



APPLICATIONS UNDER EXAMINATION

CANOLA

CANOLA
(Brassica napus L.)

Proposed denomination: '1839V'
Application number: 04-4251
Application date: 2004/06/21
Applicant: Svalof Weibull AB, Svalöv, Sweden
Agent in Canada: SW Seed Ltd., Saskatoon, Saskatchewan

Variety used for comparison: 'SW ARROW' and 'Impulse'

Summary: '1839V' differs from 'SW ARROW' and 'Impulse' in glyphosate tolerance, depth of leaf margin dentation, days to flowering, silique length and silique beak length. '1839V' is resistant to glyphosate herbicides whereas 'Impulse' is not. The depth of the leaf margin dentation of '1839V' is shallow whereas it is medium in depth in 'SW ARROW'. The plants of '1839V' flower earlier than both reference varieties. The silique of '1839V' is shorter than that of 'Impulse'. The silique beak of '1839V' is longer than that of 'Impulse'.

Description:

PLANT: open-pollinated Round-up Ready spring seasonal type, short at maturity

LEAF: dark green, few lobes, rounded margins with shallow dentation

FLOWERS: yellow

SILIQUE: short to medium in length, medium to long beak, medium-lengthed pedicel

SEED: black

QUALITY CHARACTERISTICS: erucic acid 0.04% of total fatty acids, high glucosinolate content <30 µmol/g

Origin and Breeding: '1839V' was developed by Svalöf Weibull AB, Svalöv, Sweden. The variety was derived from a cross made in 1998, with selections made in the F₂ based on quality traits and blackleg tolerance. Pedigree selection was performed in subsequent generations with one of the last selections being the original plant of '1839V'. Breeder seed multiplication began on the F₅ generation.

Tests and Trials: Tests and trials were conducted during the summers of 2004 and 2005 at Saskatoon, Saskatchewan. Plots consisted of 2 replicates of 8 rows spaced 15 cm apart, were 1.75 m wide and 3.25 m long. Plots were laid out in randomized complete block design.

Comparison table for '1839V'

	'1839V'	'SW ARROW'*	'Impulse'*
<i>Days to flowering</i>			
mean	43	46.5	49.25
<i>Silique length (mm)</i>			
mean	54.9	54.9	61.7
std. deviation	6.25	7.083	7.777
			p<0.001

<i>Siliqua beak length (mm)</i>			
mean	11.0	9.1	9.4
std. deviation	2.487	4.478	7.727
			p<0.001
<i>Siliqua pedicel length (mm)</i>			
mean	18.7	20.6	19.4
std. deviation	4.613	4.853	3.652
			p<0.001
<i>Plant height at maturity (cm)</i>			
mean	100.0	112.1	114.6
std. deviation	8.511	12.808	7.890
			p<0.001

Means are based on a two year average of 60 plant parts for siliqua measurements. Differences are significant at the 2% probability level based on LSD values.

* reference variety

Proposed denomination: '9551'
Application number: 04-4250
Application date: 2004/06/21
Applicant: Svalof Weibull AB, Svalof, Sweden
Agent in Canada: SW Seed Ltd., Saskatoon, Saskatchewan

Variety used for comparison: 'SW ARROW' and 'Impulse'

Summary: '9551' differs from 'SW ARROW' and 'Impulse' in glyphosate tolerance, leaf lobing, leaf margin type and siliqua beak length. '9551' is resistant to glyphosate herbicides whereas 'Impulse' is not. The leaves of '9551' have a medium number of lobes whereas 'SW ARROW' and 'Impulse' have few. The leaves of '9551' have sharp margins with medium to deep dentations whereas the margins are rounded with medium depth dentation in 'SW ARROW' and rounded margins with shallow dentation in 'Impulse'. The siliqua beak of '9551' is long whereas it is medium in length in 'Impulse'.

Description:

PLANT: open-pollinated Round-up Ready spring seasonal type, medium to medium tall at maturity

LEAF: dark green, medium number of lobes, sharp margins with medium to deep dentation

FLOWERS: yellow

SILIQUA: medium in length, medium to long beak, long pedicel

SEED: black

QUALITY CHARACTERISTICS: erucic acid 0.03% of total fatty acids, high glucosinolate content <30 µmol/g

Origin and Breeding: '9551' was developed by Svalöf Weibull AB, Svalöv, Sweden. The variety was derived from a cross made in 1998, with selections made in the F₂ based on quality traits and blackleg tolerance. Pedigree selection was performed in subsequent generations with one of the last selections being the original plant of '9551'. Breeder seed multiplication began on the F₅ generation.

Tests and Trials: Tests and trials were conducted during the summers of 2004 and 2005 at Saskatoon, Saskatchewan. Plots consisted of 2 replicates of 8 rows spaced 15 cm apart, were 1.75 m wide and 3.25 m long. Plots were laid out in randomized complete block design.

Comparison table for '9551'

	'9551'	'SW ARROW**	'Impulse**
<i>Days to flowering (days from planting when 50% of plants show one or more flowers open)</i>			
mean	46.5	46.5	49.25
<i>Silique beak length (mm)</i>			
mean	13.0	9.1	9.4
std. deviation	2.308	4.478	7.727
		p<0.001	p<0.001
<i>Silique pedicel length (mm)</i>			
mean	22.3	20.6	19.4
std. deviation	4.674	4.853	3.652
			p<0.001
<i>Plant height at maturity (cm)</i>			
mean	119.1	112.1	114.6
std. deviation	7.913	12.808	7.890

Means are based on a two year average of 60 plant parts for silique measurements. Differences are significant at the 2% probability level based on LSD values.

* reference variety

Proposed denomination: 'MSL 515C'
Application number: 03-3827
Application date: 2003/08/27
Applicant: Svalof Weibull AB, Svalov, Sweden & Norddeutsche Pflanzenzucht, Hohenlieth, Germany
Agent in Canada: SW Seed Ltd., Saskatoon, Saskatchewan

Variety used for comparison: 'Defender'

Summary: 'MSL 515C' differs from 'Defender' in flower colour, silique beak length and pedicel length. The flowers of 'MSL 515C' are yellow with white stripes in some environments whereas the flowers of 'Defender' are yellow. The silique beak and silique pedicel of 'MSL 515C' are shorter than those of 'Defender'.

Description:

PLANT: male sterile mother line, spring seasonal type, short to medium in height at maturity

LEAF: dark green, few lobes, undulating margins with very shallow to shallow dentation

FLOWERS: yellow with white stripes in some environments

SILIQUE: medium in length, short beak, short pedicel

SEED: black

QUALITY CHARACTERISTICS: erucic acid 0.0% of total fatty acids, high glucosinolate content <30 µmol/g

Origin and Breeding: 'MSL 515C' was derived from a cross made in 1998 in Hohenlieth, Germany in conjunction with Svalöf Weibull AB, Svalöv, Sweden. Selection criteria included male sterility, earliness, straw stiffness, high oil content, low glucosinolate content and low erucic acid content.

Tests and Trials: Tests and trials were conducted during the summers of 2003 and 2005 at Saskatoon, Saskatchewan. Plots consisted of 2 replicates of 8 rows spaced 15 cm apart, were 1.75 m wide and 3.25 m long. Plots were laid out in randomized complete block design.

Comparison table for 'MSL 515C'

	'MSL 515C'	'Defender'*
<i>Silique beak length (mm)</i>		
mean	6.6	10.7
std. deviation	1.684	2.521
		p<0.001
<i>Silique pedicel length (mm)</i>		
mean	16.1	22.0
std. deviation	3.870	4.350
		p<0.001
<i>Plant height at maturity (cm)</i>		
mean	119.8	125.4
std. deviation	8.781	12.419

Means are based on a two year average of 60 plant parts for silique measurements. Differences are significant at the 2% probability level based on LSD values.

* reference variety

Proposed denomination: 'MSL 527C'
Application number: 03-3830
Application date: 2003/08/27
Applicant: Svalof Weibull AB, Svalov, Sweden & Norddeutsche Pflanzenzucht, Hohenlieth, Germany
Agent in Canada: SW Seed Ltd., Saskatoon, Saskatchewan

Variety used for comparison: 'Defender'

Summary: 'MSL 527C' differs from 'Defender' in number of lobes, leaf margin type, depth of margin dentation, flower colour, silique beak length, pedicel length and plant height at maturity. The leaves of 'MSL 527C' have very few lobes with a sharp margin with shallow leaf dentation whereas the leaves of 'Defender' have few lobes with an undulating margin with very shallow dentation. The flowers of 'MSL 527C' are yellow with white stripes in some environments whereas the flowers of 'Defender' are yellow. The silique beak and silique pedicel of 'MSL 527C' are shorter than those of 'Defender'. The plants of 'MSL527C' are taller than the plants of 'Defender' at maturity.

Description:

PLANT: male sterile mother line, spring seasonal type, tall at maturity

LEAF: dark green, very few lobes, sharp margins with shallow dentation

FLOWERS: yellow with white stripes in some environments

SILIQUE: medium in length, short beak, very short pedicel

SEED: black

QUALITY CHARACTERISTICS: erucic acid <0.2% of total fatty acids, high glucosinolate content <30 µmol/g

Origin and Breeding: 'MSL 527C' was derived from a cross made in 1999 in Hohenlieth, Germany in conjunction with Svalöf Weibull AB, Svalöv, Sweden. Selection criteria included male sterility, earliness, straw stiffness, high oil and protein content, low glucosinolate and erucic acid content.

Tests and Trials: Tests and trials were conducted during the summers of 2003 and 2005 at Saskatoon, Saskatchewan. Plots consisted of 2 replicates of 8 rows spaced 15 cm apart, were 1.75 m wide and 3.25 m long. Plots were laid out in randomized complete block design.

Comparison table for 'MSL 527C'

	'MSL 527C'	'Defender'*
<i>Silique beak length (mm)</i>		
mean	8.29	10.7
std. deviation	2.575	2.521
		p<0.001
<i>Silique pedicel length (mm)</i>		
mean	13.2	22.0
std. deviation	2.686	4.350
		p<0.001
<i>Plant height at maturity (cm)</i>		
mean	139.8	125.4
std. deviation	17.887	12.419
		p<0.001

Means are based on a two year average of 60 plant parts for silique measurements. Differences are significant at the 2% probability level based on LSD values.

* reference variety

Proposed denomination: 'MSL SW 706C'

Application number: 03-3828

Application date: 2003/08/27

Applicant: Svalof Weibull AB, Svalov, Sweden & Norddeutsche Pflanzenzucht, Hohenlieth, Germany

Agent in Canada: SW Seed Ltd., Saskatoon, Saskatchewan

Variety used for comparison: 'Defender'

Summary: 'MSL SW 706C' differs from 'Defender' in leaf margin type, depth of margin dentation, flower colour, silique beak length, pedicel length and plant height at maturity. The leaves of 'MSL SW 706C' have sharp margins with medium depth dentation whereas the leaves of 'Defender' have an undulating margin with very shallow dentation. The flowers of 'MSL SW 706C' are yellow with white stripes in some environments whereas the flowers of 'Defender' are yellow. The silique beak and silique pedicel of 'MSL 706C' are shorter than those of 'Defender'. The plants of 'MSL SW 706C' are taller than the plants of 'Defender' at maturity.

Description:

PLANT: male sterile mother line, spring seasonal type, tall at maturity

LEAF: blue green, few lobes, sharp margins with medium depth dentation

FLOWERS: yellow with white stripes in some environments

SILIQUE: medium in length, short beak, short pedicel

SEED: black

QUALITY CHARACTERISTICS: erucic acid <0.0% of total fatty acids, high glucosinolate content <30 µmol/g

Origin and Breeding: 'MSL SW 706C' was derived from a cross made in 2000 in Hohenlieth, Germany in conjunction with Svalöf Weibull AB, Svalöv, Sweden. Selection criteria included male sterility, earliness, straw stiffness, high oil and protein content, low glucosinolate and erucic acid content.

Tests and Trials: Tests and trials were conducted during the summers of 2003 and 2005 at Saskatoon, Saskatchewan. Plots consisted of 2 replicates of 8 rows spaced 15 cm apart, were 1.75 m wide and 3.25 m long. Plots were laid out in randomized complete block design.

Comparison table for 'MSL SW 706C'

	'MSL SW 706C'	'Defender'*
<i>Siliqua beak length (mm)</i>		
mean	7.0	10.7
std. deviation	1.876	2.521
		p<0.001
<i>Siliqua pedicel length (mm)</i>		
mean	14.7	22.0
std. deviation	2.997	4.350
		p<0.001
<i>Plant height at maturity (cm)</i>		
mean	136.1	125.4
std. deviation	13.333	12.419
		p<0.001

Means are based on a two year average of 60 plant parts for siliqua measurements. Differences are significant at the 2% probability level based on LSD values.

* reference variety

Proposed denomination: 'MSL SW 707C'
Application number: 03-3829
Application date: 2003/08/27
Applicant: Svalof Weibull AB, Svalov, Sweden & Norddeutsche Pflanzenzucht, Hohenlieth, Germany
Agent in Canada: SW Seed Ltd., Saskatoon, Saskatchewan

Variety used for comparison: 'Impulse'

Summary: *'MSL SW 707C'* differs from *'Impulse'* in silique and pedicel length. Both the silique and pedicel of *'MSL SW 707C'* are shorter than those of *'Impulse'*.

Description:

PLANT: male sterile mother line, spring seasonal type, medium in height at maturity

LEAF: blue green, medium number of lobes, rounded margins with shallow dentation

FLOWERS: yellow

SILIQUE: medium in length, medium-length beak, short pedicel

SEED: black

QUALITY CHARACTERISTICS: erucic acid <0.0% of total fatty acids, high glucosinolate content <30 µmol/g

Origin and Breeding: *'MSL SW 707C'* was developed in Hohenlieth, Germany in conjunction with Svalöf Weibull AB, Svalöv, Sweden. The variety was derived from a cross made in 2000. Selection criteria included male sterility, earliness, straw stiffness, high oil and protein content, low glucosinolate and erucic acid content.

Tests and Trials: Tests and trials were conducted during the summers of 2003 and 2005 at Saskatoon, Saskatchewan. Plots consisted of 2 replicates of 8 rows spaced 15 cm apart, were 1.75 m wide and 3.25 m long. Plots were laid out in randomized complete block design.

Comparison table for *'MSL SW 707C'*

	<i>'MSL SW 707C'</i>	<i>'Impulse'</i>**
<i>Silique length (mm)</i>		
mean	55.0	62.8
std. deviation	7.729	6.533
		p<0.001
<i>Silique pedicel length (mm)</i>		
mean	14.7	18.7
std. deviation	3.973	3.247
		p<0.001

Means are based on a two year average of 60 plant parts for silique measurements. Differences are significant at the 2% probability level based on LSD values.

* reference variety

Proposed denomination: ***'MSL SW 710C RR'***
Application number: 03-3826
Application date: 2003/08/27
Applicant: Svalof Weibull AB, Svalov, Sweden & Norddeutsche Pflanzenzucht, Hohenlieth, Germany
Agent in Canada: SW Seed Ltd., Saskatoon, Saskatchewan

Variety used for comparison: *'SW ARROW'*

Summary: *'MSL SW 710C RR'* differs from *'SW ARROW'* in leafblade colour, margin type, depth of margin dentation, flowering date, petal colour and silique pedicel length. The leaves of *'MSL SW 710C RR'* are blue green whereas they

are dark green in 'SW ARROW'. The leaves of 'MSL SW 710C RR' have a sharp margin with deep margin dentation whereas the leaves of 'SW ARROW' have a rounded margin with medium depth of margin dentation. 'MSL SW 710C RR' flowers 6 days earlier than 'SW ARROW'. The petals of 'MSL SW 710C RR' are yellow with white stripes in some environments whereas the petals of 'SW ARROW' are yellow. The silique pedicel of 'MSL SW 710C RR' is shorter than that of 'SW ARROW'.

Description:

PLANT: male sterile mother line, spring seasonal type, medium in height at maturity

LEAF: blue green, few lobes, sharp margins with deep dentation

FLOWERS: yellow with white stripes in some environments

SILIQUE: medium in length, medium-length beak, medium-length pedicel

SEED: black

QUALITY CHARACTERISTICS: erucic acid <0.0% of total fatty acids, high glucosinolate content <30 µmol/g

Origin and Breeding: 'MSL SW 710C RR' was developed in Hohenlieth, Germany in conjunction with Svalöf Weibull AB, Svalöv, Sweden. The variety was derived from a cross made in 2000. Selection criteria included male sterility, earliness, straw stiffness, high oil and protein content, low glucosinolate and erucic acid content, blackleg resistance and glyphosate tolerance.

Tests and Trials: Tests and trials were conducted during the summers of 2003 and 2005 at Saskatoon, Saskatchewan. Plots consisted of 2 replicates of 8 rows spaced 15 cm apart, were 1.75 m wide and 3.25 m long. Plots were laid out in randomized complete block design.

Comparison table for 'MSL SW 710C RR'

	'MSL SW 710C RR'	'SW ARROW'*
<i>Flowering date (days from planting when 50% of plants show one or more flowers open)</i>		
mean	40.8	46.8
<i>Silique pedicel length (mm)</i>		
mean	13.9	19.5
std. deviation	2.423	3.230
		p<0.001

Means are based on a two year average of 60 plant parts for silique measurements. Differences are significant at the 2% probability level based on LSD values.

* reference variety