (cm)</i>				
mean (LSD=3.3)	24.5	19.9	22.2	23.2
std. deviation	2.9	2.0	2.3	2.5
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	41	39	40	39
<i>Silique length (mm)</i>				
mean (LSD=4.3)	56.3	56.9	51.7	58.3
std. deviation	4.0	3.8	3.2	3.3

<i>Beak length (mm)</i>				
mean (LSD=1.5)	7.9	10.1	8.6	8.8
std. deviation	1.3	2.0	1.6	1.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	87	83	86	85
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	107	112	104	119
std. deviation	9	5	8	8
*reference varieties				



Canola: 'PR1CN810' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN811'
Application number: 22-11028
Application date: 2022/07/05
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 'PR1CN811' is longer than those of 'PPS02-364' and '5440' and narrower than that of '5440'. 'PR1CN811' has a narrower leaf than 'PPS02-364' and '5440'. 'PR1CN811' has a longer silique than 'PPS04-205'. The silique beak of 'PR1CN811' is shorter than that of 'PPS02-364'. The plants of 'PR1CN811' mature later than those of 'PPS02-364'.

Description:

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

COTYLEDON: medium to long, medium width

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

FLOWER PETAL: yellow, medium length, narrow to medium width

SILIQUE: semi-erect to horizontal attitude, short, short beak, short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 41.7% of whole dried seed, protein is 49.1% of dried oil free meal, low concentration of glucosinolates (12.5 µmol/g)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

Origin and Breeding: 'PR1CN811' 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 in Saskatoon, Saskatchewan, Canada in 2018 and the subsequent double haploid line extraction was made in 2018. 'PR1CN811' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

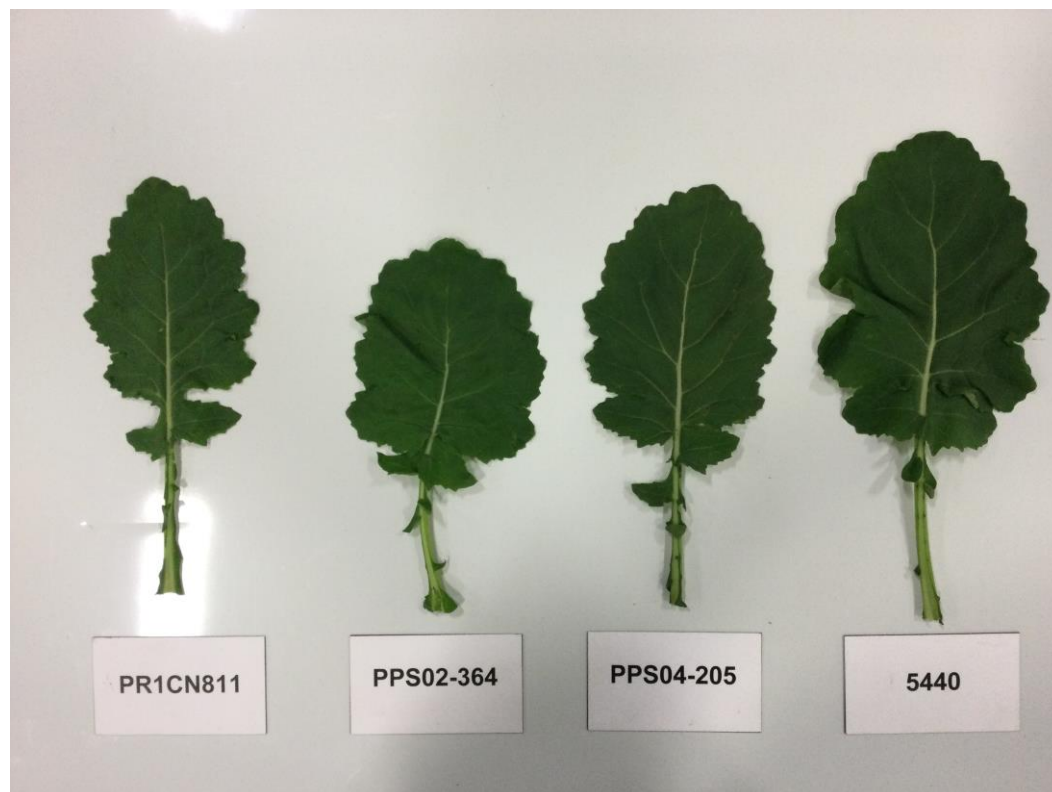
Tests and Trials: The comparative trials for 'PR1CN811' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN811'

	'PR1CN811'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	15.1	12.9	12.2	13.0
std. deviation	2.1	1.2	1.0	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	24.2	23.8	22.3	26.6
std. deviation	3.6	3.2	2.1	2.7
<i>Leaf width (cm)</i>				
mean (LSD=1.4)	8.7	10.2	9.5	10.4
std. deviation	0.9	0.9	1.0	1.3
<i>Silique length (mm)</i>				
mean (LSD=4.3)	56.4	56.9	51.7	58.3
std. deviation	4.3	3.8	3.2	3.3

<i>Beak length (mm)</i>				
mean (LSD=1.5)	7.9	10.1	8.6	8.8
std. deviation	1.6	2.0	1.6	1.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	87	83	86	85

*reference varieties



Canola: 'PR1CN811' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN813'
Application number: 22-11029
Application date: 2022/07/05
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: 'PR1CN813' has a longer leaf and petiole than 'PPS02-364'. The petal of 'PR1CN813' is wider than that of 'PPS02-364'. The silique beak of 'PR1CN813' is shorter than those of the reference varieties. At maturity, the plants of 'PR1CN813' are shorter than the plants of '5440'.

Description:

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

COTYLEDON: medium length, medium to wide

LEAF: medium green, many to very many lobes, rounded margin, low to 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, short, very short to short beak, short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 43.5% of whole dried seed, protein is 49.3% of dried oil free meal, low concentration of glucosinolates (10.8 µmol/g)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

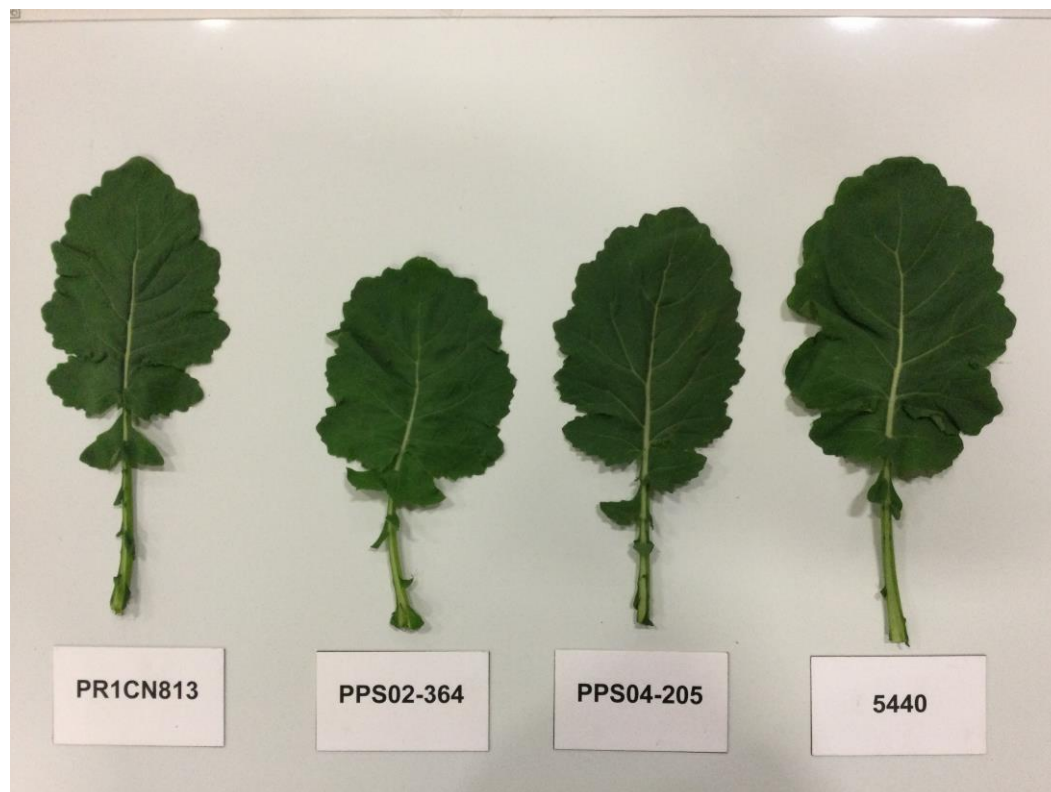
Origin and Breeding: 'PR1CN813' is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross was made in Saskatoon, Saskatchewan, Canada in 2018 and the subsequent double haploid line extraction was made in 2018. 'PR1CN813' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

Tests and Trials: The comparative trials for 'PR1CN813' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN813'

	'PR1CN813'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Leaf length (cm)</i>				
mean (LSD=3.3)	24.4	19.9	22.2	23.2
std. deviation	1.9	2.0	2.3	2.5
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	9.0	6.5	8.9	8.9
std. deviation	1.6	1.6	1.7	1.4
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	7.0	5.5	6.5	6.8
std. deviation	1.2	0.9	0.8	0.9
<i>Beak length (mm)</i>				
mean (LSD=1.5)	6.1	10.1	8.6	8.8
std. deviation	1.3	2.0	1.6	1.3
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	103	112	104	119
std. deviation	10	5	8	8

*reference varieties



Canola: 'PR1CN813' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN814'
Application number: 22-11030
Application date: 2022/07/05
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 'PR1CN814' is wider than that of 'PPS04-205'. The plants of 'PR1CN814' flower later than those of 'PPS02-364' and '5440'. The petal of 'PR1CN814' is narrower than that of '5440'. 'PR1CN814' has a shorter silique than that of '5440'. The silique beak of 'PR1CN814' is shorter than that of 'PPS02-364'. The plants of 'PR1CN814' mature later than those of 'PPS02-364' and 'PPS04-205'. At maturity, the plants of 'PR1CN814' are shorter than the plants of '5440'.*

Description:

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

COTYLEDON: medium to long, medium to wide

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

FLOWER PETAL: yellow, medium length, narrow to medium width

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 42.9% of whole dried seed, protein is 49.2% of dried oil free meal, low concentration of glucosinolates (12.7 $\mu\text{mol/g}$)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

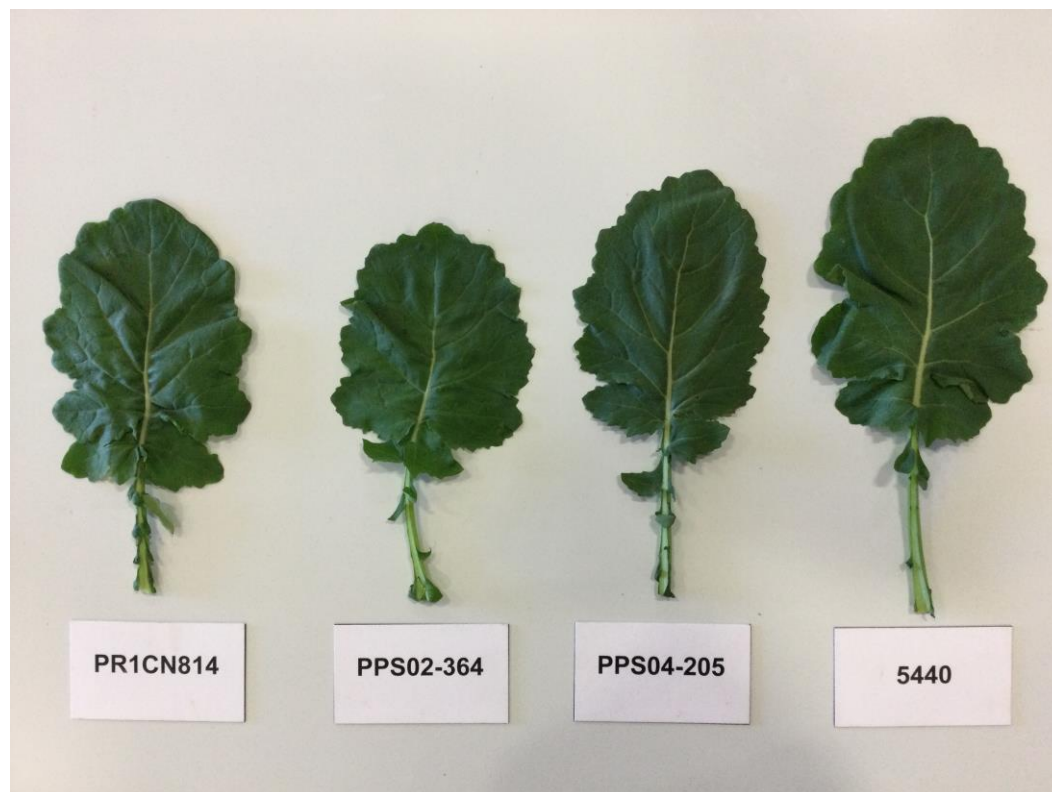
Origin and Breeding: ‘PR1CN814’ is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross was made in Saskatoon, Saskatchewan, Canada in 2018 and the subsequent double haploid line extraction was made in 2018. ‘PR1CN814’ was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

Tests and Trials: The comparative trials for ‘PR1CN814’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 ‘PR1CN814’

	‘PR1CN814’	‘PPS02-364’*	‘PPS04-205’*	‘5440’*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	25.4	23.8	22.3	26.6
std. deviation	2.4	3.2	2.1	2.7
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	41	39	40	39
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	5.5	5.5	6.5	6.8
std. deviation	0.9	0.9	0.8	0.9
<i>Silique length (mm)</i>				
mean (LSD=4.3)	52.9	56.9	51.7	58.3
std. deviation	3.3	3.8	3.2	3.3
<i>Beak length (mm)</i>				
mean (LSD=1.5)	7.6	10.1	8.6	8.8
std. deviation	1.3	2.0	1.6	1.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	88	83	86	85
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	107	112	104	119
std. deviation	8	5	8	8

*reference varieties



Canola: 'PR1CN814' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN818'
Application number: 22-11031
Application date: 2022/07/05
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 'PR1CN818' is wider than those of 'PPS02-364' and 'PPS04-205'. The leaf of 'PR1CN818' is longer than that of 'PPS02-364'. 'PR1CN818' has a longer siliqua than the reference varieties. At maturity, the plants of 'PR1CN818' are taller than the plants of 'PPS04-205'.*

Description:

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

COTYLEDON: medium length, medium to wide

LEAF: medium green, very many lobes, rounded margin, medium density of medium depth margin indentations, medium to long, medium width, short petiole

FLOWER PETAL: yellow, medium length, narrow to medium width

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 43.4% of whole dried seed, protein is 50.7% of dried oil free meal, low concentration of glucosinolates (13.4 $\mu\text{mol/g}$)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

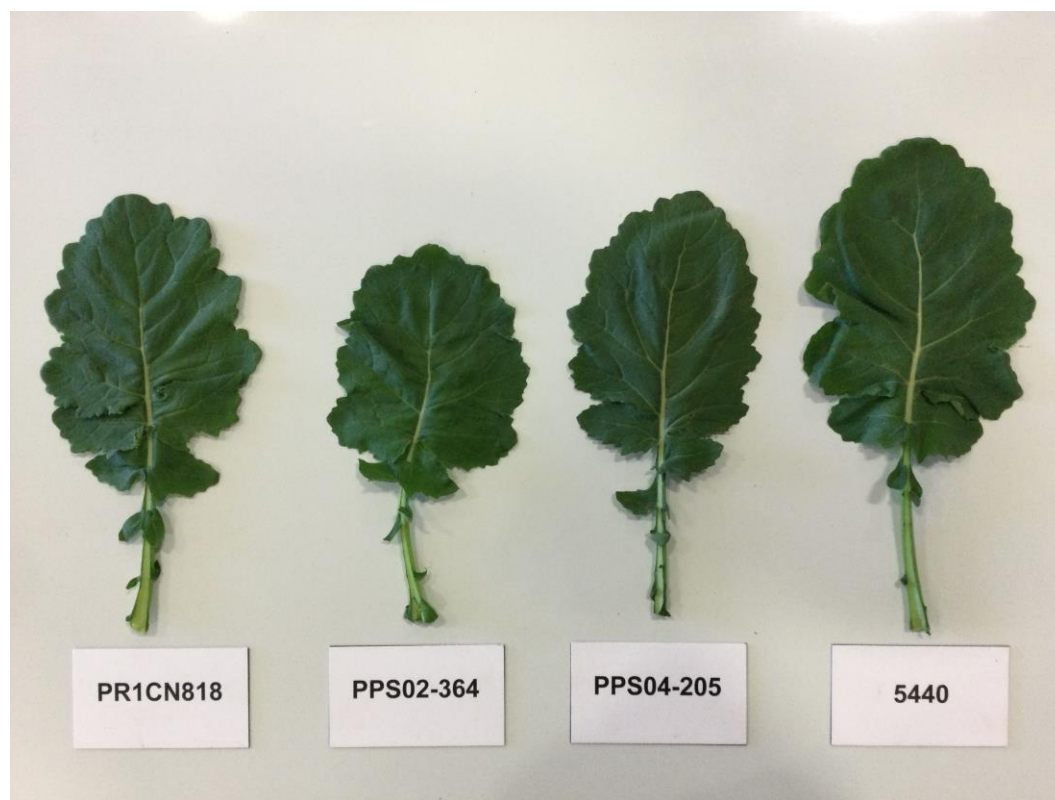
Origin and Breeding: 'PR1CN818' is a restorer line in the process of F1 hybrid production. It was derived as a double haploid line containing the Rf3 gene in a homozygous state. The cross was made in Saskatoon, Saskatchewan, Canada in 2018 and the subsequent double haploid line extraction was made in 2018. 'PR1CN818' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

Tests and Trials: The comparative trials for 'PR1CN818' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN818'

	'PR1CN818'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	26.2	23.8	22.3	26.6
std. deviation	2.7	3.2	2.1	2.7
<i>Leaf length (cm)</i>				
mean (LSD=3.3)	23.3	19.9	22.2	23.2
std. deviation	2.3	2.0	2.3	2.5
<i>Silique length (mm)</i>				
mean (LSD=4.3)	62.9	56.9	51.7	58.3
std. deviation	4.6	3.8	3.2	3.3
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	118	112	104	119
std. deviation	9	5	8	8

*reference varieties



Canola: 'PR1CN818' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN821'
Application number: 22-11032
Application date: 2022/07/05
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 'PR1CN821' is longer and wider than that of 'PPS04-205'. The petiole of 'PR1CN821' is longer than that of 'PPS02-364'. The plants of 'PR1CN821' flower later than those of 'PPS02-364' and '5440'. The petal of 'PR1CN821' is narrower than those of 'PPS04-205' and '5440'. 'PR1CN821' has a longer silique than 'PPS04-205'. The silique beak of 'PR1CN821' is shorter than that of 'PPS02-364'. The plants of 'PR1CN821' mature later than those of 'PPS02-364' and '5440'.*

Description:

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

COTYLEDON: medium to long, medium width

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

FLOWER PETAL: yellow, medium length, narrow to medium width

SILIQUE: semi-erect to horizontal attitude, medium length, short beak, short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 45.1% of whole dried seed, protein is 47.7% of dried oil free meal, low concentration of glucosinolates (10.3 $\mu\text{mol/g}$)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

Origin and Breeding: ‘PR1CN821’ 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 conducted in Saskatoon, Saskatchewan, Canada in 2019. ‘PR1CN821’ was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

Tests and Trials: The comparative trials for ‘PR1CN821’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. The means were based on a two year average. Mean differences were significant at the 2% probability level based on LSD values.

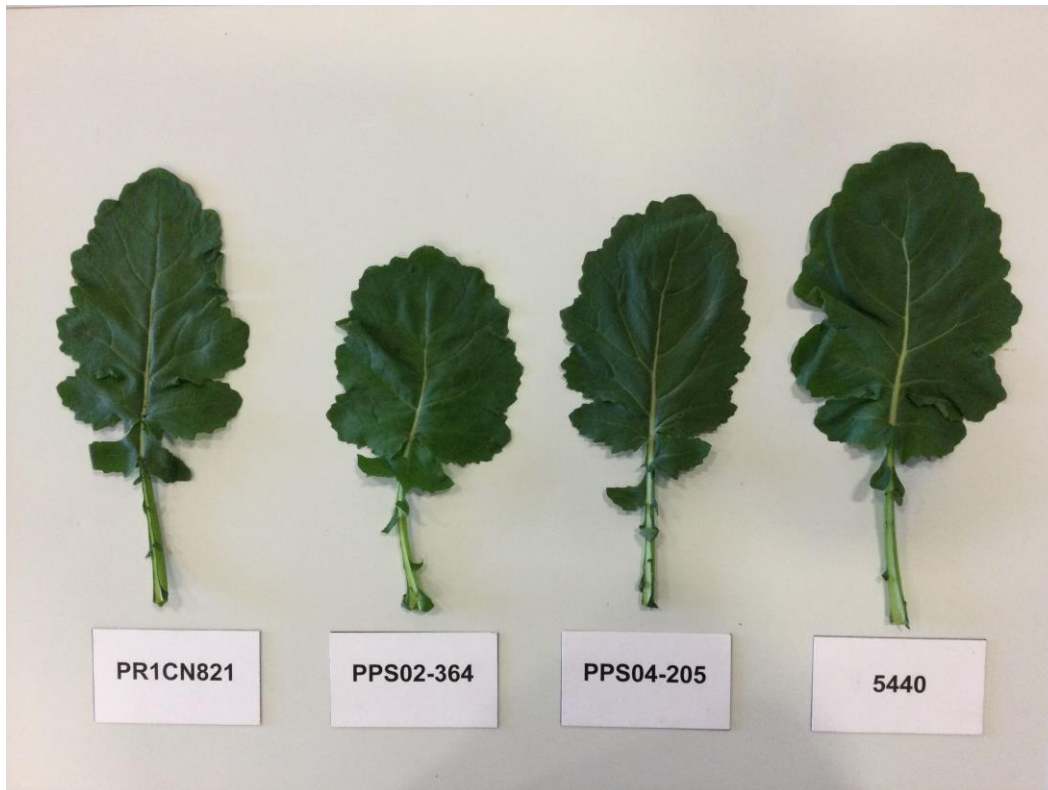
Comparison table for ‘PR1CN821’

	‘PR1CN821’	‘PPS02-364’*	‘PPS04-205’*	‘5440’*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	13.7	12.9	12.2	13.0
std. deviation	1.0	1.2	1.0	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	24.4	23.8	22.3	26.6
std. deviation	1.5	3.2	2.1	2.7
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	8.7	6.5	8.9	8.9
std. deviation	1.6	1.6	1.7	1.4
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	41	39	40	39
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	5.4	5.5	6.5	6.8
std. deviation	1.1	0.9	0.8	0.9
<i>Silique length (mm)</i>				
mean (LSD=4.3)	60.7	56.9	51.7	58.3
std. deviation	4.1	3.8	3.2	3.3
<i>Beak length (mm)</i>				
mean (LSD=1.5)	8.2	10.1	8.6	8.8
std. deviation	1.5	2.0	1.6	1.3

Days to maturity (number of days from planting to maturity)

mean 88 83 86 85

*reference varieties



Canola: 'PR1CN821' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN822'
Application number: 22-11033
Application date: 2022/07/05
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 'PR1CN822' is wider than that of 'PPS04-205'. The plants of 'PR1CN822' flower later than those of 'PPS02-364'. 'PR1CN822' has a longer silique than 'PPS02-364' and 'PPS04-205'. The silique beak of 'PR1CN822' is shorter than that of 'PPS02-364'. At maturity, the plants of 'PR1CN822' are shorter than the plants of '5440'.*

Description:

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

COTYLEDON: medium to long, medium to wide

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

FLOWER PETAL: yellow, medium length, narrow to medium width

SILIQUE: semi-erect to horizontal attitude, medium length, short beak, short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 44.5% of whole dried seed, protein is 47.9% of dried oil free meal, very low concentration of glucosinolates (9.9 $\mu\text{mol/g}$)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

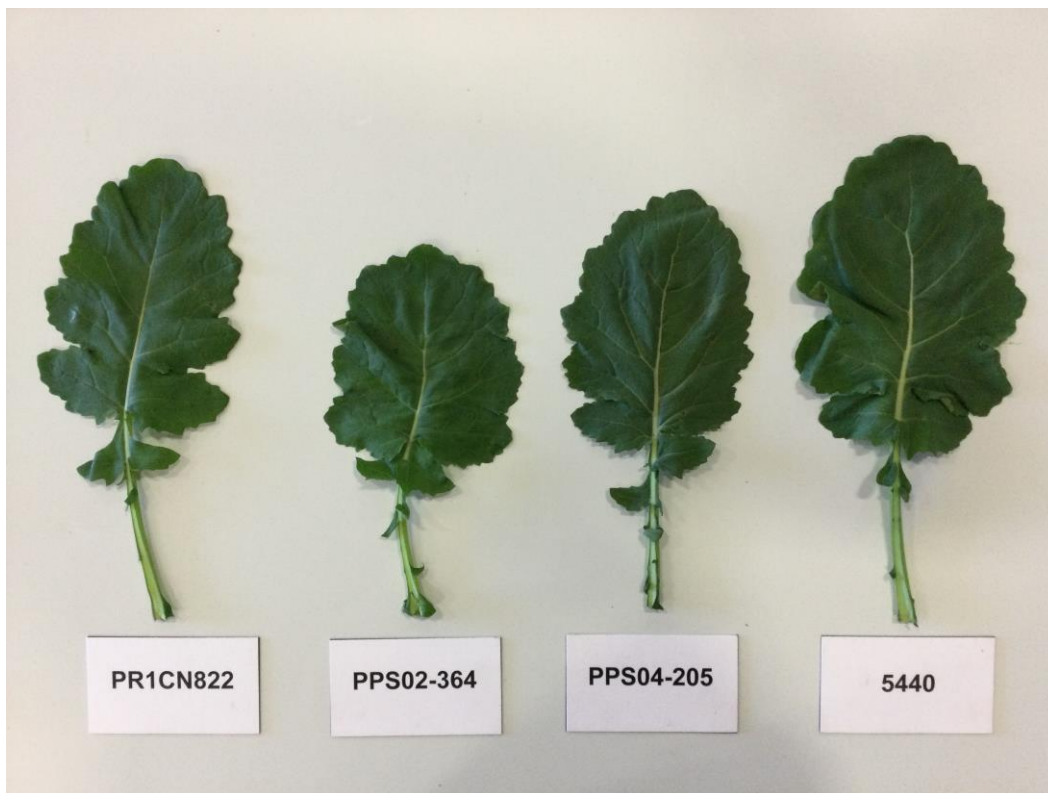
Origin and Breeding: ‘PR1CN822’ is a restorer line in the process of F1 hybrid production. It was derived by crossing an inbred line containing the Rf3 gene in a homozygous state to a donor line, which was then crossed to a recurring parent in a backcrossing scheme. The initial cross was conducted in Saskatoon, Saskatchewan, Canada in 2019. ‘PR1CN822’ was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

Tests and Trials: The comparative trials for ‘PR1CN822’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 ‘PR1CN822’

	‘PR1CN822’	‘PPS02-364’*	‘PPS04-205’*	‘5440’*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	25.7	23.8	22.3	26.6
std. deviation	2.5	3.2	2.1	2.7
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	41	39	40	39
<i>Silique length (mm)</i>				
mean (LSD=4.3)	61.9	56.9	51.7	58.3
std. deviation	3.9	3.8	3.2	3.3
<i>Beak length (mm)</i>				
mean (LSD=1.5)	7.9	10.1	8.6	8.8
std. deviation	2.0	2.0	1.6	1.3
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	107	112	104	119
std. deviation	8	5	8	8

*reference varieties



Canola: 'PR1CN822' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN823'
Application number: 22-11034
Application date: 2022/07/05
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 'PR1CN823' is longer than those of 'PPS02-364' and 'PPS04-205' and wider than that of 'PPS04-205'. The plants of 'PR1CN823' flower later than those of 'PPS02-364' and '5440'. The petal of 'PR1CN823' is wider than that of 'PPS02-364'. The silique and beak of 'PR1CN823' are shorter than those of the reference varieties. The plants of 'PR1CN823' mature later than those of the reference varieties.*

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

COTYLEDON: medium to long, medium to wide

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

FLOWER PETAL: yellow, medium length and width

SILIQUE: erect attitude, very short, very short to short beak, short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 44.8% of whole dried seed, protein is 48.5% of dried oil free meal, very low concentration of glucosinolates (8.3 $\mu\text{mol/g}$)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

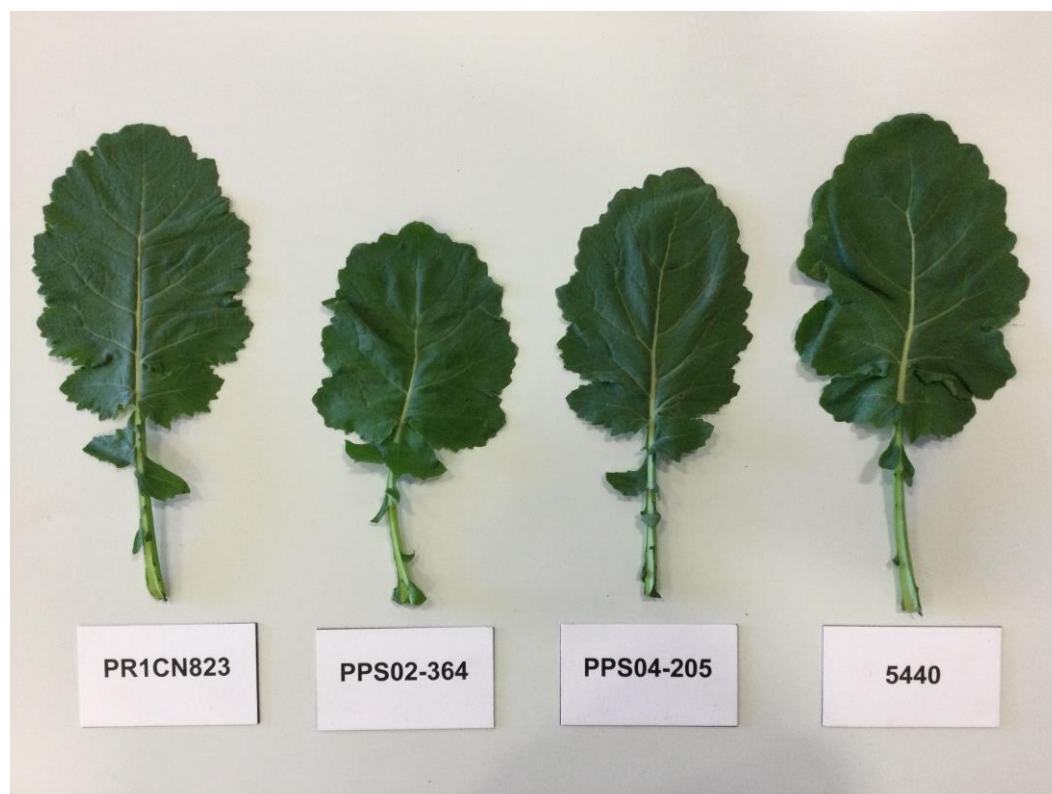
DISEASE REACTION: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*)

Origin and Breeding: 'PR1CN823' 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 in Saskatoon, Saskatchewan, Canada in 2018 and the subsequent double haploid line extraction was made in 2020. 'PR1CN823' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

Tests and Trials: The comparative trials for 'PR1CN823' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN823'

	'PR1CN823'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	14.3	12.9	12.2	13.0
std. deviation	0.8	1.2	1.0	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	24.5	23.8	22.3	26.6
std. deviation	1.6	3.2	2.1	2.7
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	42	39	40	39
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	6.8	5.5	6.5	6.8
std. deviation	1.1	0.9	0.8	0.9
<i>Silique length (mm)</i>				
mean (LSD=4.3)	46.4	56.9	51.7	58.3
std. deviation	2.7	3.8	3.2	3.3
<i>Beak length (mm)</i>				
mean (LSD=1.5)	5.8	10.1	8.6	8.8
std. deviation	1.3	2.0	1.6	1.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	90	83	86	85
*reference varieties				



Canola: 'PR1CN823' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN826'
Application number: 22-11035
Application date: 2022/07/05
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 'PR1CN826' is shorter and narrower than that of '5440' and wider than that of 'PPS04-205'. The leaf and petiole of 'PR1CN826' are longer than that of 'PPS02-364'. The petal of 'PR1CN826' is longer than that of 'PPS04-205'. 'PR1CN826' has a longer silique than 'PPS04-205'. The silique beak of 'PR1CN826' is shorter than that of 'PPS02-364'. The plants of 'PR1CN826' mature earlier than those of 'PPS04-205'. At maturity, the plants of 'PR1CN826' are taller than the plants of 'PPS04-205'.*

Description:

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

COTYLEDON: medium length and width

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

FLOWER PETAL: yellow, medium length, narrow to medium width

SILIQUE: semi-erect to horizontal attitude, medium length, short beak, short pedicel

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 42.4% of whole dried seed, protein is 48.5% of dried oil free meal, very low concentration of glucosinolates (9.7 $\mu\text{mol/g}$)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

Origin and Breeding: 'PR1CN826' 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 in Saskatoon, Saskatchewan, Canada in 2017 and the subsequent double haploid line extraction was made in 2017. 'PR1CN826' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

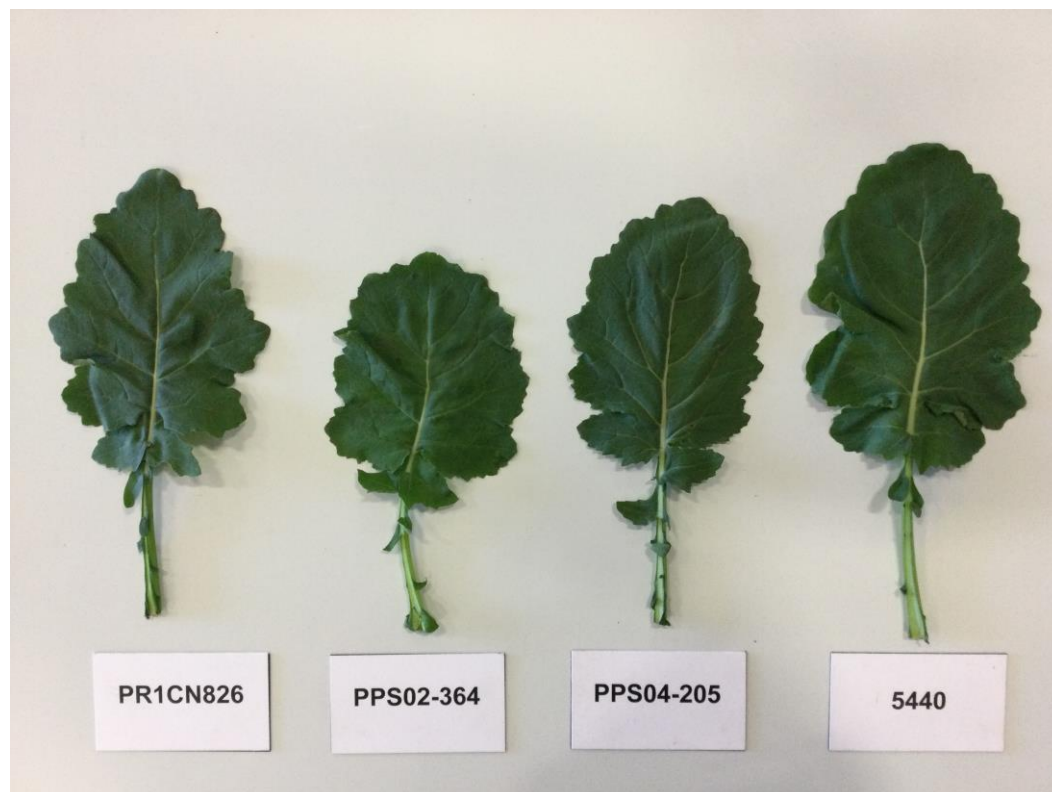
Tests and Trials: The comparative trials for 'PR1CN826' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN826'

	'PR1CN826'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	11.9	12.9	12.2	13.0
std. deviation	1.3	1.2	1.0	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	24.2	23.8	22.3	26.6
std. deviation	2.9	3.2	2.1	2.7
<i>Leaf length (cm)</i>				
mean (LSD=3.3)	23.5	19.9	22.2	23.2
std. deviation	2.2	2.0	2.3	2.5
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	9.0	6.5	8.9	8.9
std. deviation	1.6	1.6	1.7	1.4
<i>Flower petal length (mm)</i>				
mean (LSD=1.0)	14.2	14.2	13.1	14.4
std. deviation	1.2	1.4	1.3	1.3
<i>Silique length (mm)</i>				
mean (LSD=4.3)	60.7	56.9	51.7	58.3
std. deviation	4.4	3.8	3.2	3.3
<i>Beak length (mm)</i>				
mean (LSD=1.5)	7.6	10.1	8.6	8.8
std. deviation	1.5	2.0	1.6	1.3

<i>Days to maturity (number of days from planting to maturity)</i>				
mean	83	83	86	85
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	119	112	104	119
std. deviation	9	5	8	8

*reference varieties



Canola: 'PR1CN826' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN831'
Application number: 22-11036
Application date: 2022/07/05
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 'PR1CN831' is longer than that of '5440' and wider than those of 'PPS02-364' and 'PPS04-205'. The leaf of 'PR1CN831' is longer than that of 'PPS02-364'. The petal of 'PR1CN831' is wider than that of 'PPS02-364'. The silique beak of 'PR1CN831' is shorter than that of 'PPS02-364'. 'PR1CN831' has a longer pedicel than the reference varieties. The plants of 'PR1CN831' mature earlier than those of 'PPS04-205'.*

Description:

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

COTYLEDON: medium to long, medium to wide

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

FLOWER PETAL: yellow, medium length and width

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.04% of total fatty acids, oil content is 43.5% of whole dried seed, protein is 50.0% of dried oil free meal, low concentration of glucosinolates (11.5 µmol/g)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

Origin and Breeding: 'PR1CN831' 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 in Saskatoon, Saskatchewan, Canada in 2017 and the subsequent double haploid line extraction was made in 2018. 'PR1CN831' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

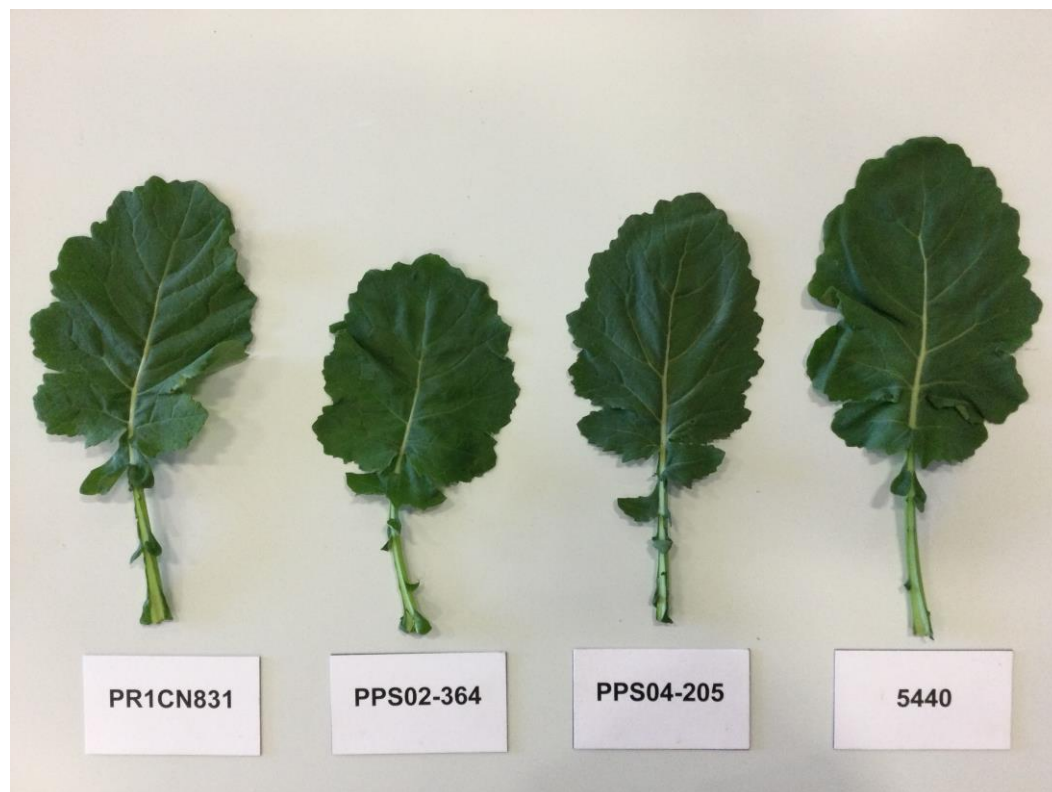
Tests and Trials: The comparative trials for 'PR1CN831' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN831'

	'PR1CN831'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon length (mm)</i>				
mean (LSD=1.0)	14.6	12.9	12.2	13.0
std. deviation	2.5	1.2	1.0	1.4
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	26.0	23.8	22.3	26.6
std. deviation	3.2	3.2	2.1	2.7
<i>Leaf length (cm)</i>				
mean (LSD=3.3)	23.3	19.9	22.2	23.2
std. deviation	2.1	2.0	2.3	2.5
<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	7.3	5.5	6.5	6.8
std. deviation	1.0	0.9	0.8	0.9
<i>Beak length (mm)</i>				
mean (LSD=1.5)	8.2	10.1	8.6	8.8
std. deviation	1.4	2.0	1.6	1.3

<i>Pedicle length (mm)</i>				
mean (LSD=2.3)	20.4	17.0	16.3	17.6
std. deviation	3.0	2.1	2.3	2.9
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	83	83	86	85

*reference varieties



Canola: 'PR1CN831' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN832'
Application number: 22-11037
Application date: 2022/07/05
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 'PR1CN832' is narrower than those of 'PPS02-364' and '5440'. The leaf of 'PR1CN832' is longer than that of 'PPS02-364'. The petiole of 'PR1CN832' is longer than 'PPS02-364'. The plants of 'PR1CN832' flower later than those of the reference varieties. The petal of 'PR1CN832' is wider than that of 'PPS02-364'. 'PR1CN832' has a*

longer silique than 'PPS04-205'. The plants of 'PR1CN832' mature later than those of the reference varieties. At maturity, the plants of 'PR1CN832' are taller than the plants of 'PPS02-364' and 'PPS04-205'.

Description:

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

COTYLEDON: medium length, narrow to medium width

LEAF: medium green, medium to many lobes, undulating to rounded margin, low to medium density of shallow margin indentations, medium to long, narrow to medium width, short to medium length petiole

FLOWER PETAL: yellow, medium length and width

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 42.5% of whole dried seed, protein is 49.5% of dried oil free meal, low concentration of glucosinolates (12.9 µmol/g)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

Origin and Breeding: 'PR1CN832' 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 in Saskatoon, Saskatchewan, Canada in 2018. 'PR1CN832' was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

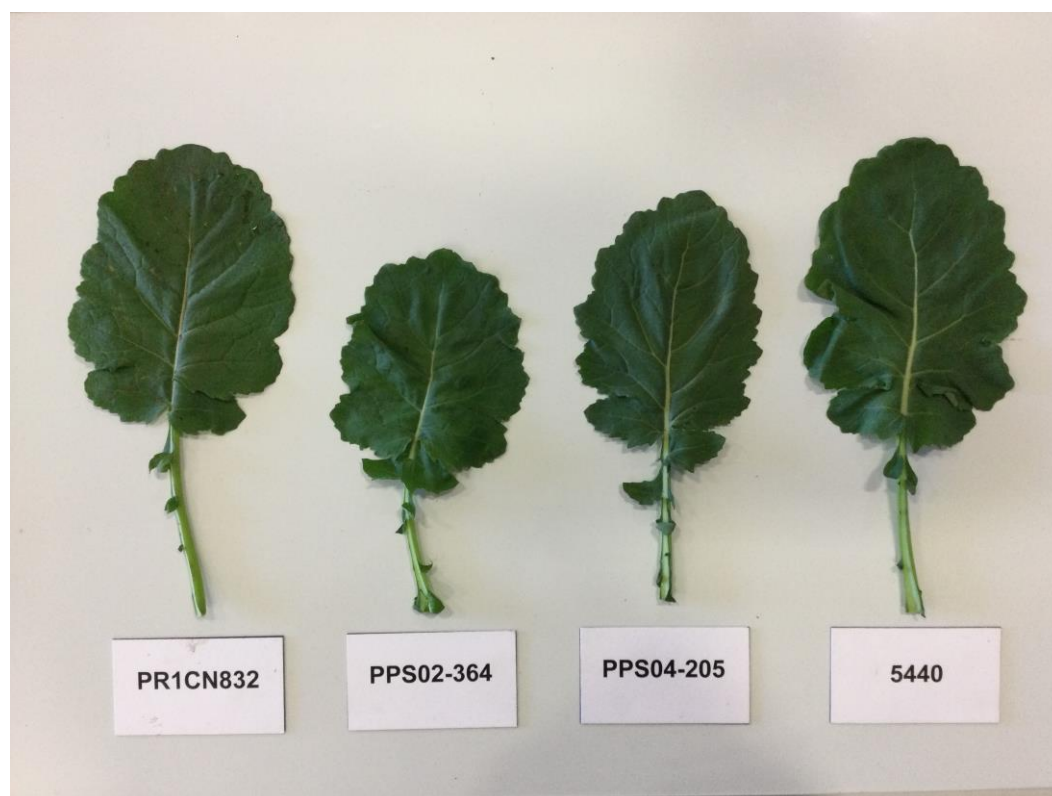
Tests and Trials: The comparative trials for 'PR1CN832' were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 'PR1CN832'

	'PR1CN832'	'PPS02-364'*	'PPS04-205'*	'5440'*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	21.6	23.8	22.3	26.6
std. deviation	3.2	3.2	2.1	2.7
<i>Leaf length (cm)</i>				
mean (LSD=3.3)	23.3	19.9	22.2	23.2
std. deviation	2.1	2.0	2.3	2.5
<i>Petiole length (cm)</i>				
mean (LSD=2.0)	9.2	6.5	8.9	8.9
std. deviation	1.6	1.6	1.7	1.4
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	44	39	40	39

<i>Flower petal width (mm)</i>				
mean (LSD=1.0)	7.0	5.5	6.5	6.8
std. deviation	1.2	0.9	0.8	0.9
<i>Silique length (mm)</i>				
mean (LSD=4.3)	56.9	56.9	51.7	58.3
std. deviation	3.0	3.8	3.2	3.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	91	83	86	85
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	123	112	104	119
std. deviation	9	5	8	8

*reference varieties



Canola: 'PR1CN832' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN833'
Application number: 22-11038
Application date: 2022/07/05
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 ‘PR1CN833’ is wider than that of ‘PPS04-205’ and narrower than that of ‘5440’. The plants of ‘PR1CN833’ flower later than those of the reference varieties. The petal of ‘PR1CN833’ is shorter than those of ‘PPS02-364’ and ‘5440’. The silique beak of ‘PR1CN833’ is shorter than that of ‘PPS02-364’. The plants of ‘PR1CN833’ mature later than those of the reference varieties. At maturity, the plants of ‘PR1CN833’ are shorter than the plants of ‘5440’.

Description:

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

COTYLEDON: medium length and width

LEAF: dark green, many 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, narrow to medium width

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.04% of total fatty acids, oil content is 46.0% of whole dried seed, protein is 49.2% of dried oil free meal, very low concentration of glucosinolates (9.1 µmol/g)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

Origin and Breeding: ‘PR1CN833’ 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 conducted in Saskatoon, Saskatchewan, Canada in 2019. ‘PR1CN833’ was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

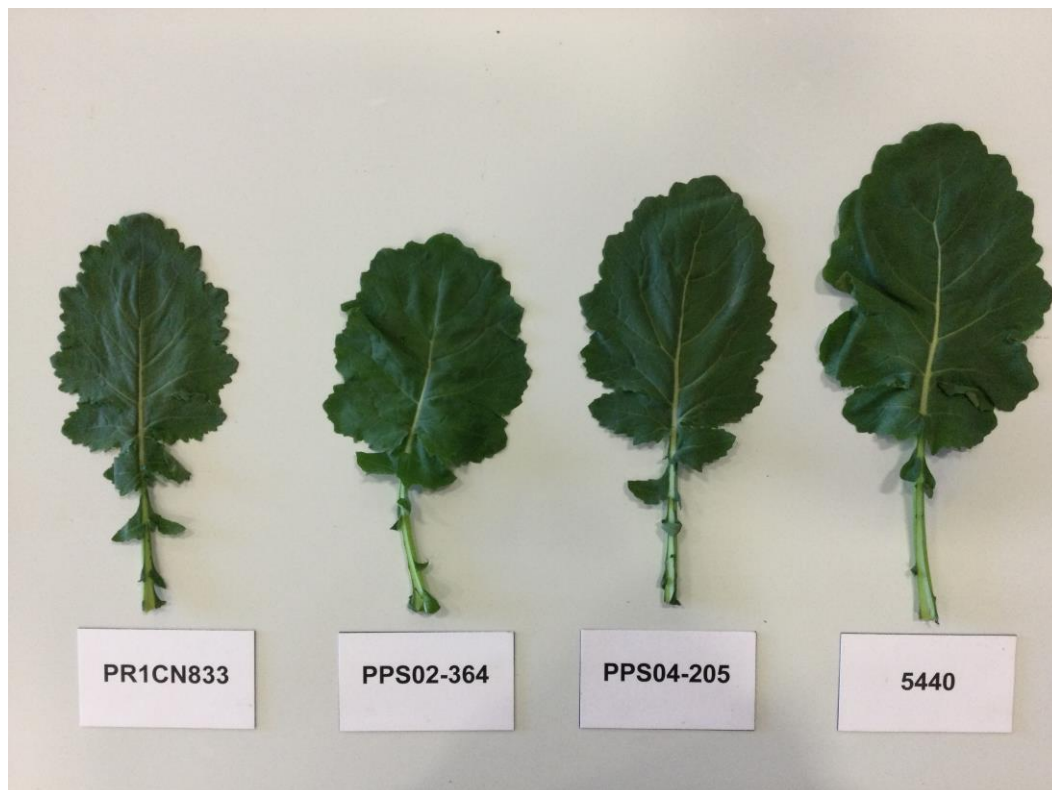
Tests and Trials: The comparative trials for ‘PR1CN833’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 ‘PR1CN833’

	‘PR1CN833’	‘PPS02-364’*	‘PPS04-205’*	‘5440’*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	23.8	23.8	22.3	26.6
std. deviation	2.0	3.2	2.1	2.7
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	43	39	40	39
<i>Flower petal length (mm)</i>				
mean (LSD=1.0)	13.1	14.2	13.1	14.4
std. deviation	1.2	1.4	1.3	1.3

<i>Beak length (mm)</i>				
mean (LSD=1.5)	8.2	10.1	8.6	8.8
std. deviation	1.6	2.0	1.6	1.3
<i>Days to maturity (number of days from planting to maturity)</i>				
mean	91	83	86	85
<i>Plant height (at maturity) (cm)</i>				
mean (LSD=9)	108	112	104	119
std. deviation	10	5	8	8

*reference varieties



Canola: 'PR1CN833' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)

Proposed denomination: 'PR1CN834'
Application number: 22-11039
Application date: 2022/07/05
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 ‘PR1CN834’ is narrower than that of ‘5440’. The plants of ‘PR1CN834’ flower later than those of the reference varieties. ‘PR1CN834’ has a shorter silique than ‘PPS02-364’ and ‘5440’. The silique beak of ‘PR1CN834’ is shorter than that of ‘PPS02-364’. The plants of ‘PR1CN834’ mature later than those of the reference varieties.

Description:

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

COTYLEDON: medium length and width

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

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

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

SEED COAT: black

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

QUALITY CHARACTERISTICS: erucic acid is 0.03% of total fatty acids, oil content is 44.7% of whole dried seed, protein is 48.4% of dried oil free meal, low concentration of glucosinolates (11.0 µmol/g)

CHEMICAL REACTION: resistant to glufosinate ammonium herbicides

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

Origin and Breeding: ‘PR1CN834’ 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 conducted in Saskatoon, Saskatchewan, Canada in 2018. ‘PR1CN834’ was selected in 2021 on the basis of fertility restoration of numerous male sterile lines and expression of resistance 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. Breeder seed production commenced in Saskatoon, Saskatchewan, Canada in 2021.

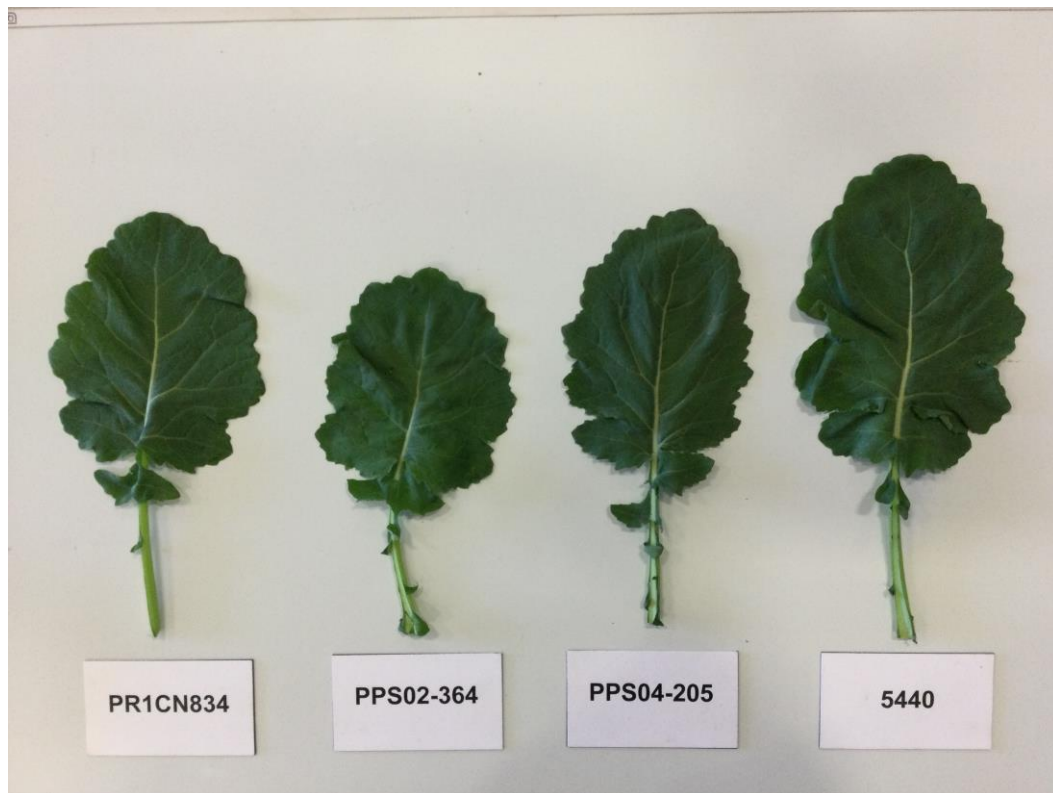
Tests and Trials: The comparative trials for ‘PR1CN834’ were conducted during the 2021 and 2022 growing seasons in Saskatoon, Saskatchewan. Trials were arranged in a RCB design with 3 replications per variety. The plots consisted of 3 rows that were 6 metres in length with spacing of 25 cm between rows and 50 cm between plots. The planting density resulted in approximately 1300 plants per variety per year. The measured characteristics were based on 30 measurements except for silique characteristics which were based on 60 measurements. 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 ‘PR1CN834’

	‘PR1CN834’	‘PPS02-364’*	‘PPS04-205’*	‘5440’*
<i>Cotyledon width (mm)</i>				
mean (LSD=1.3)	22.9	23.8	22.3	26.6
std. deviation	1.6	3.2	2.1	2.7
<i>Days to flowering (number of days from planting to when 50% of plants have one or more open flowers)</i>				
mean	43	39	40	39
<i>Silique length (mm)</i>				
mean (LSD=4.3)	49.3	56.9	51.7	58.3
std. deviation	3.6	3.8	3.2	3.3

<i>Beak length (mm)</i>					
mean (LSD=1.5)	8.3	10.1	8.6	8.8	
std. deviation	1.5	2.0	1.6	1.3	
<i>Days to maturity (number of days from planting to maturity)</i>					
mean	91	83	86	85	

*reference varieties



Canola: 'PR1CN834' (left) with reference varieties 'PPS02-364' (centre left), 'PPS04-205' (centre right) and '5440' (right)