



## APPLICATIONS UNDER EXAMINATION

## POTATO

### POTATO (*Solanum tuberosum*)

**Proposed denomination:** 'AR2007-1'  
**Application number:** 09-6618  
**Application date:** 2009/04/22  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** Agnes Murphy, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'Barbara' and 'Shepody'

**Summary:** *The plants of 'AR2007-1' are taller than the reference varieties. 'AR2007-1' has weak to medium anthocyanin colouration of the stem while it is absent or very weak in 'Shepody'. The plants of 'AR2007-1' are spreading whereas they are upright in 'Barbara'. 'AR2007-1' has an intermediate leaf silhouette whereas it is open in 'Barbara' and closed in 'Shepody'. The lateral leaflets of 'AR2007-1' is medium in size whereas it is small in 'Barbara' and medium to large in 'Shepody'. Flowering profusion of 'AR2007-1' is low while it is medium in 'Barbara' and high in 'Shepody'. 'AR2007-1' has oblong tuber shape whereas those of 'Shepody' are long. The inner surface of the corolla of 'AR2007-1' is white whereas it is blue-violet on 'Shepody'. The intensity of anthocyanin colouration on inner surface of the corolla of 'AR2007-1' is very weak while it is medium in 'Shepody'. The tuber skin of 'AR2007-1' is buff with purple whereas it is light beige in 'Shepody'. The tuber flesh of 'AR2007-1' is cream whereas it is dark yellow in 'Barbara' and white in 'Shepody'. The intensity of anthocyanin colouration on the light sprout base of 'AR2007-1' is very strong while it is weak in 'Shepody'. 'AR2007-1' has medium number of root tips of the light sprout whereas it is few in 'Shepody'.*

#### **Description:**

**PLANT:** spreading growth habit, leaf type foliage structure

**STEM:** weak to medium anthocyanin colouration, medium thickness of main stem, absent or very weak swelling at nodes

**LEAVES:** medium green, intermediate silhouette, absent or very weak anthocyanin colouration on upper side of rachis, weak anthocyanin colouration of petiole, absent to very low frequency of coalescence, medium depth of veins, absent or very weak waviness of margin, medium glossiness of upper side, low density of pubescence, medium presence of secondary leaflets

**TERMINAL LEAFLET:** medium ovate, acuminate tip, cordate base

**LATERAL LEAFLET:** medium size, narrowly ovate, acuminate tip, cordate base

**INFLORESCENCE:** low flowering profusion, small size

**FLOWER BUD:** medium persistence, medium intensity of anthocyanin colouration

**COROLLA:** white, very weak anthocyanin colouration on inner surface, small to medium size, medium prominence of star

**PEDUNCLE:** medium anthocyanin colouration

**TUBER:** oblong, cream flesh with no secondary colour

**TUBER EYES:** intermediate depth, evenly distributed, medium prominence of eyebrows

**TUBER SKIN:** buff with scattered purple, purple at base of eye, smooth texture

**LIGHT SPROUT:** medium size, spherical shape, medium number of root tips, short lateral shoots

**LIGHT SPROUT BASE:** very strong anthocyanin colouration, high proportion of blue in anthocyanin colouration, medium to dense pubescence

**LIGHT SPROUT TIP:** smaller in size than base, closed habit, very strong anthocyanin colouration, dense pubescence

**Origin and Breeding:** 'AR2007-1' (experimental designations 13764-03 and F02018) originated from the cross of 'Barbara' and 'Anson' made in 1999 in Fredericton, New Brunswick. Selection criteria were clonal selection for adaptation, tuber type and niche french fry potential.

**Tests and Trials:** Trials for 'AR2007-1' were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30 cm.

**Comparison table for 'AR2007-1'**

	'AR2007-1'	'Barbara'*	'Shepody'*
<i>Plant height (cm)</i>			
mean	39	28	27
standard deviation	2.43	3.63	3.27

\*reference varieties



Potato: 'AR2007-1' (left) with reference varieties 'Barbara' (center) and 'Shepody' (right)



Potato: 'AR2007-1' (left) with reference varieties 'Barbara' (center) and 'Shepody' (right)



Potato: 'AR2007-1' (left) with reference varieties 'Barbara' (center) and 'Shepody' (right)

**Proposed denomination:** 'AR2007-2'  
**Application number:** 09-6619  
**Application date:** 2009/04/22  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** T. Richard Tarn, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'Atlantic' and 'Snowden'

**Summary:** *The plant growth habit of 'AR2007-2' is upright whereas it is semi-upright in 'Snowden'. The plants of 'AR2007-2' are taller than those of 'Snowden'. The intensity of anthocyanin colouration on the stem of 'AR2007-2' is medium whereas it is weak in 'Snowden'. The leaf silhouette of 'AR2007-2' is intermediate whereas it is open in 'Snowden'. The lateral leaflets of 'AR2007-2' are small while those of 'Atlantic' are medium to large. Flowering profusion of 'AR2007-2' is low to medium whereas it is high in 'Atlantic'. The inner surface of the corolla of 'AR2007-2' is blue-violet whereas it is white in 'Snowden'. The intensity of anthocyanin colouration on the corolla of 'AR2007-2' is weak whereas it is medium in 'Atlantic' and very weak in 'Snowden'. The tuber skin of 'AR2007-2' is yellow whereas it is light beige on all of the reference varieties. The tuber flesh of 'AR2007-2' is cream whereas it is white on all of the reference varieties. The general shape of the light sprout of 'AR2007-2' is broad cylindrical whereas it is ovoid on all of the reference varieties. The anthocyanin colouration of the light sprout of 'AR2007-2' is medium to strong while it is weak in 'Atlantic' and absent or very weak in 'Snowden'. The proportion of blue in anthocyanin colouration of 'AR2007-2' is absent or low while it is high on 'Atlantic'. The light sprout base of 'AR2007-2' has sparse density of pubescence whereas it is medium on all of the reference varieties.*

**Description:**

PLANT: upright growth habit, stem type foliage structure

STEM: medium anthocyanin colouration, medium thickness of main stem, absent or very low swelling at nodes

LEAVES: light to medium green, intermediate silhouette, weak to medium anthocyanin colouration on upper side of rachis and petiole, absent to very low frequency of coalescence, shallow to medium depth of veins, medium waviness of margin, medium to glossy glossiness of upper side, no pubescence, weak to medium presence of secondary leaflets

TERMINAL LEAFLET: broadly ovate, acuminate tip, truncate base

LATERAL LEAFLET: small size, broadly ovate, acuminate tip, truncate base

INFLORESCENCE: low to medium flowering profusion, medium size

FLOWER BUD: medium persistence, strong intensity of anthocyanin colouration

COROLLA: blue-violet, weak anthocyanin colouration on inner surface, large size, medium prominence of star

PEDUNCLE: weak anthocyanin colouration

TUBER: oval, cream flesh with no secondary colour

TUBER EYES: intermediate depth, evenly distributed, prominent eyebrows

TUBER SKIN: yellow, white at base of eye, netted texture

LIGHT SPROUT: large size, broad cylindrical shape, medium number of root tips, short lateral shoots

LIGHT SPROUT BASE: medium to strong anthocyanin colouration, no blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: smaller in size than base, intermediate habit, absent or very weak anthocyanin colouration, sparse pubescence

**Origin and Breeding:** 'AR2007-2' (experimental designations 13740-18 and F02032) originated from the cross of 'F91031' and 'ND860-2' made in 2000 in Fredericton, New Brunswick. Selection criteria were clonal selection for adaptation, tuber type and cold temperature chipping quality.

**Tests and Trials:** Trials for 'AR2007-2' were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30 cm.

Comparison table for 'AR2007-2'

	'AR2007-2'	'Atlantic'*	'Snowden'*
<i>Plant height (cm)</i>			
mean	33	32	28
standard deviation	1.96	3.99	3.63

\*reference varieties



Potato: 'AR2007-2' (left) with reference varieties 'Atlantic' (center) and 'Snowden' (right)



Potato: 'AR2007-2' (left) with reference varieties 'Atlantic' (center) and 'Snowden' (right)



Potato: 'AR2007-2' (left) with reference varieties 'Atlantic' (center) and 'Snowden' (right).

**Proposed denomination:** 'AR2007-3'  
**Application number:** 09-6620  
**Application date:** 2009/04/22  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** Kenneth Proudfoot, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Variety used for comparison:** 'AC Blue Pride'

**Summary:** *The plants of 'AR2007-3' are taller than those of 'AC Blue Pride'. 'AR2007-3' has a semi-upright growth habit whereas it is upright in 'AC Blue Pride'. The stems of 'AR2007-3' have very strong anthocyanin colouration while it is weak to medium in 'AC Blue Pride'. 'AR2007-3' has intermediate leaf silhouette whereas it is closed in 'AC Blue Pride'. The lateral leaflets of 'AR2007-3' are small in size while they are medium in size in 'AC Blue Pride'. 'AR2007-3' has low to medium flowering profusion while it high in 'AC Blue Pride'. The inner surface of the corolla of 'AR2007-3' is blue-violet whereas it is white on 'AC Blue Pride'. 'AR2007-3' has strong intensity of anthocyanin colouration on the corolla while it is very weak on 'AC Blue Pride'. The tuber skin of 'AR2007-3' is purple whereas it is blue on 'AC Blue Pride'.*

**Description:**

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

STEM: very strong anthocyanin colouration, medium to thick main stem, very low to low swelling at nodes

LEAVES: medium to dark green, intermediate silhouette, very strong anthocyanin colouration on upper side of rachis, strong anthocyanin colouration of petiole, absent to very low frequency of coalescence, shallow depth of veins, absent or very weak waviness of margin, dull glossiness of upper side, medium density of pubescence, medium presence of secondary leaflets

TERMINAL LEAFLET: medium ovate, cuspidate tip, cordate base

LATERAL LEAFLET: small size, medium ovate, cuspidate tip, cordate base

INFLORESCENCE: low to medium flowering profusion, small to medium size

FLOWER BUD: weak to medium persistence, medium intensity of anthocyanin colouration

COROLLA: blue-violet, strong anthocyanin colouration on inner surface, medium size, weak to medium prominence of star

PEDUNCLE: strong anthocyanin colouration

TUBER: oval, white flesh with purple secondary colour

TUBER EYES: shallow to intermediate depth, evenly distributed, medium prominence of eyebrows

TUBER SKIN: purple, purple at base of eye, netted texture

LIGHT SPROUT: medium to large size, ovoid shape, few to medium number of root tips, short lateral shoots

LIGHT SPROUT BASE: very strong anthocyanin colouration, high proportion of blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: smaller in size than base, closed habit, very strong anthocyanin colouration, medium to dense pubescence

**Origin and Breeding:** 'AR2007-3' (experimental designations 13805-03 and P02041) originated from the cross of 'AC Blue Pride' and 'Redsen' made in 1994 in St-Johns, Newfoundland and Labrador (selected in New Brunswick by Agnes Murphy). Selection criteria were clonal selection for adaptation, tuber type and niche chipping potential.

**Tests and Trials:** Trials for 'AR2007-3' were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30 cm.

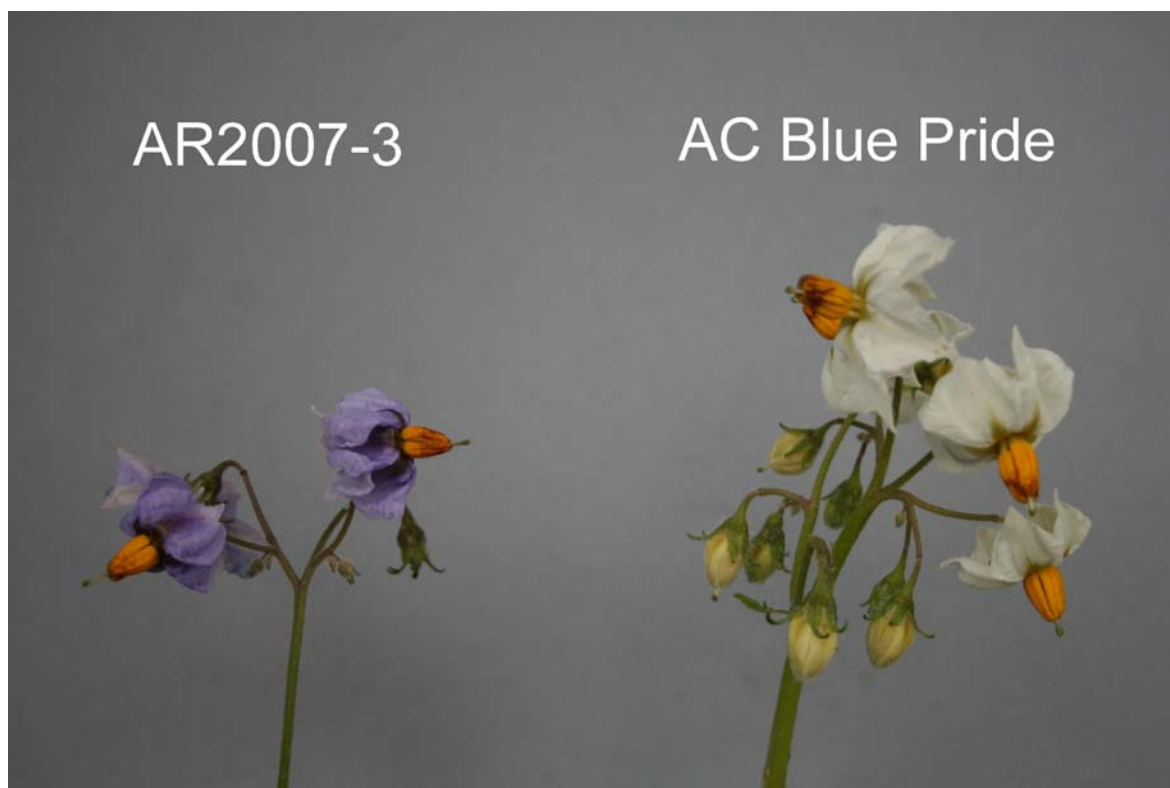
**Comparison table for 'AR2007-3'**

	'AR2007-3'	'AC Blue Pride'*
<i>Plant height (cm)</i>		
mean	52	36
standard deviation	4.01	2.52

\*reference variety

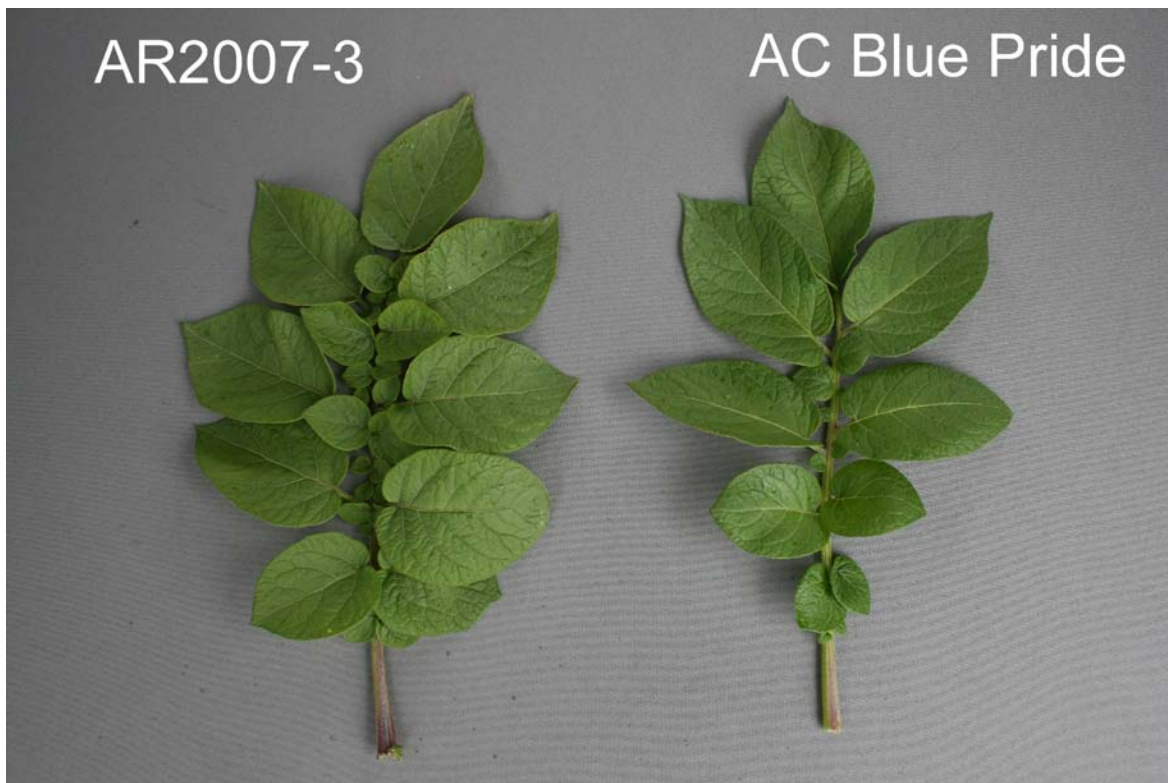


Potato: 'AR2007-3' (left) with reference variety 'AC Blue Pride' (right)



Potato: 'AR2007-3' (left) with reference variety 'AC Blue Pride' (right)





Potato: 'AR2007-3' (left) with reference variety 'AC Blue Pride' (right)

**Proposed denomination:** 'AR2007-4'  
**Application number:** 09-6621  
**Application date:** 2009/04/22  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** Agnes Murphy, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'Atlantic' and 'Superior'

**Summary:** *The plants of 'AR2007-4' are shorter than those of 'Atlantic'. The anthocyanin colouration on the stem of 'AR2007-4' is medium while it is absent or very weak on 'Superior'. The lateral leaflets of 'AR2007-4' are medium to large in size whereas they are small to medium in 'Superior'. Flowering profusion of 'AR2007-4' is low while it is high in 'Atlantic' and very high in 'Superior'. The inner surface of the corolla of 'AR2007-4' is white whereas it is blue-violet on all of the reference varieties. The intensity of anthocyanin colouration on inner surface of the corolla of 'AR2007-4' is very weak while it is medium on the reference varieties. The colour of base of the tuber eye of 'AR2007-4' is light brown whereas it is white on all of the reference varieties. The tuber shape of 'AR2007-4' is round whereas it is oval in 'Superior'. The tuber flesh of 'AR2007-4' is cream whereas that of 'Atlantic' and 'Superior' are white. The general shape of the light sprout of 'AR2007-4' is ovoid whereas it is broad cylindrical in 'Superior'. The intensity of anthocyanin colouration at the base of the light sprout of 'AR2007-4' is strong whereas it is weak on 'Atlantic' and medium on 'Superior'. Pubescence at the base of the light sprout of 'AR2007-4' is sparse whereas it is medium on all of the reference varieties.*

**Description:**

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

STEM: medium anthocyanin colouration, medium thickness of main stem, absent or very weak swelling at nodes

LEAVES: medium to dark green, closed to intermediate silhouette, medium anthocyanin colouration on upper side of rachis and petiole, low frequency of coalescence, shallow depth of veins, weak waviness of margin, dull glossiness of upper side, weak density of pubescence, medium presence of secondary leaflets

TERMINAL LEAFLET: elliptical, cuspidate tip, lobed base

LATERAL LEAFLET: medium to large size, elliptical, acute tip, cordate base

INFLORESCENCE: low flowering profusion, small size

FLOWER BUD: medium persistence, absent or very weak intensity of anthocyanin colouration

COROLLA: white, very weak anthocyanin colouration on inner surface, large size, medium prominence of star

PEDUNCLE: absent or very weak anthocyanin colouration

TUBER: round, cream flesh with no secondary colour

TUBER EYES: intermediate depth, apical distribution, medium prominence of eyebrows

TUBER SKIN: light beige, light beige at base of eye, rough texture

LIGHT SPROUT: medium to large size, ovoid shape, medium number of root tips, short to medium lateral shoots

LIGHT SPROUT BASE: strong anthocyanin colouration, high proportion of blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: smaller in size than base, closed habit, medium to strong anthocyanin colouration, sparse pubescence

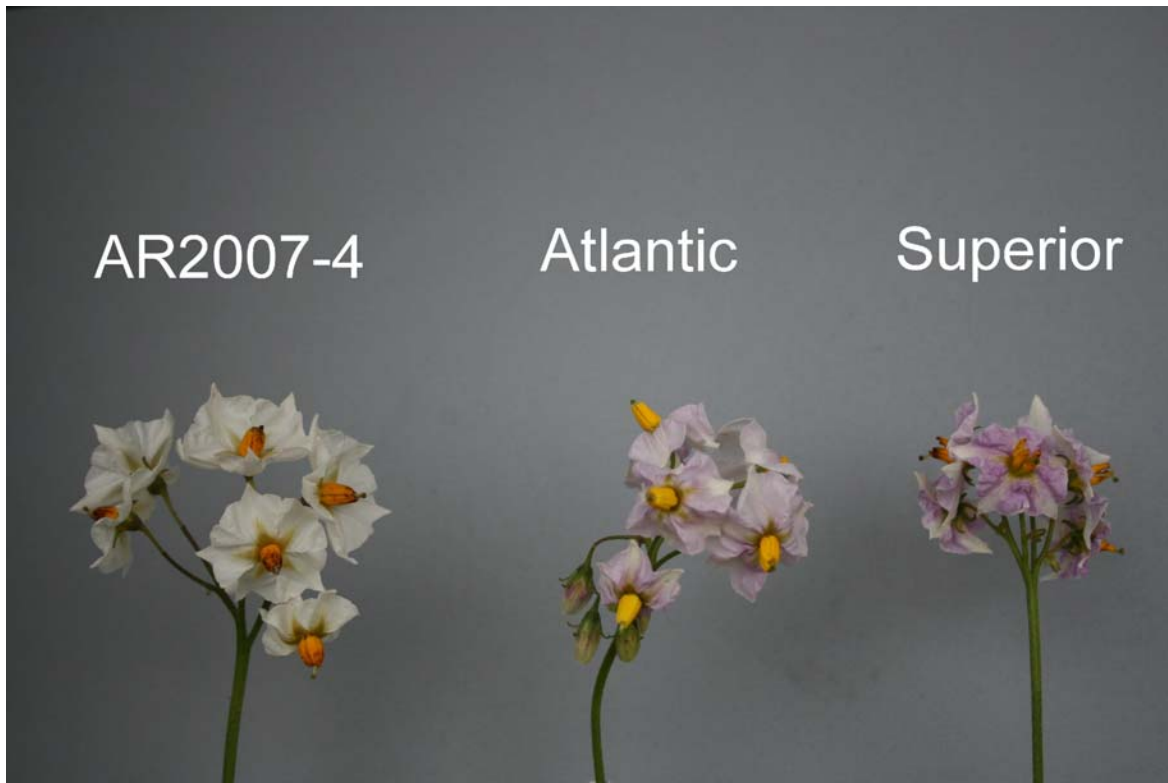
**Origin and Breeding:** 'AR2007-4' (experimental designations 13601-09 and F01044) originated from the cross of 'Brigus' and 'F58089' made in 1999 in Fredericton, New Brunswick. Selection criteria were clonal selection for adaptation, tuber type and fresh quality market.

**Tests and Trials:** Trials for 'AR2007-4' were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30 cm.

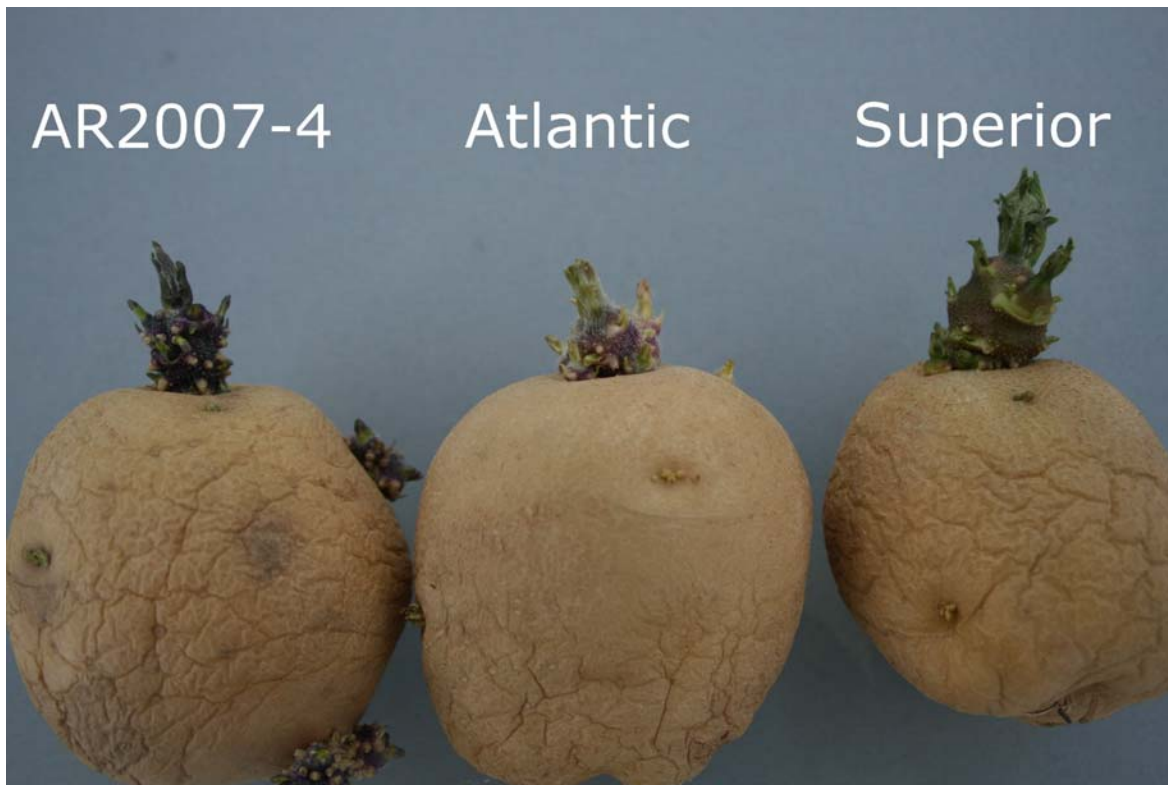
**Comparison table for 'AR2007-4'**

	'AR2007-4'	'Atlantic'*	'Superior'*
<i>Plant height (cm)</i>			
mean	23	32	20
standard deviation	2.05	3.99	3.45

\*reference varieties



Potato: 'AR2007-4' (left) with reference varieties 'Atlantic' (center) and 'Superior' (right)



Potato: 'AR2007-4' (left) with reference varieties 'Atlantic' (center) and 'Superior' (right)

**Proposed denomination:** 'AR2007-6'  
**Application number:** 09-6622  
**Application date:** 2009/04/22  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** Agnes Murphy, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'AC Red Island' and 'Red Pontiac'

**Summary:** *The plants of 'AR2007-6' are taller than 'Red Pontiac'. The intensity of anthocyanin colouration of the stem of 'AR2007-6' is medium to strong while it is weak in 'Red Pontiac'. The leaf silhouette of 'AR2007-6' is intermediate whereas it is open in 'AC Red Island'. Flowering profusion of 'AR2007-6' is low to medium while it is high in the reference varieties. The light sprout base of 'AR2007-6' has a strong anthocyanin colouration while it is medium in 'AC Red Island' and very weak to weak in 'Red Pontiac'. The inner surface of the corolla of 'AR2007-6' has medium anthocyanin colouration whereas it is strong on 'AC Red Island'. 'AR2007-6' has many root tips on the light sprout while it is medium in 'AC Red Island'.*

**Description:**

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

STEM: medium to strong anthocyanin colouration, medium to thick main stem, absent or very low swelling at nodes

LEAVES: dark green, intermediate silhouette, medium anthocyanin colouration on upper side of rachis and petiole, low frequency of coalescence, shallow to medium depth of veins, absent or very weak waviness of margin, medium glossiness of upper side, medium density of pubescence, medium presence of secondary leaflets

TERMINAL LEAFLET: medium ovate, acuminate tip, cordate base

LATERAL LEAFLET: medium size, narrowly ovate, acuminate tip, cordate base

INFLORESCENCE: low to medium flowering profusion, medium size

FLOWER BUD: strong persistence, medium intensity of anthocyanin colouration

COROLLA: red-violet, medium anthocyanin colouration on inner surface, small size, medium prominence of star

PEDUNCLE: absent or very weak anthocyanin colouration

TUBER: oval, light yellow flesh with no secondary colour

TUBER EYES: intermediate depth, evenly distributed, slight to medium prominence of eyebrows

TUBER SKIN: red, red at base of eye, netted texture

LIGHT SPROUT: medium to large size, ovoid shape, many root tips, medium to long lateral shoots

LIGHT SPROUT BASE: strong anthocyanin colouration, no blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: smaller than to equal to base, closed habit, weak to medium anthocyanin colouration, absent or very sparse pubescence

**Origin and Breeding:** 'AR2007-6' (experimental designations 13763-16 and F02014) originated from the cross of 'AC Red Island' and 'F58050' made in 2000 in Fredericton, New Brunswick. Selection criteria were clonal selection for adaptation, tuber type, light yellow flesh with fresh market and chipping quality.

**Tests and Trials:** Trials for 'AR2007-6' were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30 cm.

**Comparison table for 'AR2007-6'**

	'AR2007-6'	'AC Red Island'*	'Red Pontiac'*
<i>Plant height (cm)</i>			
mean	31	31	23
standard deviation	4.40	1.55	2.62

\*reference varieties



Potato: 'AR2007-6' (left) with reference varieties 'AC Red Island' (center) and 'Red Pontiac' (right)



Potato: 'AR2007-6' (left) with reference varieties 'AC Red Island' (center) and 'Red Pontiac' (right)

**Proposed denomination:** 'AR2007-7'  
**Application number:** 09-6623  
**Application date:** 2009/04/22  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** Agnes Murphy, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'AC Red Island' and 'Red Pontiac'

**Summary:** 'AR2007-7' has an upright growth habit while it is semi-upright in 'AC Red Island' and semi-upright to spreading in 'Red Pontiac'. The plant of 'AR2007-7' is taller than 'Red Pontiac' but shorter than 'AC Red Island'. The leaf silhouette of 'AR2007-7' is intermediate whereas it is open in 'AC Red Island'. 'AR2007-7' has small lateral leaflets while it is medium in the reference varieties. Flowering profusion of 'AR2007-7' is low to medium while it is high in the reference varieties. The inner surface of the corolla of 'AR2007-7' has strong to very strong anthocyanin colouration whereas it is medium in 'Red Pontiac'. The light sprout of 'AR2007-7' is broad cylindrical whereas it is spherical in the reference varieties. The base of the light sprout of 'AR2007-7' has strong to very strong anthocyanin colouration while it is medium on 'AC Red Island' and very weak to weak on 'Red Pontiac'. 'AR2007-7' has few root tips of the light sprout tip while it is medium in number in 'AC Red Island' and medium to many in 'Red Pontiac'.

**Description:**

PLANT: upright growth habit, intermediate type foliage structure

STEM: medium anthocyanin colouration, thin to medium main stem, absent to very low swelling at nodes

LEAVES: medium to dark green, intermediate silhouette, medium to strong anthocyanin colouration on upper side of rachis, medium anthocyanin colouration of petiole, absent to very low frequency of coalescence, deep depth of veins, absent or very weak waviness of margin, medium to glossy glossiness of upper side, medium density of pubescence, medium to stronger presence of secondary leaflets

TERMINAL LEAFLET: broadly ovate, acuminate tip, truncate base

LATERAL LEAFLET: small size, medium ovate, acuminate tip, cordate base

INFLORESCENCE: low to medium flowering profusion, small to medium size

FLOWER BUD: medium to strong persistence, very strong intensity of anthocyanin colouration

COROLLA: red-violet, strong to very strong anthocyanin colouration on inner surface, large size, medium prominence of star

PEDUNCLE: strong anthocyanin colouration

TUBER: round, cream flesh with no secondary colour

TUBER EYES: shallow to intermediate depth, evenly distributed, slight prominence of eyebrows

TUBER SKIN: red, red at base of eye, smooth texture

LIGHT SPROUT: large size, broad cylindrical shape, few root tips, short lateral shoots

LIGHT SPROUT BASE: strong anthocyanin colouration, no blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: smaller in size than base, intermediate habit, weak anthocyanin colouration, medium pubescence

**Origin and Breeding:** 'AR2007-7' (experimental designations 13766-35 and F02022) originated from the cross of 'N0069-478' and 'Redsen' made in 2000 in Fredericton, New Brunswick. Selection criteria were clonal selection for adaptation, tuber type, light yellow flesh with fresh market quality.

**Tests and Trials:** Trials for 'AR2007-7' were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30cm.

## Comparison table for 'AR2007-7'

	'AR2007-7'	'AC Red Island'*	'Red Pontiac'*
<i>Plant height (cm)</i>			
mean	27	31	23
standard deviation	3.13	1.55	2.62

\*reference varieties



Potato: 'AR2007-7' (left) with reference varieties 'AC Red Island' (center) and 'Red Pontiac' (right)



Potato: 'AR2007-7' (left) with reference varieties 'AC Red Island' (center) and 'Red Pontiac' (right)

**Proposed denomination:** 'AR2007-8'  
**Application number:** 09-6624  
**Application date:** 2009/04/22  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** T. Richard Tarn, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'Atlantic' and 'Superior'

**Summary:** 'AR2007-8' has an upright growth habit while it is semi-upright to spreading in 'Superior'. The plant of 'AR2007-8' is shorter than 'Atlantic'. The inner surface of the corolla of 'AR2007-8' is white whereas it is blue-violet on all of the reference varieties. The intensity of anthocyanin colouration on inner surface of the corolla of 'AR2007-8' is very weak while it is medium on the reference varieties. The tuber flesh of 'AR2007-8' is cream whereas it is white on all of the reference varieties. The light sprout base of 'AR2007-8' has no or very low proportion of blue whereas the reference varieties have a high proportion.

**Description:**

**PLANT:** upright growth habit, intermediate type foliage structure

**STEM:** weak anthocyanin colouration, medium thickness of main stem, absent or low swelling at nodes

**LEAVES:** light to medium green, intermediate silhouette, absent or very weak anthocyanin colouration on upper side of rachis, weak anthocyanin colouration of the petiole, low to medium frequency of coalescence, weak waviness of margin, medium presence of secondary leaflets

**TERMINAL LEAFLET:** medium ovate, acuminate tip, cordate base

**LATERAL LEAFLET:** medium size, medium ovate, cuspidate tip, cordate base

**INFLORESCENCE:** high flowering profusion, medium to large size

**FLOWER BUD:** medium to strong persistence, absent or very weak intensity of anthocyanin colouration



COROLLA: white, very weak anthocyanin colouration on inner surface, large size, medium prominence of star  
 PEDUNCLE: absent anthocyanin colouration

TUBER: round, cream flesh with no secondary colour  
 TUBER EYES: intermediate, predominantly apical distributed, slight to medium prominence of eyebrows  
 TUBER SKIN: light beige, white at base of eye, smooth texture

LIGHT SPROUT: large size, conical shape, few to medium number of root tips, short to medium lateral shoots  
 LIGHT SPROUT BASE: absent or very weak anthocyanin colouration, no blue in anthocyanin colouration, sparse to medium pubescence  
 LIGHT SPROUT TIP: equal to base in size, closed habit, absent or very weak anthocyanin colouration, absent or very sparse pubescence

**Origin and Breeding:** ‘AR2007-8’ (experimental designations TAT13289-01 and F02060) originated from the cross of ‘TAT11468-02’ and ‘F66011’ made in 1998 in Fredericton, New Brunswick. Selection criteria were clonal selection for adaptation, tuber type, and fresh market quality.

**Tests and Trials:** Trials for ‘AR2007-8’ were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30 cm.

**Comparison table for ‘AR2007-8’**

	‘AR2007-8’	‘Atlantic’*	‘Superior’*
<i>Plant height (cm)</i>			
mean	23	32	20
standard deviation	5.74	3.99	3.45

\*reference varieties



Potato: ‘AR2007-8’ (left) with reference varieties ‘Atlantic’ (center) and ‘Superior’ (right)



Potato: 'AR2007-8' (left) with reference varieties 'Atlantic' (center) and 'Superior' (right)

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<b>Proposed denomination:</b>	'SP213'
<b>Application number:</b>	08-6330
<b>Application date:</b>	2008/05/06
<b>Applicant:</b>	SunRise Produce, Alliston, Ontario
<b>Breeder:</b>	Peter VanderZaag, SunRise Produce, Alliston, Ontario

**Varieties used for comparison:** 'Atlantic' and 'Snowden'

**Summary:** 'SP213' matures late to very late while the reference varieties mature mid-season. The stem of 'SP213' has absent to very weak anthocyanin colouration while it is weak to medium in 'Atlantic'. 'SP213' has a dark green leaf colour while it is light to medium green in 'Atlantic'. The lateral leaflet of 'SP213' is medium sized while it is large in 'Snowden'. 'SP213' has veins on the terminal and lateral leaflets that are moderate in depth while they are shallow in 'Snowden'. 'SP213' has a large inflorescence while it is medium sized in the reference varieties. The corolla of 'SP213' and 'Atlantic' is red-violet while it is white in 'Snowden'. 'SP213' has a strong anthocyanin colouration of the inner surface of the corolla while it is medium in 'Atlantic'. 'SP213' has a very prominent star of the corolla while the reference varieties do not. The skin texture of 'SP213' is smooth while it is rough in the reference varieties. 'SP213' has a spherical light sprout shape while it is ovoid in the reference varieties. The anthocyanin colouration at the base of the light sprout of 'SP213' is strong while it is weak in 'Snowden'. 'SP213' has sparse pubescence at the base of the light sprout while it is medium in 'Atlantic'. The habit of the tip of the light sprout of 'SP213' is closed while it is intermediate in the reference varieties. 'SP213' has medium anthocyanin colouration of the tip of the light sprout while it is weak in 'Atlantic' and absent to very weak in 'Snowden'. The pubescence of the tip of the light sprout of 'SP213' is sparse while it is dense in 'Atlantic' and absent to very sparse in 'Snowden'. 'SP213' has a few root tips on the light sprout while there are medium number in 'Snowden'.

**Description:**

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

STEM: absent or very weak anthocyanin colouration, thin to medium thickness of main stem, low to medium swelling at nodes

LEAVES: dark green, intermediate to open silhouette, absent or very weak anthocyanin colouration on upper side of rachis and of petiole, absent or very low frequency of coalescence, medium depth of veins, weak waviness of margin, dull to medium glossiness of upper side, pubescence on blade, medium presence of secondary leaflets

TERMINAL LEAFLET: medium ovate, acuminate tip, cordate base

LATERAL LEAFLET: medium size, medium ovate, acuminate tip, cordate base

INFLORESCENCE: high flowering profusion, large size

FLOWER BUD: strong persistence, medium intensity of anthocyanin colouration

COROLLA: red-violet, strong anthocyanin colouration on inner surface, medium to large size, strong prominence of star

PEDUNCLE: weak anthocyanin colouration

TUBER: round, white flesh with no secondary colour

TUBER EYES: intermediate depth, evenly distributed, no prominence of eyebrows

TUBER SKIN: light beige, white at base of eye, smooth texture

LIGHT SPROUT: medium size, spherical shape, low number of root tips, short lateral shoots

LIGHT SPROUT BASE: strong anthocyanin colouration, medium proportion of blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: medium in size in relation to the base, closed habit, medium anthocyanin colouration, sparse pubescence

**Origin and Breeding:** 'SP213' is the result of the cross of Allegany x E55-35 made in 1989 in Ithaca, New York, USA. An initial population of 45,000 seedling tubers were planted and evaluated in Alliston, Ontario in 1991. Clones were selected and planted as single hills in 1992 with subsequent selections planted as 5 hills in 1993 and then as 20 hills in 1994. Selection criteria included tuber quality, adaptation, yield, resistance and processing traits.

**Tests and Trials:** Trials were conducted in Alliston, Ontario in 2008. Plots consisted of 2 rows, with a row length of 6 meters, a plant spacing of 30 cm within the row and a row spacing of 1 meter. There were 30 plants per plot. There were two replicates.



Potato: 'SP213' (centre) with reference varieties 'Atlantic' (left) and 'Snowden' (right)

**Proposed denomination:** 'SP23'  
**Application number:** 08-6329  
**Application date:** 2008/05/06  
**Applicant:** SunRise Produce, Alliston, Ontario  
**Breeder:** Peter VanderZaag, SunRise Produce, Alliston, Ontario

**Varieties used for comparison:** 'Atlantic' and 'Snowden'

**Summary:** 'SP23' matures late while the reference varieties mature mid-season. The stem of 'SP23' has absent or very weak anthocyanin colouration while it is weak to medium in 'Atlantic'. 'SP23' has a medium degree of swelling of the nodes while it is low in the reference varieties. The leaf of 'SP23' is medium to dark green while it is light to medium green in 'Atlantic'. 'SP23' has medium sized lateral leaflets while they are large in 'Snowden'. The depth of the veins of the terminal and lateral leaflets of 'SP23' is shallow while they are moderate in 'Atlantic'. 'SP23' and 'Atlantic' have a red-violet corolla colour while it is white in 'Snowden'. The intensity of the anthocyanin colouration on the inner surface of the corolla of 'SP23' is weak while it is medium in 'Atlantic'. 'SP23' has a narrow cylindrical shaped light sprout while it is ovoid in the reference varieties. The anthocyanin colouration at the base of the light sprout of 'SP23' is strong while it is weak in 'Snowden'. 'SP23' has absent or low proportion of blue in the anthocyanin colouration at the base of the light sprout while it is medium in 'Atlantic'. The base of the light sprout of 'SP23' has medium pubescence while it is sparse in 'Snowden'. The light sprout tip of 'SP23' has strong anthocyanin colouration while it is weak in 'Atlantic' and absent to weak in 'Snowden'. 'SP23' has medium pubescence of the tip of the light sprout while it is dense in 'Atlantic' and absent or very sparse in 'Snowden'. 'SP23' has a medium number of root tips on the light sprout while it is few in 'Atlantic'.

**Description:**

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

STEM: absent to very weak anthocyanin colouration, thin to medium main stem, medium swelling at nodes

LEAVES: medium to dark green, intermediate silhouette, absent or very weak anthocyanin colouration on upper side of rachis and petiole, absent or very low frequency of coalescence, shallow depth of veins, weak to medium waviness of margin, dull to medium glossiness of upper side, pubescence on blade, weak to medium presence of secondary leaflets

TERMINAL LEAFLET: medium ovate, acuminate tip, cordate base

LATERAL LEAFLET: medium size, narrowly ovate, acuminate tip, cordate base

INFLORESCENCE: medium flowering profusion, medium size

FLOWER BUD: medium persistence, medium intensity of anthocyanin colouration

COROLLA: red-violet, weak anthocyanin colouration on inner surface, large size, no prominence of star

PEDUNCLE: absent to very weak anthocyanin colouration

TUBER: elliptical, white flesh with no secondary colour

TUBER EYES: shallow depth, evenly distributed, eyebrows not prominent

TUBER SKIN: light beige, white at base of eye, rough texture

LIGHT SPROUT: medium size, narrow cylindrical shape, medium number of root tips, short lateral shoots

LIGHT SPROUT BASE: strong anthocyanin colouration, no blue in anthocyanin colouration, medium pubescence

LIGHT SPROUT TIP: smaller in size than base, intermediate habit, strong anthocyanin colouration, medium pubescence

**Origin and Breeding:** 'SP23' is the result of the cross of F100-1 x Q155-3 made in 1989 in Ithaca, New York, USA. An initial population of 45,000 seedling tubers were planted and evaluated in Alliston, Ontario in 1991. Clones were selected and planted as single hills in 1992 with subsequent selections planted as 5 hills in 1993 and then as 20 hills in 1994. Selection criteria included tuber quality, adaptation, yield, resistance and processing traits.

**Tests and Trials:** Trials were conducted in Alliston, Ontario in 2008. Plots consisted of 2 rows, with a row length of 6 meters, a plant spacing of 30 cm within the row and a row spacing of 1 meter. There were 30 plants per plot. There were two replicates.



Potato: 'SP23' (centre) with reference varieties 'Atlantic' (left) and 'Snowden' (right)

**Proposed denomination:** 'SP241'  
**Application number:** 08-6328  
**Application date:** 2008/05/06  
**Applicant:** SunRise Produce, Alliston, Ontario  
**Breeder:** Peter VanderZaag, SunRise Produce, Alliston, Ontario

**Varieties used for comparison:** 'Atlantic' and 'Snowden'

**Summary:** 'SP241' has very weak to weak anthocyanin colouration on the stem while it is weak to medium for 'Atlantic'. The leaf of 'SP241' is dark green while it is light to medium green in 'Atlantic'. 'SP241' has medium sized lateral leaflets while they are large in 'Snowden'. The depth of the veins of the terminal and lateral leaflets of 'SP241' are moderate while they are deep in 'Snowden'. 'SP241' has a blue-violet corolla, while it is red-violet in 'Atlantic' and white in 'Snowden'. The corolla of 'SP241' is medium in size while it is large in 'Snowden'. 'SP241' has a smooth skin texture while it is rough in the reference varieties. The light sprout of 'SP241' is large while they are medium sized in the reference varieties. 'SP241' has a narrow cylindrical shaped light sprout while it is ovoid in the reference varieties. The base of the light sprout of 'SP241' has a very strong anthocyanin colouration with a high degree of blue while it is strong with medium degree of blue in 'Atlantic' and weak with absent or low degree of blue in 'Snowden'. 'SP241' has a strong anthocyanin colouration of the tip of the light sprout while it is weak in 'Atlantic' and absent or very weak in 'Snowden'. The light sprout tip of 'SP241' has medium pubescence while it is dense in 'Atlantic' and absent or very sparse in 'Snowden'. 'SP241' has medium number of root tips on the light sprout while it is absent to a very few number in 'Atlantic'.

**Description:**

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

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

LEAVES: dark green, closed to intermediate silhouette, absent or very weak anthocyanin colouration on upper side of rachis and of petiole, absent or very low frequency of coalescence, medium depth of veins, weak waviness of margin, dull glossiness of upper side, strong density of pubescence, medium to strong presence of secondary leaflets

TERMINAL LEAFLET: medium ovate, acuminate tip, cordate base

LATERAL LEAFLET: medium size, narrowly ovate, acuminate tip, cordate base

INFLORESCENCE: medium flowering profusion, medium size

FLOWER BUD: medium persistence, medium intensity of anthocyanin colouration

COROLLA: blue-violet, medium to strong anthocyanin colouration on inner surface, medium size, no prominence of star

PEDUNCLE: absent or very weak anthocyanin colouration

TUBER: round, white flesh with no secondary colour

TUBER EYES: shallow depth, evenly distributed, no prominence of eyebrows

TUBER SKIN: light beige, white at base of eye, smooth texture

LIGHT SPROUT: large size, narrow cylindrical shape, medium number of root tips, short lateral shoots

LIGHT SPROUT BASE: very strong anthocyanin colouration, high proportion of blue in anthocyanin colouration, medium pubescence

LIGHT SPROUT TIP: smaller in size than base, intermediate habit, strong anthocyanin colouration, medium pubescence

**Origin and Breeding:** 'SP241' is the result of the cross of Allegany x E55-35 made in 1989 in Ithaca, New York, USA. An initial population of 45,000 seedling tubers were planted and evaluated in Alliston, Ontario in 1991. Clones were selected and planted as single hills in 1992 with subsequent selections planted as 5 hills in 1993 and then as 20 hills in 1994. Selection criteria included tuber quality, adaptation, yield, resistance and processing traits.

**Tests and Trials:** Trials were conducted in Alliston, Ontario in 2008. Plots consisted of 2 rows, with a row length of 6 meters, a plant spacing of 30 cm within the row and a row spacing of 1 meter. There were 30 plants per plot. There were two replicates.



Potato: 'SP241' (centre) with reference varieties 'Atlantic' (left) and 'Snowden' (right)

**Proposed denomination:** 'Starburst'  
**Application number:** 08-6289  
**Application date:** 2008/04/10  
**Applicant:** Agriculture & Agri-Food Canada, Lethbridge, Alberta  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** Benoit Bizimungu, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'Atlantic' and 'Snowden'

**Summary:** 'Starburst' matures earlier than the reference varieties. The plants of 'Starburst' are taller than the reference varieties. 'Starburst' has a spreading growth habit while it is semi-upright in 'Atlantic' and 'Snowden'. The stem of 'Starburst' has weak anthocyanin colouration while it is absent or very weak in 'Snowden'. The corolla of 'Starburst' and 'Atlantic' is red-violet while it is white in 'Snowden'. The skin texture of 'Starburst' is smooth while it is netted in the reference varieties. 'Starburst' has a spherical light sprout shape while it is ovoid in 'Atlantic'. 'Starburst' has high proportion of blue in anthocyanin colouration at the light sprout base while it is absent or low in 'Atlantic'. 'Starburst' has sparse pubescence at the base of the light sprout while it is dense in 'Atlantic'. The anthocyanin colouration at the base of the light sprout of 'Starburst' is strong while it is medium in 'Atlantic' and absent or very weak in 'Snowden'. 'Starburst' has many root tips on the light sprout while there are medium number in 'Atlantic'.

**Description:**

**PLANT:** spreading growth habit, intermediate type foliage structure, early maturity

**STEM:** weak anthocyanin colouration, medium thickness of main stem, medium swelling at nodes



LEAVES: medium green, closed to intermediate silhouette, absent to weak anthocyanin colouration on upper side of rachis and on petiole, absent to very low frequency of coalescence, absent or very weak waviness of margin, strong presence of secondary leaflets

TERMINAL LEAFLET: medium ovate, acuminate tip, cordate base

LATERAL LEAFLET: medium size, medium ovate, acuminate tip, cordate base

INFLORESCENCE: medium to high flowering profusion, medium to large size

COROLLA: red-violet on inner surface, medium anthocyanin colouration on inner surface, large size, medium prominence of star

PEDUNCLE: weak anthocyanin colouration

TUBER: oval, white flesh with no secondary colour

TUBER EYES: shallow depth, evenly distributed, eyebrows not prominent

TUBER SKIN: light beige, white at base of eye, smooth texture

LIGHT SPROUT: medium size, spherical shape, many number of root tips, short lateral shoots

LIGHT SPROUT BASE: strong anthocyanin colouration, high proportion of blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: smaller in size than base, intermediate habit, strong anthocyanin colouration, dense pubescence

**Origin and Breeding:** ‘Starburst’ (experimental designation V0379-2) originated from the cross of ‘Conestoga’ and ‘ND860-2’ made in 1987 at Agriculture and Agri-Food Canada, Lethbridge Research Centre. The true potato seed was sown in the greenhouse in 1988 and resulting seedlings tubers were planted at the Vauxhall Research Station in 1989 for selection. The V0379-2 clone was selected in 1989, and progressed through 4-hill, 10-hill, and 50-hill generations stages of selection and evaluated at Vauxhall. This was followed by evaluation in the Western Canadian Regional Potato Trials in 1993-1997 and in 2002-2003. Commercial evaluation started in 2003 by the Western Potato Consortium-A.

**Tests and Trials:** Trials were conducted at the Vauxhall Research Substation, Agriculture and Agri-Food Canada, Lethbridge Research Centre, Alberta in 2008 and 2009. A randomized complete block design was used with four replicates per variety. Plots consisted of rows of 7.6 metres long. The plants within each row were planted 30cm apart, and the spacing between rows was 91cm. Measured characteristics were based on at least 50 measurements. Colour determinations were made using the RHS colour chart.

**Comparison table for ‘Starburst’**

	‘Starburst’	‘Atlantic’*	‘Snowden’*
<i>Plant: height (cm)</i>			
mean	64.7	61.3	59.5
standard deviation	2.9	3.7	4.2

\*reference varieties



Potato: 'Starburst' (V0379-2) (centre) with reference varieties 'Atlantic' (right) and 'Snowden' (left)



Potato: 'Starburst' (V0379-2) (centre) with reference varieties 'Atlantic' (left) and 'Snowden' (right)

**Proposed denomination:** 'Tarnick'  
**Application number:** 09-6667  
**Application date:** 2009/06/18  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** Agnes Murphy, Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
T. Richard Tarn, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'Atlantic' and 'Snowden'

**Summary:** *The plants of 'Tarnick' are shorter than those of 'Atlantic'. 'Tarnick' has high flowering profusion while it is low in 'Snowden'. The plant growth habit of 'Tarnick' is upright whereas it is semi-upright in 'Snowden'. 'Tarnick' has strong anthocyanin colouration at the base of the light sprout with an high proportion of blue while it is low 'Snowden'. The corolla of 'Tarnick' is white whereas it is blue-violet in 'Atlantic'. 'Tarnick' has very weak intensity of anthocyanin colouration on inner surface of corolla while it is medium on 'Atlantic'. 'Tarnick' has dense pubescence on the light sprout base while it is medium on the reference varieties. 'Tarnick' has a medium number of root tips on the light sprout while it is many on 'Snowden' and few on 'Atlantic'.*

**Description:**

PLANT: upright growth habit, leaf type foliage structure

STEM: weak to medium anthocyanin colouration, medium to thick main stem, absent or very low swelling at nodes

LEAVES: medium to dark green, intermediate silhouette, absent or very weak anthocyanin colouration on upper side of rachis, weak anthocyanin colouration of petiole, absent to very low frequency of coalescence, medium depth of veins, absent or very weak waviness of margin, dull to medium glossiness of upper side, medium density of pubescence, medium presence of secondary leaflets

TERMINAL LEAFLET: medium ovate, acuminate tip, truncate base

LATERAL LEAFLET: medium to large size, medium ovate, acuminate tip, truncate base

INFLORESCENCE: high flowering profusion, large size

FLOWER BUD: high persistence, absent or very weak intensity of anthocyanin colouration

COROLLA: white, large size, medium prominence of star

PEDUNCLE: absent or very weak anthocyanin colouration

TUBER: round, white flesh with no secondary colour

TUBER EYES: intermediate depth, evenly distributed, slight to medium prominence of eyebrows

TUBER SKIN: light beige, white at base of eye, smooth texture

LIGHT SPROUT: medium size, spherical shape, medium number of root tips, medium length lateral shoots

LIGHT SPROUT BASE: strong anthocyanin colouration, high proportion of blue in anthocyanin colouration, dense pubescence

LIGHT SPROUT TIP: smaller in size than base, closed habit, medium anthocyanin colouration, medium pubescence

**Origin and Breeding:** 'Tarnick' (experimental designation 11926-2 and F95031) originated by the hybridization of 'AC Novachip' and 'Connestoga', made in Fredericton, in 1992. Selection criteria were adaptation, tuber type and chip quality.

**Tests and Trials:** Trials for 'Tarnick' were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30 cm.

Comparison table for 'Tarnick'

	'Tarnick'	'Atlantic'*	'Snowden**
Plant height (cm)			
mean	26	32	28
standard deviation	3.14	3.99	3.63

\*reference varieties



Potato: 'Tarnick' (left) with reference varieties 'Atlantic' (center) and 'Snowden' (right)

**Proposed denomination:** 'Tenace'  
**Application number:** 09-6668  
**Application date:** 2009/06/18  
**Applicant:** Agriculture & Agri-Food Canada, Fredericton, New Brunswick  
**Agent in Canada:** Agriculture & Agri-Food Canada, Lacombe, Alberta  
**Breeder:** T. Richard Tam, Agriculture & Agri-Food Canada, Fredericton, New Brunswick

**Varieties used for comparison:** 'Frontier Russet' and 'Russet Burbank'

**Summary:** 'Tenace' has a semi-upright habit whereas it is upright in 'Frontier Russet' and spreading in 'Russet Burbank'. The plants of 'Tenace' are shorter in height than the reference varieties. 'Tenace' has weak anthocyanin colouration of the stem while it is medium in 'Russet Burbank'. The lateral leaflets of 'Tenace' are medium to large in size while those of 'Frontier Russet' are small to medium. 'Tenace' has medium flowering profusion while it is low in the reference varieties. The tuber shape of 'Tenace' is cylindrical whereas it is oblong in 'Frontier Russet'. The tuber flesh of 'Tenace' is cream whereas it is white in the reference varieties. 'Tenace' has many number of root tips on the light sprout while it is medium on 'Russet Burbank'. 'Tenace' has absent or very sparse pubescence of the base of the light sprout while it is medium in the reference varieties.

**Description:**

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

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

LEAVES: medium green, open silhouette, absent or very low anthocyanin colouration on upper side of rachis, weak anthocyanin colouration of petiole, absent to very low frequency of coalescence, medium to deep depth of veins, weak waviness of margin, medium glossiness of upper side, medium density of pubescence, medium to strong presence of secondary leaflets

TERMINAL LEAFLET: medium ovate, cuspidate tip, cordate base

LATERAL LEAFLET: medium to large size, elliptical, cuspidate tip, cordate base

INFLORESCENCE: medium flowering profusion, medium size

FLOWER BUD: medium to strong persistence, absent or very weak intensity of anthocyanin colouration

COROLLA: white, medium size, medium to strong prominence of star

PEDUNCLE: absent or very weak anthocyanin colouration

TUBER: cylindrical, cream flesh with no secondary colour

TUBER EYES: shallow, evenly distributed, slight prominence of eyebrows

TUBER SKIN: brown, white at base of eye, netted texture

LIGHT SPROUT: medium size, ovoid shape, many root tips, short lateral shoots

LIGHT SPROUT BASE: medium anthocyanin colouration, no blue in anthocyanin colouration, absent or very sparse pubescence

LIGHT SPROUT TIP: equal in size to base, closed to intermediate habit, absent or very weak anthocyanin colouration, dense pubescence

DISEASE RESISTANCE: resistant to golden nematode (*Globodera rostochiensis* Ro1)

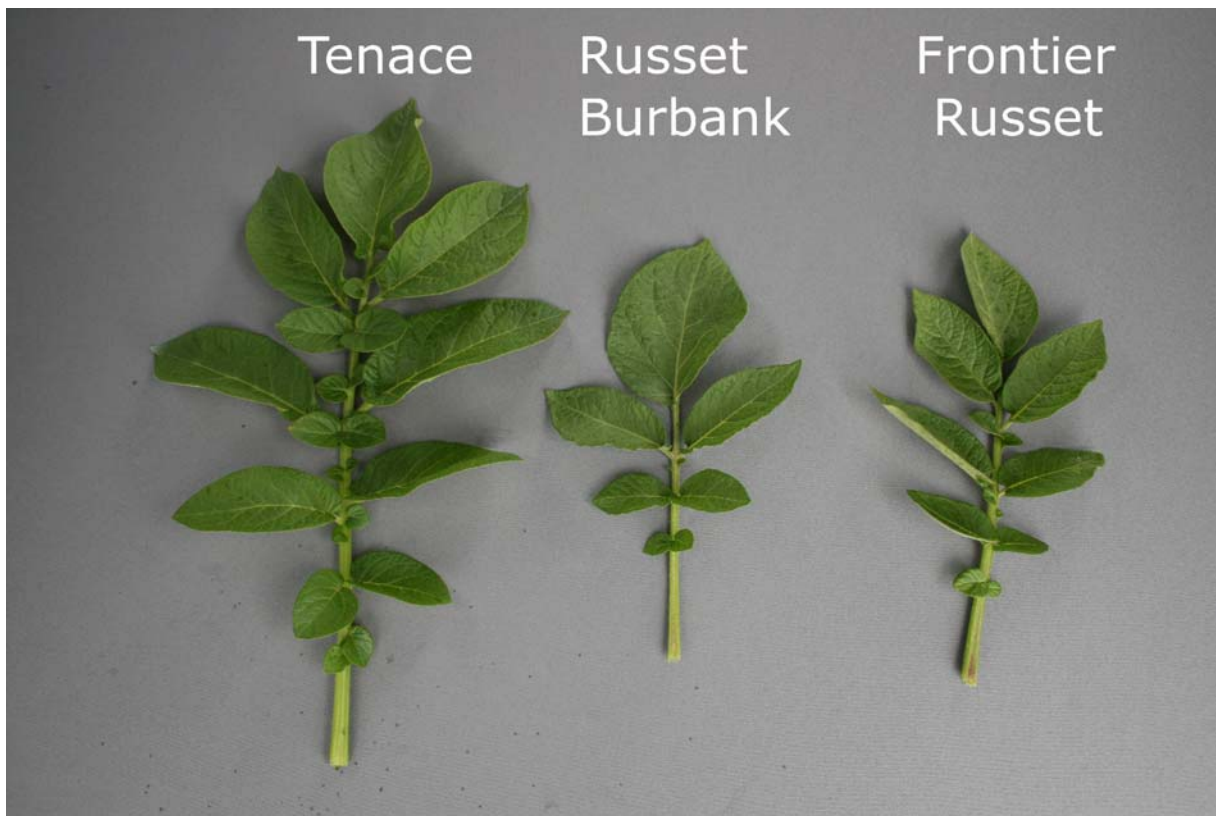
**Origin and Breeding:** 'Tenace' (experimental designation 12753-1, F99047 and AR2004-7) originated from a cross between Frontier Russet and F87070, made in 1996 in Fredericton, New Brunswick. Selection criteria were adaptation, tuber type and culinary quality.

**Tests and Trials:** Trials for 'Tenace' were conducted at Potato Research Centre, Fredericton, New-Brunswick, in 2009. There were two replicates of 30 plants with a plant spacing of 30 cm.

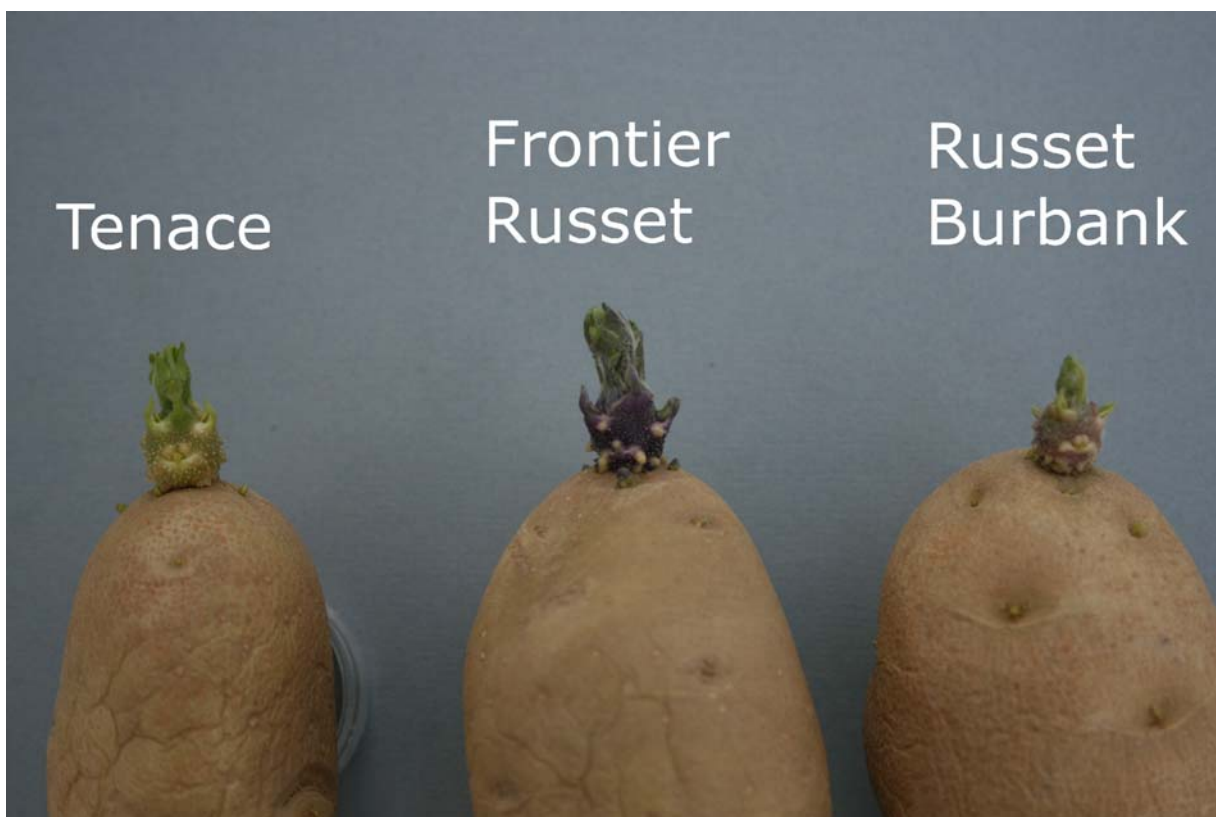
**Comparison table for 'Tenace'**

	'Tenace'	'Frontier Russet'*	'Russet Burbank'*
<i>Plant height (cm)</i>			
mean	25	41	57
standard deviation	3.29	2.72	3.49

\*reference varieties



Potato: 'Tenace' (left) with reference varieties 'Russet Burbank' (center) and 'Frontier Russet' (right)



Potato: 'Tenace' (left) with reference varieties 'Frontier Russet' (center) and 'Russet Burbank' (right)