



APPLICATIONS UNDER EXAMINATION

CANOLA

CANOLA
(Brassica napus)

Proposed denomination: 'Kumily'
Application number: 08-6137
Application date: 2008/01/22
Applicant: Lantmännen SW Seed AB, Svalöv, Sweden
Agent in Canada: Lantmännen SW Seed Ltd., Saskatoon, Saskatchewan
Breeder: Lantmännen SW Seed AB, Svalöv, Sweden

Variety used for comparison: 'Sponsor'

Summary: 'Kumily' has a wider cotyledon than 'Sponsor'. The leaf margin of 'Kumily' is rounded while it is sharp in 'Sponsor'. 'Kumily' has a shorter silique and pedicel than 'Sponsor'.

Description:

PLANT: short at maturity

COTYLEDON: medium to wide

LEAF: medium green, medium number of lobes, rounded margin, medium to deep dentations, medium length, narrow width

FLOWER PETALS: yellow

SILIQUE: very short to short, short to medium length beak, medium to long pedicel

SEED: black

AGRONOMIC CHARACTERISTICS: good resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.0 % of total fatty acids, medium glucosinolates

Origin and Breeding: 'Kumily' (experimental designation SW H2815) was developed as a doubled haploid by Svalof Weibull AB, Svalov, Sweden. The cross occurred in 1996, with the selection criteria being double low quality of erucic acid and glucosinolates, early flowering and maturity, stalk stiffness, Blackleg resistance, high oil and protein levels and yield.

Tests and Trials: Trials were conducted during the summers of 2007 and 2009 in Elora, Ontario. Plots consisted of 4 rows with a row length of 5 meters and a row spacing of 36 centimeters. There were 2 replicates.

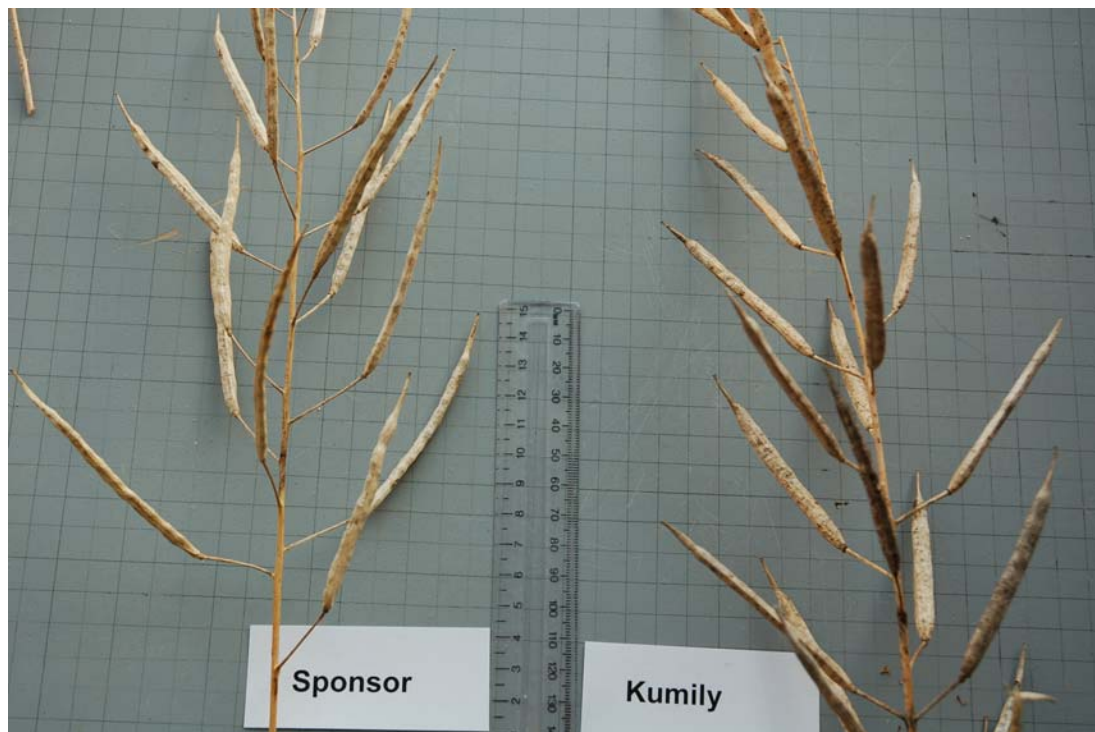
Comparison table for 'Kumily'

	'Kumily'	'Sponsor'*
<i>Cotyledon width (mm)</i>		
mean (LSD=1.0835)	26.2	22.44
std. deviation	2.91	2.07
<i>Silique length (mm)</i>		
mean (LSD=5.8227)	51.76	58.84
std. deviation	11.39	11.71
<i>Pedicel length (mm)</i>		
mean (LSD=3.6793)	25.68	33.44
std. deviation	11.82	13.38

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height, leaf characteristics and 60 plant parts for silique, beak and pedicel characteristics. Differences are significant at the 1% probability

level based on LSD values.

*reference variety



Canola: 'Kumily' (right) with reference variety 'Sponsor' (left)

Proposed denomination: 'Orinoco'
Application number: 08-6136
Application date: 2008/01/22
Applicant: Lantmännen SW Seed AB, Svalöv, Sweden
Agent in Canada: Lantmännen SW Seed Ltd., Saskatoon, Saskatchewan
Breeder: Lantmännen SW Seed AB, Svalöv, Sweden

Variety used for comparison: 'Defender'

Summary: 'Orinoco' has deeper leaf margin dentations than 'Defender'. The beak of 'Orinoco' is longer than that of 'Defender'.

Description:

PLANT: short to medium height at maturity

COTYLEDON: medium width

LEAF: blue green, few to medium number of lobes, sharp margin, medium to deep dentations, medium length, narrow width

FLOWER PETALS: yellow

SILIQUE: short, medium length beak, medium to long pedicel

SEED: black

AGRONOMIC CHARACTERISTICS: good resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.0 % of total fatty acids, medium glucosinolates

Origin and Breeding: ‘Orinoco’ (experimental designation SW F2800) was developed using the pedigree breeding method by Svalof Weibull AB, Svalov, Sweden. The cross occurred in 1994, with the selection criteria being double low quality for erucic acid and glucosinolates, early flowering and maturity, stalk stiffness, Blackleg resistance, high content of oil and protein and yield.

Tests and Trials: Trials were conducted during the summers of 2007 and 2009 in Elora, Ontario. Plots consisted of 4 rows with a row length of 5 meters and a row spacing of 36 centimeters. There were 2 replicates.

Comparison table for ‘Orinoco’

	‘Orinoco’	‘Defender’*
<i>Beak length (mm)</i>		
mean (LSD=1.4081)	11.21	9.69
std. deviation	4.15	3.73

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height, leaf characteristics and 60 plant parts for silique, beak and pedicel characteristics. Differences are significant at the 1% probability level based on LSD values.

*reference variety



Canola: ‘Orinoco’ (right) with reference variety ‘Defender’ (left)

Proposed denomination: 'PPS07-160 A-Line'
Application number: 09-6693
Application date: 2009/07/21
Applicant: Bayer CropScience Inc., Saskatoon, Saskatchewan
Breeder: Hieronim Polewicz, Bayer CropScience 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: 'PPS01-140 A-Line', 'PPS02-144 A-Line' and '5020'

Summary: *The cotyledon of 'PPS07-160 A-Line' is shorter and narrower than 'PPS02-144 A-Line' and '5020'. 'PPS07-160 A-Line' has a medium green leaf colour while it is light green in 'PPS02-144 A-Line'. The leaf of 'PPS07-160 A-Line' has very few lobes while 'PPS01-140 A-Line', 'PPS02-144 A-Line' have a medium number and '5020' has medium to many. 'PPS07-160 A-Line' has a shorter and narrower leaf than '5020'. 'PPS07-160 A-Line' flowers later than 'PPS02-144 A-Line' and '5020'. The flower petal of 'PPS07-160 A-Line' is longer than that of 'PPS01-140 A-Line' but shorter than that of '5020'. 'PPS07-160 A-Line' has a narrower flower petal than 'PPS02-144 A-Line' and '5020'. The plant height of 'PPS07-160 A-Line' at maturity is shorter than that of 'PPS01-140 A-Line'. 'PPS07-160 A-Line' has a semi erect silique attitude while it is horizontal in the reference varieties. The silique of 'PPS07-160 A-Line' is shorter than the reference varieties. 'PPS07-160 A-Line' has a longer beak than 'PPS01-140 A-Line' but shorter than 'PPS02-144 A-Line' and '5020'. The pedicel of 'PPS07-160 A-Line' is longer than that of 'PPS01-140 A-Line' but shorter than that of '5020'. 'PPS07-160 A-Line' matures later than 'PPS01-140 A-Line' and '5020'. The seed of 'PPS07-160 A-Line' has lower protein levels than in 'PPS02-144 A-Line'.*

Description:

PLANT: male sterile inbred line, glufosinate ammonium tolerant, spring seasonal type, short to medium height at maturity

COTYLEDON: very narrow to narrow, short

LEAF: medium green, very few lobes, rounded margin, low density of shallow dentations, short, narrow to medium width

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

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

SEED: black

AGRONOMIC CHARACTERISTICS: fair resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.7% of total fatty acids, oil content is 48.9% of whole dried seed, protein is 25.5% of dried oil free meal, low glucosinolates (13.9 umol/gm)

DISEASE RESISTANCE: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and resistant to White Rust (*Albugo candida*, races 7a & 2v)

Origin and Breeding: 'PPS07-160 A-line' is a male sterile inbred line used in F1 hybrid production, that contains the Ms8 gene construct in heterozygous state. 'PPS07-160 A-line' is a doubled haploid line that was produced in Canada in 2003. It was selected in 2005 and 2006 on the basis of male sterility stability, expression of tolerance to glufosinate ammonium herbicide and good combining ability with numerous restorer lines. Other selection criteria included height, vigour, maturity, blackleg resistance, oil content, fatty acid profile and glucosinolate content.

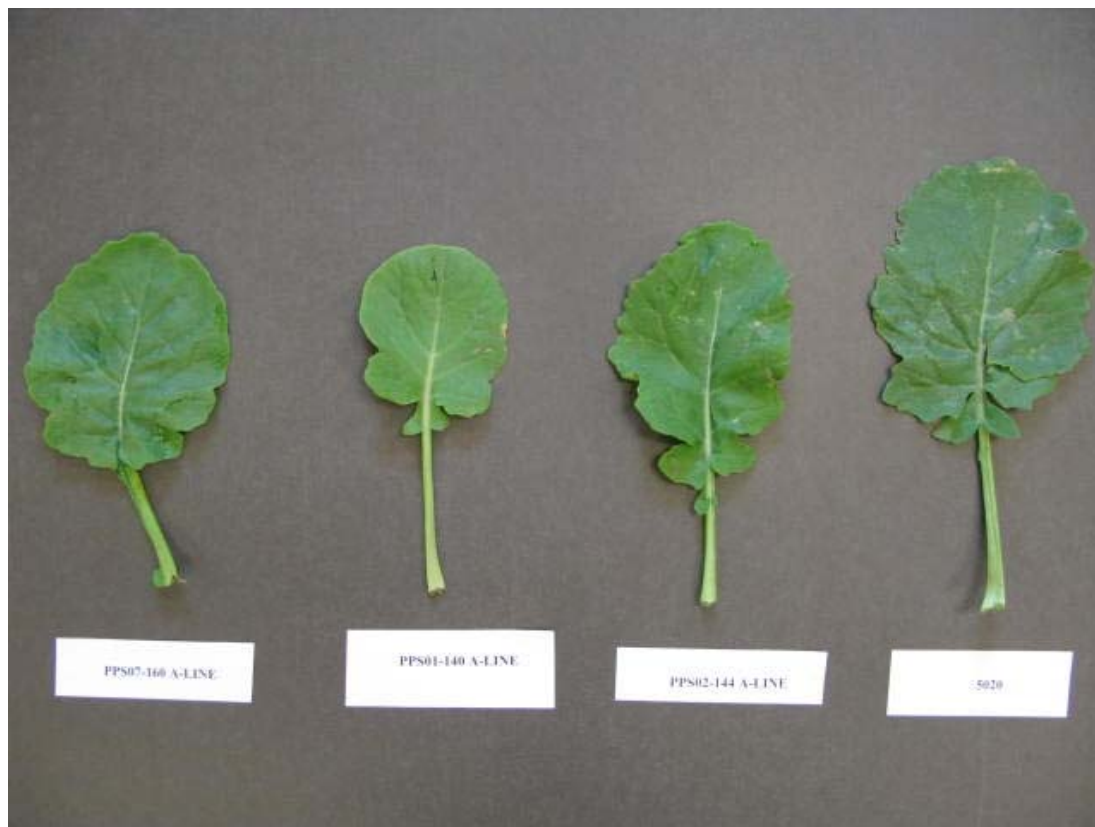
Tests and Trials: Trials were conducted during the summers of 2008 and 2009 in Saskatoon, Saskatchewan. Plots consisted of 3 rows with a row length of 6 meters and a row spacing of 50 cm. There were 3 replicates arranged in a RCB design.

Comparison table for 'PPS07-160 A-Line'

	'PPS07-160 A-Line'	'PPS01-140 A-Line**	'PPS02-144 A-Line**	'5020**
<i>Cotyledon width (mm)</i>				
mean (LSD=3.8)	20.2	23.1	27.3	27.7
std. deviation	2.2	1.6	2.8	3.3
<i>Cotyledon length (mm)</i>				
mean (LSD=2.9)	11.5	12.4	15.7	15.8
std. deviation	1.4	0.9	1.4	1.5
<i>Leaf length (mm)</i>				
mean (LSD=47.18)	154	173	183	225
std. deviation	22	20	22	24
<i>Leaf width (mm)</i>				
mean (LSD=22)	82	83	88	110
std. deviation	13	12	12	17
<i>Days to Flowering</i>				
mean (LSD=2.4)	48.0	47.0	43.0	42.0
<i>Flower petal length (mm)</i>				
mean (LSD=1.2)	12.2	10.7	13.0	17.1
std. deviation	1.1	0.8	0.8	0.8
<i>Flower petal width (mm)</i>				
mean (LSD=0.91)	5.8	5.8	6.9	7.8
std. deviation	0.9	0.8	0.6	0.6
<i>Plant height at maturity (cm)</i>				
mean (LSD=12)	128	146	125	129
std. deviation	7.1	6.5	5.8	8.1
<i>Silique length (mm)</i>				
mean (LSD=2)	47.5	56.5	62.2	65.4
std. deviation	5.1	5.4	9.0	5.0
<i>Beak length (mm)</i>				
mean (LSD=0.6)	10.3	7.5	14.3	14.6
std. deviation	1.2	1.4	1.7	1.7
<i>Pediceal length (mm)</i>				
mean (LSD=1.6)	15.7	14.1	16.7	17.9
std. deviation	2.6	2.1	2.2	2.1
<i>Days to maturity</i>				
mean (LSD=5)	111	105	108	97.5
<i>Protein content of seed (% of dried oil free meal)</i>				
mean (LSD=2.6)	25.5	26.9	28.8	24.6

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height and 60 plant parts for leaf, petiole, flower petal, silique, beak and pedicel characteristics. Differences are significant at the 2% probability level based on LSD values.

*reference varieties



Canola: 'PPS07-160 A-Line' (far left) with reference varieties 'PPS01-140 A-Line' (centre left), 'PPS02-144 A-Line' (centre right) and '5020' (far right)

Proposed denomination: 'PPS07-160 B-Line'
Application number: 09-6694
Application date: 2009/07/21
Applicant: Bayer CropScience Inc., Saskatoon, Saskatchewan
Breeder: Hieronim Polewicz, Bayer CropScience 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: 'PPS01-140 B-Line', 'PPS02-144 B-Line' and '5020'

Summary: *The cotyledon of 'PPS07-160 B-Line' is shorter than 'PPS02-144 B-Line' and narrower than both 'PPS02-144 B-Line' and '5020'. 'PPS07-160 B-Line' flowers later than 'PPS02-144 B-Line' and '5020'. The flower petal of 'PPS07-160 B-Line' is shorter than that of 'PPS02-144 B-Line' and '5020' and narrower than that of 'PPS02-144 B-Line'. 'PPS07-160 B-Line' has a semi erect silique attitude while it is horizontal in the reference varieties. The silique of 'PPS07-160 B-Line' is shorter than the reference varieties. 'PPS07-160 B-Line' has a shorter beak than 'PPS02-144 B-Line' and '5020' but longer than 'PPS01-140 B-Line'. The plant height of 'PPS07-160 B-Line' at maturity is taller than that of 'PPS02-144 B-Line'. 'PPS07-160 B-Line' matures later than the reference varieties. The seed of 'PPS07-160 B-Line' has higher oil content and lower protein levels than 'PPS01-140 B-Line'.*

Description:

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

COTYLEDON: narrow to medium width, medium length

LEAF: medium green, very few lobes, rounded margin, low density of shallow dentations, short to medium length, medium width

FLOWER PETALS: yellow, medium to long, medium width

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

SEED: black

AGRONOMIC CHARACTERISTICS: fair to good resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.01% of total fatty acids, oil content is 50.2% of whole dried seed, protein is 24.1% of dried oil free meal, low glucosinolates (13.3 umol/gm)

DISEASE RESISTANCE: resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and resistant to White Rust (*Albugo candida*, races 7a & 2v)

Origin and Breeding: 'PPS07-160 B-line' is a male fertile maintainer line of 'PPS07-160 A-line'. 'PPS07-160 B-line' is a doubled haploid line that was produced in Canada in 2003. 'PPS07-160 B-line' was selected in 2005 and 2006 on the basis of height, vigour, maturity, blackleg resistance, oil content, fatty acid profile and glucosinolate content.

Tests and Trials: Trials were conducted during the summers of 2008 and 2009 in Saskatoon, Saskatchewan. Plots consisted of 3 rows with a row length of 6 meters and a row spacing of 50 cm. There were 3 replicates arranged in a RCB design.

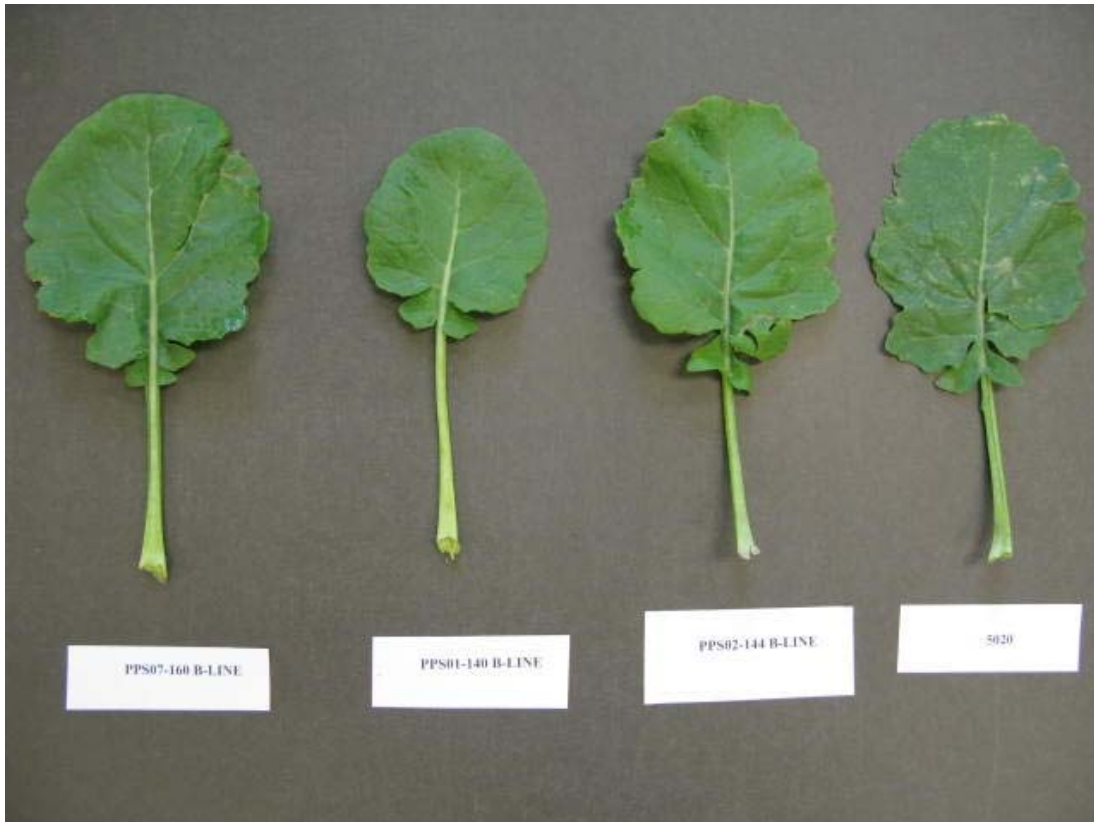
Comparison table for 'PPS07-160 B-Line'

	'PPS07-160 B-Line'	'PPS01-140 B-Line**'	'PPS02-144 B-Line**'	'5020**'
<i>Cotyledon width (mm)</i>				
mean (LSD=3.8)	23.7	25.4	29.8	27.7
std. deviation	2.2	1.9	3.1	3.3
<i>Cotyledon length (mm)</i>				
mean (LSD=2.9)	13.8	13.6	17.3	15.8
std. deviation	1.3	1.1	1.9	1.5
<i>Days to flowering</i>				
mean (LSD=2.4)	45.5	45.0	41.5	42.0
<i>Flower petal length (mm)</i>				
mean (LSD=1.2)	15.5	14.6	17.3	17.1
std. deviation	0.8	0.7	1.1	0.8
<i>Flower petal width (mm)</i>				
mean (LSD=0.91)	7.0	7.8	8.3	7.8
std. deviation	0.7	0.6	0.6	0.6
<i>Silique length (mm)</i>				
mean (LSD=2)	53.0	57.4	62.3	65.4
std. deviation	4.8	4.0	5.5	5.0
<i>Beak length (mm)</i>				
mean (LSD=0.6)	10.3	8.5	15.5	14.6
std. deviation	0.9	1.4	1.6	1.7
<i>Plant height at maturity (cm)</i>				
mean (LSD=12)	123	135	111	129
std. deviation	7.6	6.1	6.3	8.1

<i>Days to Maturity</i>				
mean	103	97.5	98.5	97.5
<i>Oil content of seed (% of whole dried seed)</i>				
mean (LSD=4.0)	50.2	46.1	49.6	48.9
<i>Protein content of seed (% of dried oil free meal)</i>				
mean (LSD=2.6)	24.1	26.9	25.4	24.6

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height and 60 plant parts for leaf, petiole, flower petal, silique, beak and pedicel characteristics. Differences are significant at the 2% probability level based on LSD values.

*reference varieties



Canola: 'PPS07-160 B-Line' (far left) with reference varieties 'PPS01-140 B-Line' (centre left), 'PPS02-144 B-Line' (centre right) and '5020' (far right)

Proposed denomination: 'PPS08-165 A-Line'
Application number: 09-6695
Application date: 2009/07/21
Applicant: Bayer CropScience Inc., Saskatoon, Saskatchewan
Breeder: Hieronim Polewicz, Bayer CropScience 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: 'PPS01-140 A-Line', 'PPS02-144 A-Line' and '5020'

Summary: 'PPS08-165 A-Line' has a medium green leaf colour while it is light green in 'PPS02-144 A-Line'. 'PPS08-165 A-Line' flowers later than 'PPS02-144 A-Line' and '5020'. The flower petal of 'PPS08-165 A-Line' is shorter and narrower than that of 'PPS02-144 A-Line' and '5020'. 'PPS08-165 A-Line' has a taller plant height at maturity than 'PPS02-144 A-Line' and '5020'. The silique of 'PPS08-165 A-Line' is shorter than that of 'PPS02-144 A-Line' and '5020'. 'PPS08-165 A-Line' has a longer beak than that of 'PPS01-140 A-Line' but shorter than that of 'PPS02-144 A-Line' and '5020'. The pedicel of 'PPS08-165 A-Line' is shorter than that of '5020'. 'PPS08-165 A-Line' has higher protein content of the seed than '5020'.

Description:

PLANT: male sterile inbred line, glufosinate ammonium tolerant, spring seasonal type, tall at maturity

COTYLEDON: narrow to medium width, short to medium length

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

FLOWER PETALS: yellow, short, narrow

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

SEED: black

AGRONOMIC CHARACTERISTICS: fair resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.4% of total fatty acids, oil content is 46.3% of whole dried seed, protein is 27.4% of dried oil free meal, high glucosinolates (27.2 umol/gm)

DISEASE RESISTANCE: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and resistant to White Rust (*Albugo candida*, races 7a & 2v)

Origin and Breeding: 'PPS08-165 A-line' is a male sterile inbred line used in F1 hybrid production, that contains the Ms8 gene construct in heterozygous state. 'PPS08-165 A-line' is a doubled haploid line that was produced in Canada in 2003. It was selected in 2005 and 2006 on the basis of male sterility stability, expression of tolerance to glufosinate ammonium herbicide and good combining ability with numerous restorer lines. Other selection criteria included height, vigour, maturity, blackleg resistance, oil content, fatty acid profile and glucosinolate content.

Tests and Trials: Trials were conducted during the summers of 2008 and 2009 in Saskatoon, Saskatchewan. Plots consisted of 3 rows with a row length of 6 meters and a row spacing of 50 cm. There were 3 replicates arranged in a RCB design.

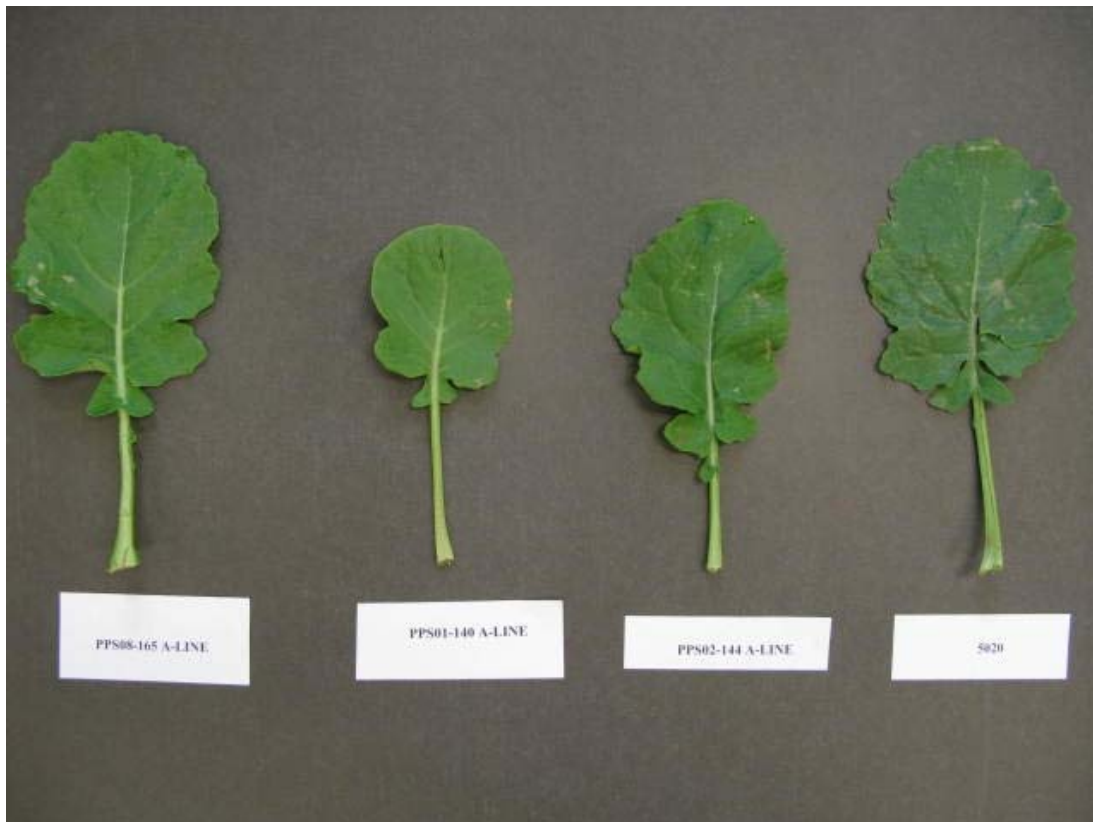
Comparison table for 'PPS08-165 A-Line'

	'PPS08-165 A-Line'	'PPS01-140 A-Line'*	'PPS02-144 A-Line'*	'5020'*
<i>Days to flowering</i>				
mean (LSD=2.4)	46.5	47.0	43.0	42.0
<i>Flower petal length (mm)</i>				
mean (LSD=1.2)	10.5	10.7	13.0	17.1
std. deviation	1.0	0.8	0.8	0.8
<i>Flower petal width (mm)</i>				
mean (LSD=0.91)	5.1	5.8	6.9	7.8
std. deviation	0.7	0.8	0.6	0.6
<i>Plant height at maturity (cm)</i>				
mean (LSD=12)	141	146	125	129
std. deviation	4.5	6.5	5.8	8.1

<i>Siliqua length (mm)</i>				
mean (LSD=2)	55.1	56.5	62.2	65.4
std. deviation	6.7	5.4	9.0	5.0
<i>Beak length (mm)</i>				
mean (LSD=0.6)	10.8	7.5	14.3	14.6
std. deviation	1.5	1.4	1.7	1.7
<i>Pediceal length (mm)</i>				
mean (LSD=1.6)	15.2	14.1	16.7	17.9
std. deviation	3.0	2.1	2.2	2.1
<i>Protein content of the seed (% of dried oil free meal)</i>				
mean (LSD=2.6)	27.4	26.9	28.8	24.6

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height and 60 plant parts for leaf, petiole, flower petal, siliqua, beak and pediceal characteristics. Differences are significant at the 2% probability level based on LSD values.

*reference varieties



Canola: 'PPS08-165 A-Line' (far left) with reference varieties 'PPS01-140 A-Line' (centre left), 'PPS02-144 A-Line' (centre right) and '5020' (far right)

Proposed denomination: 'PPS08-165 B-Line'
Application number: 09-6696
Application date: 2009/07/21
Applicant: Bayer CropScience Inc., Saskatoon, Saskatchewan
Breeder: Hieronim Polewicz, Bayer CropScience 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: 'PPS01-140 B-Line', 'PPS02-144 B-Line' and '5020'

Summary: *The cotyledon of 'PPS08-165 B-Line' is shorter and narrower than that of 'PPS02-144 B-Line'. 'PPS08-165 B-Line' flowers later than 'PPS02-144 B-Line'. The flower petal of 'PPS08-165 B-Line' is shorter and narrower than that of 'PPS02-144 B-Line' and '5020' and narrower than 'PPS01-140 B-Line'. 'PPS08-165 B-Line' has a shorter silique than 'PPS02-144 B-Line' and '5020'. The beak of 'PPS08-165 B-Line' is longer than 'PPS01-140 B-Line' but shorter than that of 'PPS02-144 B-Line' and '5020'. 'PPS08-165 B-Line' has a longer pedicel than the reference varieties. The plant height of 'PPS08-165 B-Line' at maturity is taller than that of 'PPS02-144 B-Line'.*

Description:

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

COTYLEDON: narrow to medium width, medium length

LEAF: medium green, medium number of lobes, rounded margin, low density of shallow dentations, medium length, medium width, medium to long petiole

FLOWER PETALS: yellow, medium length, medium width

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

SEED: black

AGRONOMIC CHARACTERISTICS: fair to good resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.07% of total fatty acids, oil content is 47.9% of whole dried seed, protein is 25.2% of dried oil free meal, medium glucosinolates (17.1 umol/gm)

DISEASE RESISTANCE: moderately resistant to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and resistant to White Rust (*Albugo candida*, races 7a & 2v)

Origin and Breeding: 'PPS08-165 B-line' is a male fertile maintainer line of 'PPS08-165 A-line'. 'PPS08-165 B-line' is a doubled haploid line that was produced in Canada in 2003. 'PPS08-165 B-line' was selected in 2005 and 2006 on the basis of height, vigour, maturity, blackleg resistance, oil content, fatty acid profile and glucosinolate content.

Tests and Trials: Trials were conducted during the summers of 2008 and 2009 in Saskatoon, Saskatchewan. Plots consisted of 3 rows with a row length of 6 meters and a row spacing of 50 cm. There were 3 replicates arranged in a RCB design.

Comparison table for 'PPS08-165 B-Line'

	'PPS08-165 B-Line'	'PPS01-140 B-Line**'	'PPS02-144 B-Line**'	'5020**'
<i>Cotyledon width (mm)</i>				
mean (LSD=3.8)	24.2	25.4	29.8	27.7
std. deviation	2.3	1.9	3.1	3.3
<i>Cotyledon length (mm)</i>				
mean (LSD=2.9)	13.9	13.6	17.3	15.8
std. deviation	1.2	1.1	1.9	1.5
<i>Days to flowering</i>				
mean (LSD=2.4)	44.0	45.0	41.5	42.0
<i>Flower petal length (mm)</i>				
mean (LSD=1.2)	14.4	14.6	17.3	17.1
std. deviation	0.98	0.7	1.1	0.8

<i>Flower petal width (mm)</i>				
mean (LSD=0.91)	6.5	7.8	8.3	7.8
std. deviation	0.55	0.6	0.6	0.6
<i>Silique length (mm)</i>				
mean (LSD=2)	58.1	57.4	62.3	65.4
std. deviation	4.0	4.0	5.5	5.0
<i>Beak length (mm)</i>				
mean (LSD=0.6)	11.0	8.5	15.5	14.6
std. deviation	1.3	1.4	1.6	1.7
<i>Pedicle length (mm)</i>				
mean (LSD=1.6)	19.8	17.1	17.8	17.9
std. deviation	2.0	2.2	2.2	2.1
<i>Plant height at maturity (cm)</i>				
mean (LSD=12)	130	135	111	129
std. deviation	9.6	6.1	6.3	8.1

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height and 60 plant parts for leaf, petiole, flower petal, silique, beak and pedicle characteristics. Differences are significant at the 2% probability level based on LSD values.

*reference varieties



Canola: 'PPS08-165 B-Line' (far left) with reference varieties 'PPS01-140 B-Line' (centre left), 'PPS02-144 B-Line' (centre right) and '5020' (far right)

Proposed denomination: 'PPS08-168 A-Line'
Application number: 09-6697
Application date: 2009/07/21
Applicant: Bayer CropScience Inc., Saskatoon, Saskatchewan
Breeder: Hieronim Polewicz, Bayer CropScience 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: 'PPS01-140 A-Line', 'PPS02-144 A-Line' and '5020'

Summary: 'PPS08-168 A-Line' has a medium green leaf colour while it is light green in 'PPS02-144 A-Line'. The leaf petiole of 'PPS08-168 A-Line' is shorter than that of '5020'. 'PPS08-168 A-Line' flowers later than 'PPS02-144 A-Line' and '5020'. The flower petal of 'PPS08-168 A-Line' is shorter and narrower than that of '5020'. 'PPS08-168 A-Line' has a shorter silique than that of '5020' but longer than that of 'PPS01-140 A-Line'. The beak of 'PPS08-168 A-Line' is longer than that of 'PPS01-140 A-Line' but shorter than that of 'PPS02-144 A-Line' and '5020'. 'PPS08-168 A-Line' has a shorter pedicel than that of '5020'. The plant height of 'PPS08-168 A-Line' at maturity is taller than that of 'PPS02-144 A-Line' and '5020'. 'PPS08-168 A-Line' matures later than '5020'. The seed of 'PPS08-168 A-Line' has lower protein levels than that of 'PPS02-144 A-Line'.

Description:

PLANT: male sterile inbred line, glufosinate ammonium tolerant, spring seasonal type, medium to tall at maturity

COTYLEDON: medium to wide, medium length

LEAF: medium green, few to medium number of lobes, rounded margin, low density of shallow dentations, short to medium length, medium width, short to medium length petiole

FLOWER PETALS: yellow, short, medium to wide

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

SEED: black

AGRONOMIC CHARACTERISTICS: fair resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.26% of total fatty acids, oil content is 48.9% of whole dried seed, protein is 25.8% of dried oil free meal, medium glucosinolates (18.5 umol/gm)

DISEASE RESISTANCE: susceptible to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and resistant to White Rust (*Albugo candida*, races 7a & 2v)

Origin and Breeding: 'PPS08-168 A-line' is a male sterile inbred line used in F1 hybrid production, that contains the Ms8 gene construct in heterozygous state. 'PPS08-168 A-line' is a doubled haploid line that was produced in Canada in 2003. It was selected in 2005 and 2006 on the basis of male sterility stability, expression of tolerance to glufosinate ammonium herbicide and good combining ability with numerous restorer lines. Other selection criteria included height, vigour, maturity, blackleg resistance, oil content, fatty acid profile and glucosinolate content.

Tests and Trials: Trials were conducted during the summers of 2008 and 2009 in Saskatoon, Saskatchewan. Plots consisted of 3 rows with a row length of 6 meters and a row spacing of 50 cm. There were 3 replicates arranged in a RCB design.

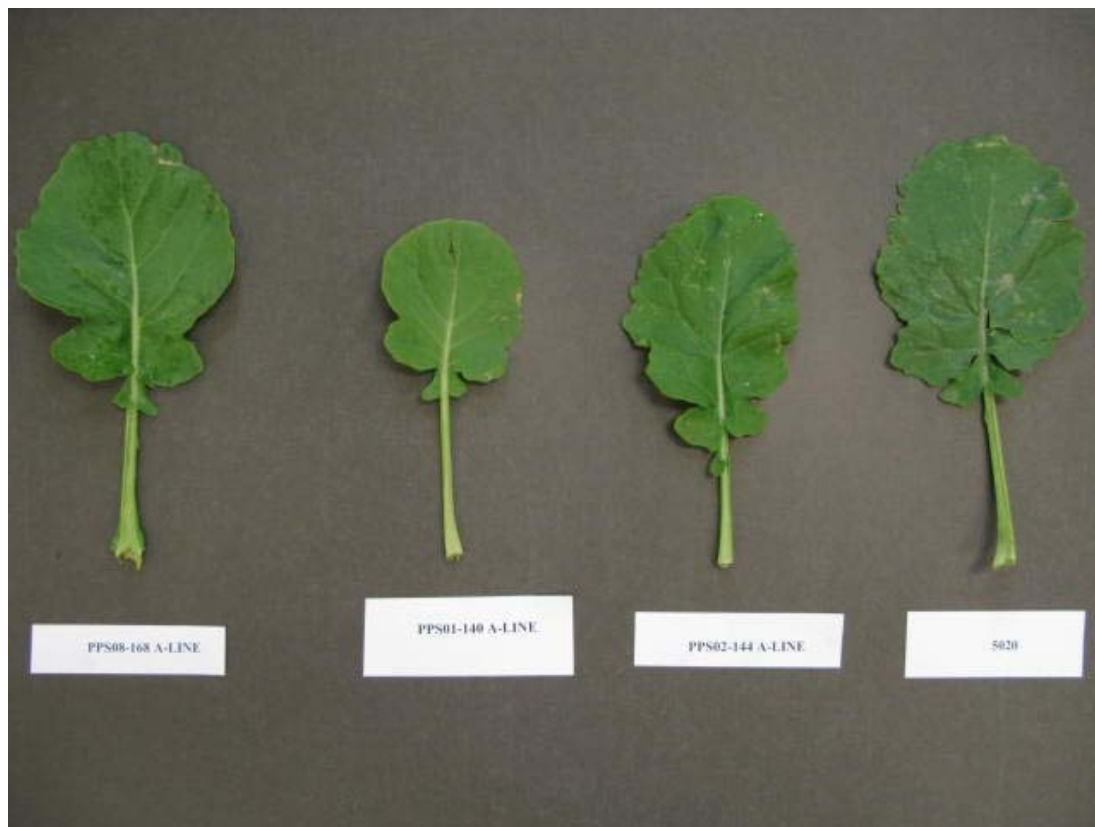
Comparison table for 'PPS08-168 A-Line'

	'PPS08-168 A-Line'	'PPS01-140 A-Line'*	'PPS02-144 A-Line'*	'5020**
<i>Petiole length (mm)</i>				
mean (LSD=17)	93	92	81	112
std. deviation	16.0	12.6	13.1	14.9

<i>Days to flowering</i>				
mean (LSD=2.4)	47.5	47.0	43.0	42.0
<i>Flower petal length (mm)</i>				
mean (LSD=1.2)	11.9	10.7	13.0	17.1
std. deviation	0.9	0.8	0.8	0.8
<i>Flower petal width (mm)</i>				
mean (LSD=0.91)	6.6	5.8	6.9	7.8
std. deviation	0.6	0.8	0.6	0.6
<i>Silique length (mm)</i>				
mean (LSD=2)	59.7	56.5	62.2	65.4
std. deviation	5.6	5.4	9.0	5.0
<i>Beak length (mm)</i>				
mean (LSD=0.6)	12.3	7.5	14.3	14.6
std. deviation	1.6	1.4	1.7	1.7
<i>Pedicle length (mm)</i>				
mean (LSD=1.6)	15.9	14.1	16.7	17.9
std. deviation	2.2	2.1	2.2	2.1
<i>Days to maturity</i>				
mean (LSD=5)	107	105	108	97.5
<i>Plant height at maturity (cm)</i>				
mean (LSD=12)	144	146	125	129
std. deviation	7.4	6.5	5.8	8.1
<i>Protein content of seed (% of dried oil free meal)</i>				
mean (LSD=2.6)	25.8	26.9	28.8	24.6

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height and 60 plant parts for leaf, petiole, flower petal, silique, beak and pedicle characteristics. Differences are significant at the 2% probability level based on LSD values.

*reference varieties



Canola: 'PPS08-168 A-Line' (far left) with reference varieties 'PPS01-140 A-Line' (centre left), 'PPS02-144 A-Line' (centre right) and '5020' (far right)

Proposed denomination: 'PPS08-168 B-Line'
Application number: 09-6698
Application date: 2009/07/21
Applicant: Bayer CropScience Inc., Saskatoon, Saskatchewan
Breeder: Hieronim Polewicz, Bayer CropScience 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: 'PPS01-140 B-Line', 'PPS02-144 B-Line' and '5020'

Summary: 'PPS08-168 B-Line' flowers later than 'PPS02-144 B-Line' and '5020'. The flower petal of 'PPS08-168 B-Line' is shorter than that of 'PPS02-144 B-Line' and '5020'. 'PPS08-168 B-Line' has a taller plant height at maturity than that of 'PPS02-144 B-Line'. The siliqua of 'PPS08-168 B-Line' is shorter than that of 'PPS02-144 B-Line' and '5020'. 'PPS08-168 B-Line' has a shorter beak than that of 'PPS02-144 B-Line' and '5020' but longer than that of 'PPS01-140 B-Line'. The seed of 'PPS08-168 B-Line' has a higher oil content than that of 'PPS01-140 B-Line' and lower protein levels than 'PPS01-140 B-Line' and 'PPS02-144 B-Line'.

Description:

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

COTYLEDON: medium to wide, medium to long

LEAF: medium green, few to medium number of lobes, rounded margin, low density of shallow dentations, medium length, medium width, medium to long petiole

FLOWER PETALS: yellow, medium to long, medium to wide

SILIQUAE: horizontal attitude, medium length, medium width, medium length beak, short to medium length pedicel

SEED: black

AGRONOMIC CHARACTERISTICS: good resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.02% of total fatty acids, oil content is 52.5% of whole dried seed, protein is 22.9% of dried oil free meal, medium glucosinolates (17.6 $\mu\text{mol/gm}$)

DISEASE RESISTANCE: moderately susceptible to Blackleg (*Leptosphaeria maculans* asexual stage: *Phoma lingam*) and resistant to White Rust (*Albugo candida*, races 7a & 2v)

Origin and Breeding: 'PPS08-168 B-line' is a male fertile maintainer line of 'PPS08-168 A-line'. 'PPS08-168 B-line' is a doubled haploid line that was produced in Canada in 2003. 'PPS08-168 B-line' was selected in 2005 and 2006 on the basis of height, vigour, maturity, blackleg resistance, oil content, fatty acid profile and glucosinolate content.

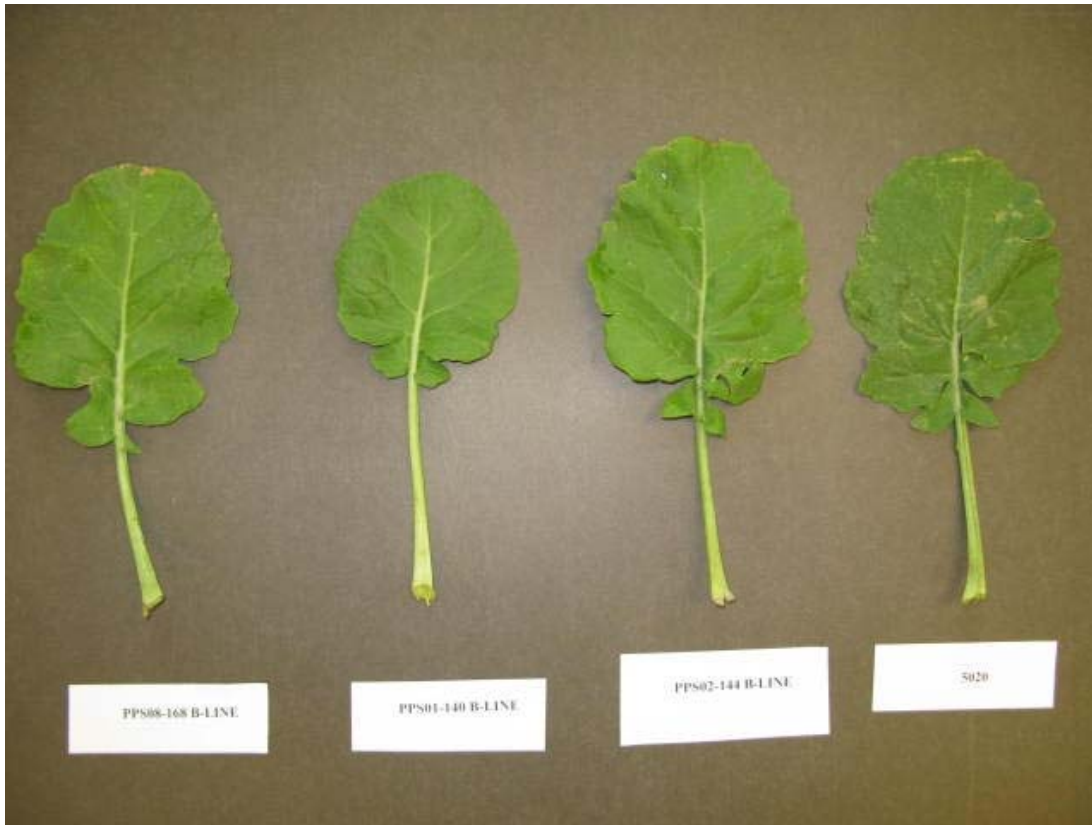
Tests and Trials: Trials were conducted during the summers of 2008 and 2009 in Saskatoon, Saskatchewan. Plots consisted of 3 rows with a row length of 6 meters and a row spacing of 50 cm. There were 3 replicates arranged in a RCB design.

Comparison table for 'PPS08-168 B-Line'

	'PPS08-168 B-Line'	'PPS01-140 B-Line**'	'PPS02-144 B-Line**'	'5020**'
<i>Days to flowering</i>				
mean (LSD=2.4)	46.5	45.0	41.5	42.0
<i>Flower petal length (mm)</i>				
mean (LSD=1.2)	15.4	14.6	17.3	17.1
std. deviation	0.7	0.7	1.1	0.8
<i>Plant height at maturity (cm)</i>				
mean (LSD=12)	135	135	111	129
std. deviation	7.1	6.1	6.3	8.1
<i>Silique length (mm)</i>				
mean (LSD=2)	59.2	57.4	62.3	65.4
std. deviation	3.7	4.0	5.5	5.0
<i>Beak length (mm)</i>				
mean (LSD=0.6)	11.8	8.5	15.5	14.6
std. deviation	1.3	1.4	1.6	1.7
<i>Oil content of the seed (% in whole dried seed)</i>				
mean (LSD=4.0)	52.5	46.1	49.6	48.9
<i>Protein content of the seed (% of dried oil free meal)</i>				
mean (LSD=2.6)	22.9	26.9	25.4	24.6

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height and 60 plant parts for leaf, petiole, flower petal, silique, beak and pedicel characteristics. Differences are significant at the 2% probability level based on LSD values.

*reference varieties



Canola: 'PPS08-168 B-Line' (far left) with reference varieties 'PPS01-140 B-Line' (centre left), 'PPS02-144 B-Line' (centre right) and '5020' (far right)

Proposed denomination: 'Santiago'
Application number: 08-6138
Application date: 2008/01/22
Applicant: Lantmännen SW Seed AB, Svalöv, Sweden
Agent in Canada: Lantmännen SW Seed Ltd., Saskatoon, Saskatchewan
Breeder: Lantmännen SW Seed AB, Svalöv, Sweden

Variety used for comparison: 'Sponsor'

Summary: *The silique of 'Santiago' is longer than that of 'Sponsor'. 'Santiago' has a shorter beak than that of 'Sponsor'.*

Description:

PLANT: short to medium height at maturity

COTYLEDON: medium width

LEAF: blue green, few to medium number of lobes, rounded margin, medium to deep dentations, medium length, narrow width

FLOWER PETALS: yellow

SILIQUE: medium length, short to medium length beak, medium to long pedicel

SEED: black

AGRONOMIC CHARACTERISTICS: good resistance to lodging

QUALITY CHARACTERISTICS: erucic acid is 0.0 % of total fatty acids, medium glucosinolates

Origin and Breeding: 'Santiago' (experimental designation SW G2806) was developed using the pedigree breeding method by Svalof Weibull AB, Svalov, Sweden. The cross occurred in 1994, with the selection criteria being double low quality of erucic acid and glucosinolates, early flowering and maturity, stalk stiffness, Blackleg resistance, high content of oil and protein and yield.

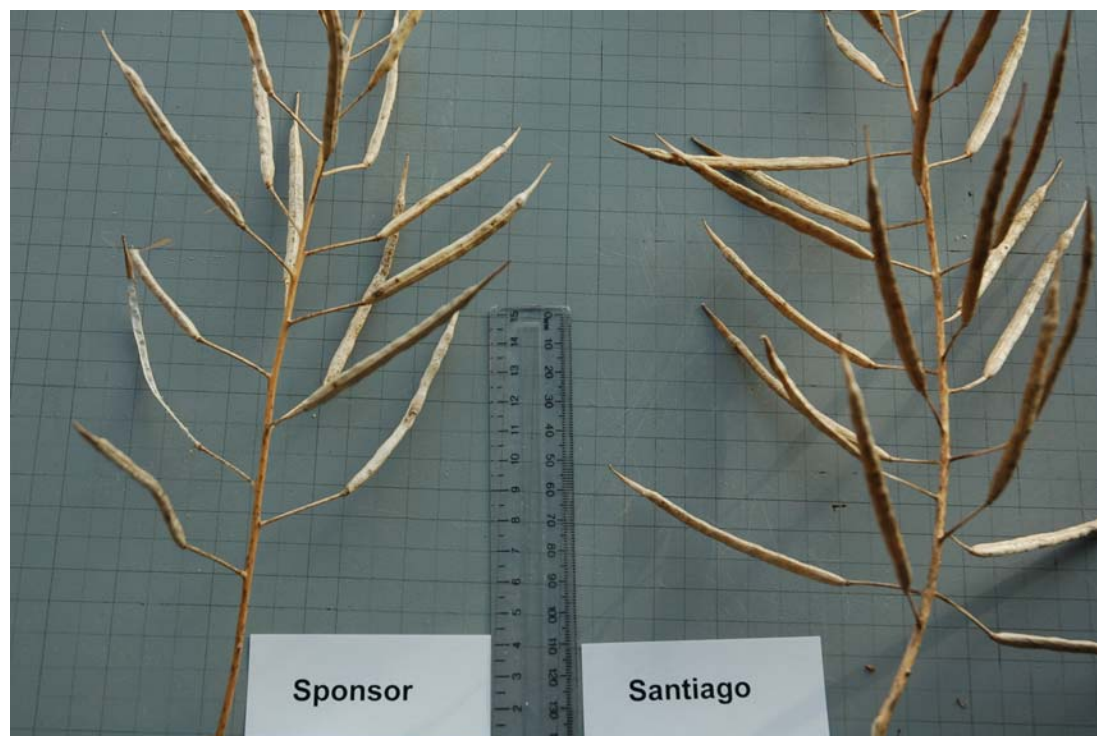
Tests and Trials: Trials were conducted during the summers of 2007 and 2009 in Elora, Ontario. Plots consisted of 4 rows with a row length of 5 meters and a row spacing of 36 centimeters. There were 2 replicates.

Comparison table for 'Santiago'

	'Santiago'	'Sponsor**'
<i>Siliqua length (mm)</i>		
mean (LSD=5.8227)	68.91	58.84
std. deviation	15.57	11.71
<i>Beak length (mm)</i>		
mean (LSD=1.4081)	9.87	11.50
std. deviation	4.14	4.72

Means are based on a two year average of 40 measurements for cotyledon characteristics, 30 for plant height, leaf characteristics and 60 plant parts for siliqua, beak and pedicel characteristics. Differences are significant at the 1% probability level based on LSD values.

*reference variety



Canola: 'Santiago' (right) with reference variety 'Sponsor' (left)