

| POTATO (Solanum tuberosum L.) | |
|----------------------------------|---|
| Proposed denomination: | 'A91556-1W' |
| Application number: | 04-4059 |
| Application date: | 2003/02/24 |
| Applicant: | The Regents of the University of California, Oakland, California, USA |

Agent in Canada: Global Agri Services Inc., New Maryland, New Brunswick

Variety used for comparison: 'Calwhite'

Summary: 'A91556-1W' has a shorter plant height and narrower leaves than 'Calwhite'. 'A91556-1W' has weak to medium anthocyanin on the petiole while 'Calwhite' has no anthocyanin. The skin colour of the tubers of 'A91556-1W' is yellow whereas it is light beige in the reference variety. The base of the eyes of 'A91556-1W' is yellow whereas it is white for 'Calwhite'. 'A91556-1W' has an ovoid shaped light sprout while 'Calwhite' has a broad cylindrical light sprout. The pubescence on the light sprouts of 'A91556-1W' is sparse at the base and moderate at the tip, whereas it is dense at the base and sparse at the tip for 'Calwhite'.

Description:

PLANT: upright growth habit, leaf type foliage structure

STEM: medium anthocyanin in lower half, main stem medium to moderately thick, swelling of nodes absent or very low

LEAF: medium to dark green, open silhouette, weak anthocyanin in rachis, weak to moderate anthocyanin in petiole TERMINAL LEAFLET: narrowly ovate, acute to acuminate tip, obtuse base, low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: small, narrowly ovate, acute to acuminate tip, obtuse to cordate base, moderately deep veins, moderate to strong waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: medium in size, medium to high flowering profusion, buds persistent, strong to very strong anthocyanin in buds COROLLA: medium in size, white, moderately prominent star

PEDUNCLE: weak anthocyanin

TUBER: oblong, eyes flat to shallow and evenly distributed, eyebrows not prominent, white coloured flesh with no secondary colour

SKIN: yellow, yellow at base of eye, medium anthocyanin when exposed to light, smooth to rough texture

LIGHT SPROUT: large, ovoid, few root tips, short lateral roots BASE: very strong anthocyanin, high proportion of blue, sparse pubescence TIP: smaller than base, intermediate habit, weak anthocyanin, medium pubescence.

Origin and Breeding: 'A91556-1W' was developed by University of California breeders Ronald E. Voss and Hebert A. Philips. The variety originated from a cross between varieties 'BC0038-1' and 'A8519-4' made in Aberdeen, Idaho, in 1991. The clone was grown as a seedling and harvested in 1992. The resulting tubers were planted in 1993 and selected from single hill and first year seedlings in the same year. Tubers were selected from a 12 hill trial in 1994. The variety was entered in a preliminary yield trial in 1995 and grown in an intermediate yield trial in 1996. It was grown at 2 different locations in 1996, in a 12 and 27 hill observational trial, with selection occurring at both locations. The

Plant Varieties Journal, July, 2006, No. 60



variety was again grown in two different locations in 1997, one location being a 27 hill observational trial and the other a 2x27 hill observational trial. It was grown in a replicated yield trial in 1998. A91556-1W was selected out of an F1 population using the following selection criteria: healthy strong vine type and good vigour, early maturity, tuber shape, tuber colour, tuber quality, good yield and lack of defects such as growth cracks, rotten tubers and pointed ends.

Tests and Trials: Trials for 'A91556-1W' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

| | 'A91556-1W' | 'Calwhite'* | |
|-------------------------|------------------|-------------|--|
| Plant height (cm) | | | |
| mean | 52.0 | 64.3 | |
| std. deviation | 2.2 | 4.1 | |
| Leaf length (cm) | | | |
| mean | 28.6 | 31.6 | |
| std. deviation | 2.3 | 2.2 | |
| Leaf width (cm) | | | |
| mean | 14.8 | 21.7 | |
| std. deviation | 1.1 | 1.9 | |
| Colour of inner surface | of corolla (RHS) | | |
| | 157D | 155A | |

* reference variety



Potato: 'A91556-1W' (left) with reference variety 'Calwhite' (right)

| Proposed denomination: | 'Annabelle' |
|------------------------|--|
| Application number: | 04-4158 |
| Application date: | 2004/04/01 |
| Applicant: | HZPC Holland B.V., Joure, The Netherlands |
| Agent in Canada: | Global Agri Services Inc., New Maryland, New Brunswick |

Varieties used for comparison: 'Yukon Gold' and 'Amandine'

Summary: 'Annabelle' has a shorter plant height than 'Yukon Gold'. 'Annabelle' has smaller leaves than 'Yukon Gold'. The shape of the terminal leaflets of 'Annabelle' is medium ovate, whereas it is narrowly ovate to lanceolate for 'Yukon Gold'. The frequency of coalescence of the terminal and lateral leaflets is moderate to high in 'Annabelle' and absent to very low in the reference varieties. The corolla of 'Annabelle' has a white inner surface, whereas it is red-violet in the reference varieties. The base of the eye on the tubers of 'Annabelle' is yellow, whereas it is red for 'Yukon Gold'. The tubers of 'Annabelle' are elliptical in shape, while those of 'Yukon Gold' are oval to round. Light sprouts of 'Annabelle' are large with moderate pubescence at the base, whereas they are small with dense pubescence at the base for 'Yukon Gold'. 'Annabelle' has longer lateral shoots on the light sprout than the reference varieties.

Description:

PLANT: semi-upright growth habit, leaf type foliage structure

STEM: weak to moderate anthocyanin distributed evenly but more pronounced in bottom 3/4, thin main stem, moderate swelling of nodes

LEAF: light to medium green, intermediate silhouette, weak anthocyanin in rachis and petiole TERMINAL LEAFLET: medium ovate, acute to acuminate tip, obtuse base, medium to high frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: small to medium in size, narrowly ovate, acute to acuminate tip, obtuse to cordate base, moderately deep veins, weak waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: small, low flowering profusion, buds weakly persistent, absent to weak anthocyanin in buds COROLLA: medium in size, white, no anthocyanin on inner surface, moderately prominent star PEDUNCLE: anthocyanin absent to very weak

TUBER: elliptical in shape, eyes flat and evenly distributed, eyebrows slightly prominent, medium yellow to dark yellow flesh with no secondary colour

SKIN: yellow, yellow at base of eye, medium anthocyanin when exposed to light, smooth to rough texture

LIGHT SPROUT: large, ovoid, few root tips, long lateral roots BASE: medium anthocyanin, absent or low proportion of blue, medium pubescence TIP: equal in size to base, intermediate habit, weak anthocyanin, medium pubescence.

Origin and Breeding: 'Annabelle' was selected from the F1 progeny of a cross between 'Nicola' and 'Monalisa' made in 1990 in Metslawier (The Netherlands). The variety was selected based on yield, quality, agronomic characters and resistance to pests. 'Nicola' originates from a cross between 'Clivia' and '6430 1011'. 'Monalisa' originates from a cross between 'bierma a1 287' and 'Colmo'.

Tests and Trials: Trials for 'Annabelle' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

| | 'Annabelle' | 'Yukon Gold'* | 'Amandine'* | |
|-------------------------|------------------|---------------|-------------|--|
| Plant height (cm) | | | | |
| mean | 58.4 | 64.4 | 56.7 | |
| std. deviation | 5.0 | 3.2 | 1.0 | |
| Leaf length (cm) | | | | |
| mean | 26.0 | 33.5 | 27.5 | |
| std. deviation | 2.0 | 2.3 | 1.0 | |
| Leaf width (cm) | | | | |
| mean | 14.8 | 19.8 | 15.7 | |
| std. deviation | 1.5 | 2.0 | 1.6 | |
| Colour of inner surface | of corolla (RHS) | | | |
| | 157C | 76A | 76A | |

* reference variety



Potato: 'Annabelle' (center) with reference varieties 'Amandine' (left) and 'Yukon Gold' (right)

| Proposed denomination: | 'Avalanche' |
|------------------------|--|
| Application number: | 01-2945 |
| Application date: | 2001/12/17 |
| Applicant: | Irish Potato Breeders Limited, Malahide, Ireland |
| Agent in Canada: | Smart & Biggar, Vancouver, British Columbia |

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.

Variety used for comparison: 'Calwhite'

Summary: 'Avalanche' has a shorter plant height, thinner main stems and shorter narrower leaves than 'Calwhite'. The margins of the terminal and lateral leaflets of 'Avalanche' have a medium to strong waviness, whereas those of

'Calwhite' have weak waviness. The flower buds of 'Avalanche' are less persistent than those of 'Calwhite'. The inner surface of the corolla of 'Avalanche' is red-violet, whereas it is white for 'Calwhite'. The main colour of the tuber flesh of 'Avalanche' is cream, whereas it is white for 'Calwhite'. The light sprout of 'Avalanche' is spherical in shape whereas that of 'Calwhite' is broad cylindrical. The base of the light sprout of 'Avalanche' has less anthocyanin with a lower proportion of blue, and less pubescence than the reference variety. The tip of the light sprout of 'Avalanche' has less anthocyanin and more pubescence than that of 'Calwhite'.

Description:

PLANT: upright growth habit, intermediate foliage structure

STEM: weak anthocyanin in lower half, main stem thin to medium in thickness, swelling of nodes absent or very low

LEAF: medium green, intermediate in silhouette, anthocyanin in rachis and petiole absent to very weak TERMINAL LEAFLET: narrowly ovate, acute tip, cordate base, absent or very low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium size, narrowly ovate, acute tip, cordate base, moderately deep veins, moderate to strong waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: absent or very low flowering profusion, buds drop readily, absent to weak anthocyanin in buds COROLLA: small to medium size, red-violet colour, weak anthocyanin on inner surface, slightly prominent star PEDUNCLE: anthocyanin absent to very weak

TUBER: oval to round, eyes intermediate in depth and evenly distributed, eyebrows slightly prominent, cream coloured flesh with no secondary colour

SKIN: yellow, yellow at base of eye, medium anthocyanin when exposed to light, smooth to rough texture

LIGHT SPROUT: small to medium, spherical, few root tips, short lateral roots BASE: medium anthocyanin, low proportion of blue, medium pubescence TIP: equal in size to base, closed habit, anthocyanin absent to very weak, medium pubescence

Origin and Breeding: 'Avalanche' originated from the potato breeding program of Irish Potato Breeders at Arpley Warrington, Cheshire, United Kingdom. The variety was discovered in 1995 and results from a cross between 'DHS 70.1034.9' and 'Maris Piper'. The variety is asexually reproduced through tubers.

Tests and Trials: Trials for 'Avalanche' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

| | 'Avalanche' | 'Calwhite'* | |
|-------------------|-------------|-------------|--|
| Plant height (cm) | | | |
| mean | 52.6 | 64.3 | |
| std. deviation | 3.2 | 4.1 | |
| Leaf length (cm) | | | |
| mean | 27.6 | 31.6 | |
| std. deviation | 2.6 | 2.2 | |
| Leaf width (cm) | | | |
| mean | 16.3 | 21.7 | |
| std. deviation | 1.8 | 1.9 | |

Comparison table for 'Avalanche'

Colour of inner surface of corolla (RHS) 76D

155A

* reference variety



Potato: 'Avalanche' (left) with reference variety 'Calwhite' (right)

| Proposed denomination: | 'BC Reds' |
|------------------------|--|
| Application number: | 05-4693 |
| Application date: | 2005/04/06 |
| Applicant: | Virgil Gonvick, Chetwynd, British Columbia |

Varieties used for comparison: 'Norland' and 'Sangre'

Summary: 'BC Reds' has no anthocyanin in the stem and petiole while 'Norland' and 'Sangre' have weak to medium anthocyanin. 'BC Reds' has absent to very weak levels of coalescence in terminal and lateral leaflets whereas 'Sangre' has moderate to high levels of coalescence. Tubers of 'BC Reds' are oval to oblong whereas those of the reference varieties are round. The light sprout of 'BC Reds' is larger than that of 'Sangre'. The base of the light sprout of 'BC Reds' has less anthocyanin and less pubescence than the reference varieties. The tip of the light sprout of 'BC Reds' has less anthocyanin and more pubescence than that of 'Sangre'.

Description:

PLANT: upright to semi-upright growth habit, leaf type foliage structure

STEM: absent or very weak anthocyanin, thin main stem, swelling of nodes absent or very low

LEAF: medium to dark green, intermediate silhouette, anthocyanin in rachis absent to weak and absent to very weak in petiole

TERMINAL LEAFLET: medium ovate, acute tip, obtuse to cordate base, absent or very low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium size, narrowly ovate, acute tip, obtuse to cordate base, moderately deep veins, weak waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: small to medium, moderate flowering profusion, buds fairly persistent, weak anthocyanin in buds COROLLA: medium to large, red-violet colour, moderate anthocyanin on inner surface, moderately prominent star

PEDUNCLE: anthocyanin absent to very weak

TUBER: oval to oblong shape, eyes intermediate to deep and evenly distributed, eyebrows moderately prominent, white flesh with no secondary colour

SKIN: red, red at base of eye, medium anthocyanin when exposed to light, smooth to rough texture

LIGHT SPROUT: large, narrow cylindrical, moderate number of root tips, short lateral roots BASE: weak to medium anthocyanin, absent or low proportion of blue, sparse pubescence TIP: smaller than base, open habit, anthocyanin weak to moderate, moderate pubescence.

Origin and Breeding: 'BC Reds' originated from a single plant discovered in a field in Chetwynd, British Columbia, by the applicant in 1991. The field had been planted with 'Norgold Russet' and one row of an unknown red potato variety planted in between the rows. The plant of the new variety was noticed to produce large, long, narrow tubers. The variety was propagated over the next four years and found to be uniform and stable.

Tests and Trials: Trials for 'BC Reds' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

Comparison table for 'BC Reds'

| 'BC Reds' | 'Norland'* | 'Sangre'* | |
|--|------------|-----------|--|
| | | | |
| Colour of inner surface of corolla (RHS) | | | |
| 87A | 76B | 84A | |



Potato: 'BC Reds' (center) with reference varieties 'Sangre' (left) and 'Norland' (right)

| Proposed denomination: | 'Dakota Jewel' |
|------------------------|---|
| Application number: | 04-4312 |
| Application date: | 2004/08/03 |
| Applicant: | NDSU Research Foundation, Agricultural Experiment Station, Fargo, North Dakota, |
| | USA |
| Agent in Canada: | Global Agri Services Inc., New Maryland, New Brunswick |

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: 'Norland' and 'Dakota Rose'

Summary: 'Dakota Jewel' has longer leaves than 'Norland'. 'Dakota Jewel' has a lower flowering profusion than the reference varieties. The flower buds of 'Dakota Jewel' drop readily, whereas they are moderately persistent in the reference varieties. The anthocyanin colouration of the flower buds of 'Dakota Jewel' is weak, while it is very strong in 'Dakota Rose'. The light sprouts of 'Dakota Jewel' are smaller and have less pubescence at the base than those of 'Norland'. The tip of the light sprouts of 'Dakota Jewel' has stronger anthocyanin than 'Dakota Rose', and more pubescence than 'Norland'.

Description:

PLANT: upright growth habit, leaf type foliage structure

STEM: medium anthocyanin evenly distributed, main stem medium in thickness, swelling of nodes absent or very low

LEAF: medium to dark green, closed silhouette, moderate anthocyanin in rachis and petiole

TERMINAL LEAFLET: medium ovate, acute to acuminate tip, obtuse base, low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium size, narrowly ovate, acute to acuminate tip, obtuse to cordate base, moderately deep veins, weak waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: absent to very low flowering profusion, buds drop readily, weak anthocyanin in buds COROLLA: medium size, red-violet colour, strong anthocyanin on inner surface, prominent star PEDUNCLE: medium anthocyanin

TUBER: round shape, eyes intermediate in depth and evenly distributed, eyebrows slightly prominent, white flesh with no secondary colour

SKIN: red, red at base of eye, medium anthocyanin when exposed to light, smooth texture

LIGHT SPROUT: medium in size, ovoid, moderate number of root tips, short lateral roots BASE: very strong anthocyanin, medium to high proportion of blue, medium pubescence TIP: smaller than base, closed habit, medium to strong anthocyanin, dense pubescence.

Origin and Breeding: 'Dakota Jewel' was developed in the potato breeding program of North Dakota State University in Fargo, North Dakota. The variety originates from a cross between 'ND2223-8R' and 'ND649-4R' made in 1985. A phenotypic recurrent technique was used in the development of the variety. 'Dakota Jewel' has been evaluated in dryland and irrigated conditions in 14 years of North Dakota state-wide trials, as well as in the North Central Regional Variety Trials from 2000 to 2003. The variety has been propagated clonally since the first year of selection.

Tests and Trials: Trials for 'Dakota Jewel' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

| | 'Dakota Jewel' | 'Norland'* | 'Dakota Rose'* | |
|-------------------------|------------------|------------|----------------|--|
| Leaf length (cm) | | | | |
| mean | 31.3 | 27.2 | 28.9 | |
| std. deviation | 1.9 | 1.9 | 2.2 | |
| Leaf width (cm) | | | | |
| mean | 17.7 | 16.1 | 17.8 | |
| std. deviation | 1.9 | 1.7 | 2.7 | |
| Colour of inner surface | of corolla (RHS) | | | |
| | 86D | 76A | 83C | |

* reference variety



Potato: 'Dakota Jewel' (center) with reference varieties 'Dakota Rose' (left) and 'Norland' (right)

| Proposed denomination: | 'Elisabeth' |
|------------------------|---|
| Application number: | 04-4012 |
| Application date: | 2004/01/22 |
| Applicant: | Agrico B.A., Emmerloord, The Netherlands |
| Agent in Canada: | Parkland Seed Potatoes Ltd., Lacombe, Alberta |

Varieties used for comparison: 'Estima' and 'Provento'

Summary: 'Elisabeth' has a shorter plant height and shorter leaves than 'Provento'. The star in the corolla of 'Elisabeth' is more prominent than in 'Provento'. The light sprout of 'Elisabeth' is smaller than that of the reference varieties. 'Elisabeth' has a spherical light sprout while 'Estima' has an ovoid to broad cylindrical light sprout and 'Provento' has an oval light sprout. The light sprout base of 'Elisabeth' has a moderate level of anthocyanin colouration, whereas that of 'Estima' has no anthocyanin. The light sprout tip of 'Elisabeth' has less anthocyanin and less pubescence than that of 'Provento'.

Description:

PLANT: semi-upright growth habit, intermediate foliage structure

STEM: absent or very weak anthocyanin, main stem thin, swelling of nodes absent or very low

LEAF: medium green, intermediate silhouette, anthocyanin in rachis and petiole absent to very weak TERMINAL LEAFLET: medium to broadly ovate, acute tip, cordate base, absent or very low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium size, narrowly ovate, acute tip, cordate base, moderately deep to deep veins, weak waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: small, moderate flowering profusion, moderately persistent buds, absent to weak anthocyanin in buds

COROLLA: medium size, white, prominent star PEDUNCLE: anthocyanin absent to very weak

TUBER: round to oval, shallow eyes and predominantly apical, eyebrows not prominent, medium yellow to dark yellow flesh with no secondary colour

SKIN: light beige, yellow at base of eye, medium anthocyanin when exposed to light, smooth to rough texture

LIGHT SPROUT: small, spherical, few root tips, short lateral roots BASE: medium anthocyanin, absent or low proportion of blue, medium pubescence

TIP: smaller than base, closed habit, anthocyanin absent to very weak, sparse pubescence.

Origin and Breeding: 'Elisabeth' was selected from the F_1 progeny of the crossing of 'VE82-96' and 'Cilena' made in 1991 in Bant, The Netherlands. The selection process was based on negative agronomic traits.

Tests and Trials: Trials for 'Elisabeth' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

| | 'Elisabeth' | 'Estima'* | 'Provento'* |
|----------------------------|------------------|-----------|-------------|
| Plant height (cm) | | | |
| mean | 56.8 | 56.3 | 62.8 |
| std. deviation | 2.5 | 4.8 | 3.4 |
| Leaf length (cm) | | | |
| mean | 28.9 | 26.4 | 32.2 |
| std. deviation | 1.3 | 1.9 | 2.7 |
| Colour of inner surface of | of corolla (RHS) | | |
| | 157A ´ | 157C | 157C |



Potato: 'Elisabeth' (center) with reference varieties 'Provento' (left) and 'Estima' (right)

| Proposed denomination: | 'Laura' |
|------------------------|--|
| Application number: | 02-3353 |
| Application date: | 2002/11/05 |
| Applicant: | Europlant Pflanzenzucht GmbH, Luneburg, Germany |
| Agent in Canada: | Global Agri Services Inc., New Maryland, New Brunswick |

Varieties used for comparison: 'Symfonia' and 'Asterix'

Summary: 'Laura' has a taller plant height than the reference varieties. The terminal leaflets of 'Laura' are broadly ovate whereas those of 'Symfonia' are fused to the first pair of lateral leaflets and those of 'Asterix' are narrowly ovate to medium ovate. 'Laura' has absent to very weak anthocyanin in the flower buds while 'Symfonia' has strong anthocyanin and 'Asterix' has medium anthocyanin. The light sprouts of 'Laura' are smaller and have more pubescence at the base than the sprouts of the reference varieties. The tips of the light sprouts of 'Laura' have moderate anthocyanin colouration and sparse pubescence whereas 'Asterix' has absent to weak anthocyanins and dense pubescence.

Description:

PLANT: upright growth habit, stem type to intermediate foliage structure

STEM: medium anthocyanin mainly in top half, main stem thin to medium in thickness, swelling of nodes absent or very low

LEAF: light green, intermediate in silhouette, moderate anthocyanin in rachis and petiole

TERMINAL LEAFLET: broadly ovate, acuminate tip, cordate base, high to very high frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium size, narrowly ovate, acute to acuminate tip, cordate base, moderately deep veins, weak waviness of margins, dull, weak pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: medium in size, moderate flowering profusion, buds moderately persistent, absent to weak anthocyanin in buds

COROLLA: medium size, red-violet colour, moderate anthocyanin on inner surface, prominent star PEDUNCLE: weak anthocyanin

TUBER: oval to round, eyes intermediate in depth and predominantly apical, eyebrows not prominent, dark yellow flesh with no secondary colour

SKIN: red, red at base of eye, strong anthocyanin when exposed to light, smooth texture

LIGHT SPROUT: small, spherical, many root tips, short lateral roots BASE: medium anthocyanin, absent or low proportion of blue, medium pubescence TIP: equal in size to base, closed habit, moderate anthocyanin, sparse pubescence.

Origin and Breeding: 'Laura' was selected from the F1 progeny of a cross between 'Rosella' and 'Stamm 6140/12' made in 1989 in Kaltenberg, Germany. The variety was selected based on negative agronomic criteria.

Tests and Trials: Trials for 'Laura' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

Comparison table for 'Laura'

| | 'Laura' | 'Symfonia' * | 'Asterix'* | |
|-------------------------|------------------|---------------------|------------|--|
| Plant height (cm) | | | | |
| mean | 57.8 | 51.8 | 51.2 | |
| std. deviation | 3.8 | 2.6 | 3.9 | |
| Leaf length (cm) | | | | |
| mean | 23.2 | 28.7 | 28.0 | |
| std. deviation | 1.8 | 2.6 | 2.0 | |
| Leaf width (cm) | | | | |
| mean | 16.7 | 13.9 | 16.0 | |
| std. deviation | 1.3 | 2.6 | 2.9 | |
| Colour of inner surface | of corolla (RHS) | | | |
| | 76A | 75A | 85A | |



Potato: 'Laura' (center) with reference varieties 'Asterix' (left) and 'Symfonia' (right)

| Proposed denomination: | 'Milva' |
|------------------------|--|
| Application number: | 02-3354 |
| Application date: | 2002/11/05 |
| Applicant: | Europlant Pflanzenzucht GmbH, Luneburg,, Germany |
| Agent in Canada: | Global Agri Services Inc., New Maryland, New Brunswick |
| Breeder: | Nordkartoffel Zuchtgesellschaft MBH, Ebstorf, Germany |

Varieties used for comparison: 'Satina' and 'Sante'

Summary: The plants of 'Milva' are shorter than the plants of 'Satina' and taller than the plants of 'Sante'. The tubers of Milva' have a yellow and smooth skin whereas it is light beige and rough for 'Satina'. 'Milva' has tubers that are oval in shape, whereas they are round in the reference varieties. The light sprout of 'Milva' is smaller than that of the reference varieties. The base and the tip of the light sprout of 'Milva' have more anthocyanin colouration than 'Santina' and 'Sante'. The base of the light sprout of 'Milva' has a high proportion of blue in the anthocyanin, whereas it is absent to low in the reference varieties. The pubescence at the base of the sprout is absent to very sparse in 'Milva' and dense in 'Satina'.

Description:

PLANT: semi-upright growth habit, intermediate foliage structure

STEM: weak anthocyanin on leaf axil only, main stem thin, swelling of nodes low

LEAF: light to medium green, intermediate in silhouette, anthocyanin in rachis and petiole absent to very weak TERMINAL LEAFLET: medium ovate, acute tip, cordate base, absent or very low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium size, narrowly to medium ovate, acute tip, obtuse to cordate base, shallow to moderately deep veins, moderate waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), weak to moderate presence of secondary leaflets

INFLORESCENCE: small, moderate flowering profusion, buds fairly persistent, absent to very weak anthocyanin in buds

COROLLA: medium in size, white, moderately prominent star PEDUNCLE: anthocyanin absent to very weak

TUBER: oval, eyes intermediate in depth and evenly distributed, eyebrows slightly to moderately prominent, medium to dark yellow coloured flesh with no secondary colour

SKIN: yellow, yellow at base of eye, weak to medium anthocyanin when exposed to light, smooth texture

LIGHT SPROUT: small, ovoid, moderate number of root tips, short lateral roots BASE: very strong anthocyanin, high proportion of blue, absent or very sparse pubescence TIP: smaller than base, intermediate habit, strong anthocyanin, medium pubescence.

Origin and Breeding: 'Milva' was selected from the F1 progeny of a cross between 'Dunja' and 'Nena' made in 1986 in Kaltenberg, Germany. The variety was selected based on negative agronomic criteria.

Tests and Trials: Trials for 'Milva' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

| | 'Milva' | 'Satina'* | 'Sante'* | |
|-------------------------|------------------|-----------|----------|--|
| Plant height (cm) | | | | |
| mean | 58.3 | 63.5 | 50.5 | |
| std. deviation | 1.9 | 3.2 | 2.6 | |
| Colour of inner surface | of corolla (RHS) | | | |
| | 157B | 157A | 157C | |

* reference variety



Potato: 'Milva' (center) with reference varieties 'Sante' (left) and 'Santina' (right)

| Proposed denomination: | 'Murato' |
|------------------------|---|
| Application number: | 04-4013 |
| Application date: | 2004/01/22 |
| Applicant: | Agrico B.A., Emmerloord, The Netherlands |
| Agent in Canada: | Parkland Seed Potatoes Ltd., Lacombe, Alberta |

Varieties used for comparison: 'Desiree' and 'Asterix'

Summary: 'Murato' has stronger anthocyanin colouration on the stem and peduncle than 'Desiree' and 'Asterix'. The tuber eyes of 'Murato' are predominantly apical, whereas they are evenly distributed in the reference varieties. 'Murato' has a spherical shaped light sprout while 'Desiree' has a broad to narrow cylindrical light sprout and 'Asterix' has an ovoid light sprout. The light sprout of 'Murato' is smaller than that of the reference varieties.

Description:

PLANT: semi-upright growth habit, leaf type foliage structure

STEM: very strong anthocyanin evenly distributed, main stem medium in thickness, swelling of nodes absent or very low

LEAF: dark green, intermediate silhouette, strong anthocyanin in rachis and petiole TERMINAL LEAFLET: medium ovate, acuminate tip, cordate base, moderate frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium size, narrowly ovate, acute to acuminate tip, cordate base, moderately deep veins,

moderate waviness of margins, medium glossiness, sparse pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: large, flowering profusion medium to high, persistent buds, absent to weak anthocyanin in buds COROLLA: large, red-violet colour, strong anthocyanin on inner surface, prominent star PEDUNCLE: very strong anthocyanin

TUBER: round to oval, eyes intermediate in depth and predominantly apical, eyebrows slightly prominent, medium yellow to dark yellow flesh with no secondary colour SKIN: red, red at base of eye, strong anthocyanin when exposed to light, smooth texture

LIGHT SPROUT: small, spherical, few root tips, short lateral roots BASE: strong anthocyanin, moderate proportion of blue, medium pubescence TIP: equal in size to base, closed habit, anthocyanin absent to very weak, medium pubescence.

Origin and Breeding: 'Murato' was selected from the F_1 progeny of the crossing of 'AR83-303' and 'KO83-1372' made in 1989 in Bant, The Netherlands. The selection process was based on negative agronomic traits.

Tests and Trials: Trials for 'Murato' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

Comparison table for 'Murato'

| | 'Murato' | 'Desiree'* | 'Asterix'* | |
|-------------------------|------------------|------------|------------|--|
| <i>Leaf length</i> (cm) | | | | |
| mean | 29.0 | 26.9 | 28.0 | |
| std. deviation | 1.7 | 1.9 | 2.0 | |
| Leaf width (cm) | | | | |
| mean | 18.1 | 18.6 | 16.0 | |
| std. deviation | 1.3 | 1.3 | 2.9 | |
| Colour of inner surface | of corolla (RHS) | | | |
| | 85A | 84B | 85A | |



Potato: 'Murato' (center) with reference varieties 'Desiree' (left) and 'Asterix' (right)

| Proposed denomination: | 'Princess' |
|------------------------|--|
| Application number: | 02-3339 |
| Application date: | 2002/10/11 |
| Applicant: | SAKA-RAGIS Pflanzenzucht GbR, Hamburg, Germany |
| Agent in Canada: | Global Agri Services Inc., New Maryland, New Brunswick |

Variety used for comparison: 'Yukon Gold'

Summary: 'Princess' has shorter leaves, a higher flowering profusion and more persistent flower buds than'Yukon Gold'. The inner surface of the corolla is white for 'Princess' whereas it is red-violet for 'Yukon Gold'. The base of the light sprout of 'Princess' has a higher proportion of blue in the anthocyanin colouration and less pubescence than 'Yukon Gold'.

Description:

PLANT: semi-upright growth habit, leaf type foliage structure

STEM: medium anthocyanin evenly distributed, main stem medium in thickness, swelling of nodes low to moderate

LEAF: light to medium green, intermediate in silhouette, weak anthocyanin in rachis and strong in petiole TERMINAL LEAFLET: medium ovate, acute to acuminate tip, cordate base, low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium to large, narrowly ovate, acute tip, cordate base, shallow to moderately deep veins, weak waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: medium in size, high flowering profusion, persistent buds, absent to very weak anthocyanin in buds COROLLA: medium size, white, slightly prominent star PEDUNCLE: anthocyanin absent to very weak

TUBER: oval, eyes intermediate in depth and evenly distributed, eyebrows slightly prominent, medium yellow to dark yellow flesh with no secondary colour

SKIN: yellow, yellow at base of eye, medium anthocyanin when exposed to light, smooth texture

LIGHT SPROUT: small, spherical, few root tips, short lateral roots

BASE: medium to strong anthocyanin, moderate proportion of blue, sparse pubescence

TIP: equal in size to base, intermediate habit, anthocyanin absent to very weak, medium pubescence.

Origin and Breeding: 'Princess' was developed in the potato breeding program of SAKA-RAGIS Pflanzenzucht GbR at the breeding station of Windeby, Schleswig-Holstein, Germany. The variety originated from a cross between 'Dunja' and 'Arnika', made in 1988. 'Dunja' originated from a cross between 'B 51' and a seedling of 'Anett'. 'Arnika' originated from a cross between 'Granola' and 'MP 71.241/50'.

Tests and Trials: Trials for 'Princess' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

Comparison table for 'Princess'

| | 'Princess' | 'Yukon Gold'* | |
|------------------|------------|---------------|--|
| Leaf length (cm) | | | |
| mean | 29.6 | 33.5 | |
| std. deviation | 2.0 | 2.3 | |

* reference variety



Potato: 'Princess' (left) with reference variety 'Yukon Gold' (right)

| Proposed denomination: | 'Piccolo' |
|------------------------|---|
| Application number: | 04-4489 |
| Application date: | 2004/11/29 |
| Applicant: | Handelmaatschappij Van Rijn B.V., 'S-Gravenzande, The Netherlands |
| Agent in Canada: | Solanum International Inc., Spruce Grove, Alberta |

Varieties used for comparison: 'Yukon Gold' and 'Bintje'

Summary: 'Piccolo' has a shorter plant height than 'Yukon Gold' and 'Bintje'. The leaves of 'Piccolo' are longer than those of 'Bintje' and narrower than those of 'Yukon Gold'. 'Piccolo' has a lower flowering profusion than the reference varieties. The inner surface of the corolla of 'Piccolo' is white, whereas it is red-violet for 'Yukon Gold'. The corolla of 'Piccolo' is larger than that of 'Bintje'. The base of the light sprout of 'Piccolo' has less anthocyanin than 'Bintje' and less pubescence than 'Yukon Gold'. The light sprout tip of 'Piccolo' has more anthocyanin and pubescence than 'Yukon Gold' and less than 'Bintje'.

Description:

PLANT: semi-upright growth habit, intermediate type foliage structure

STEM: absent or very weak anthocyanin, main stem medium in thickness, swelling of nodes absent or very low

LEAF: medium green, closed to intermediate silhouette, anthocyanin in rachis and petioles absent to very weak TERMINAL LEAFLET: narrowly ovate, acute tip, obtuse to cordate base, absent or very low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: medium to large, narrowly ovate, acute tip, cordate base, moderately deep veins, moderate waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate to strong presence of secondary leaflets

INFLORESCENCE: absent to very low flowering profusion, buds not persistent, strong anthocyanin in buds COROLLA: medium size, white, prominent star PEDUNCLE: anthocyanin absent to very weak

TUBER: round to oval, shallow eyes predominantly apical, eyebrows slightly prominent, medium to dark yellow flesh with no secondary colour

SKIN: yellow, yellow at base of eye, medium to strong anthocyanin when exposed to light, smooth texture

LIGHT SPROUT: small to medium size, spherical, few root tips, short to medium lateral roots BASE: medium anthocyanin, absent or low proportion of blue, moderate pubescence TIP: equal to base, closed habit, moderate anthocyanin, moderate pubescence.

Origin and Breeding: 'Piccolo' results from a cross between 'Ausonia' and 'VE 74-120', made in 1991 in Emmeloord, The Netherlands. 'Ausonia' derives from the crossing of 'Wilja' and Konst 63 665. The variety was selected by recurrent phenotypic selection and has been clonally propagated since the first year of selection.

Tests and Trials: Trials for 'Piccolo' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

| | 'Piccolo' | 'Yukon Gold'* | 'Bintje'* | |
|-------------------------|------------------|---------------|-----------|--|
| Plant height (cm) | | | | |
| mean | 54.4 | 58.8 | 54.0 | |
| std. deviation | 6.4 | 1.8 | 4.7 | |
| Leaf length (cm) | | | | |
| mean | 30.9 | 33.5 | 26.9 | |
| std. deviation | 2.0 | 2.3 | 1.0 | |
| Leaf width (cm) | | | | |
| mean | 16.5 | 19.8 | 16.7 | |
| std. deviation | 2.4 | 2.0 | 1.1 | |
| Colour of inner surface | of corolla (RHS) | | | |
| | 157C | 76A | 157B | |

* reference variety



Potato: 'Piccolo' (center) with reference varieties 'Bintje' (left) and 'Yukon Gold' (right)

Plant Varieties Journal, July, 2006, No. 60

| Proposed denomination: | 'Roko' |
|------------------------|--|
| Application number: | 03-3472 |
| Application date: | 2003/02/24 |
| Applicant: | Nieder Österreichische Saatbaugenossenschaft, Windigsteig, Austria |
| Agent in Canada: | Parkland Seed Potatoes Ltd., Lacombe, Alberta |

Varieties used for comparison: 'Desiree' and 'Sangre'

Summary: 'Roko' has a narrowly ovate terminal leaflet while 'Desiree' and 'Sangre' have a medium ovate terminal leaflet. The terminal and lateral leaflets of 'Roko' have absent or very low coalescence whereas 'Sangre' has a medium to high frequency of coalescence. The terminal and lateral leaflets of 'Roko' have stronger waviness than the reference varieties. The colour at the base of the tuber eye is white for 'Roko' while it is red for the reference varieties. The tip of the light sprout of 'Roko' has weak anthocynanin, whereas 'Desiree' has none and 'Sangre' has strong anthocyanin. Pubescence on the tip of the light sprout of 'Roko' is moderate, whereas it is absent or very sparse in 'Sangre'.

Description:

PLANT: semi-upright growth habit, intermediate to leaf type foliage structure

STEM: moderate anthocyanin evenly distributed, main stem medium in thickness, swelling of nodes absent or very low

LEAF: light to medium green, intermediate silhouette, anthocyanin in rachis and petiole moderate TERMINAL LEAFLET: narrowly ovate, acute to acuminate tip, obtuse base, absent or very low frequency of coalescence of terminal and lateral leaflets

LATERAL LEAFLETS: small to medium size, narrowly ovate, acuminate to acute tip, obtuse to cordate base, moderately deep veins, strong waviness of margins, medium glossiness, no pubescence on blade (at apical rosette), moderate presence of secondary leaflets

INFLORESCENCE: medium size, moderate flowering profusion, persistent buds, moderate anthocyanin in buds COROLLA: medium to large size, red-violet colour, medium anthocyanin on inner surface, prominent star PEDUNCLE: moderate anthocyanin

TUBER: oval, eyes shallow and predominantly apical, eyebrows not prominent, cream coloured flesh with no secondary colour

SKIN: red, white at base of eye, strong anthocyanin when exposed to light, smooth to rough texture

LIGHT SPROUT: medium in size, spherical, few root tips, short lateral roots BASE: strong anthocyanin, moderate proportion of blue, sparse pubescence TIP: larger than base, intermediate habit, weak anthocyanin, medium pubescence.

Origin and Breeding: 'Roko' was selected from the F_1 progeny of the crossing of 'Alwawa' and 'MA81-536' made in 1988 in Meires, Austria. The selection process was based on negative agronomic traits.

Tests and Trials: Trials for 'Roko' were conducted in Drummond, New Brunswick in 2005. A block design was used with four replicates per variety. All entries were planted in single-row plots and each entry had one replicate per block. Plots consisted of rows 5.5 metres long and between row spacing of 91 cm. Measured characteristics were based on 10 measurements. Colour determinations were made using the 1986 RHS colour chart.

Comparison table for 'Roko'

| | 'Roko' | 'Desiree'* | 'Sangre'* | |
|---|-------------|-------------|-------------|--|
| <i>Leaf length</i> (cm) mean std. deviation | 28.4 1.0 | 26.9 1.9 | 29.4 2.7 | |

Plant Varieties Journal, July, 2006, No. 60

| <i>Leaf width</i> (cm) mean std. deviation | 18.3 1.3 | 18.6 1.3 | 16.2 2.9 |
|--|-------------|-------------|-------------|
| Colour of inner surface o | 84B | 84A | |



Potato: 'Roko' (center) with reference varieties 'Sangre' (left) and 'Desiree' (right)