Research Branch Agriculture et Agroalimentaire Canada

Direction générale de la recherche

Potato Gene Resources Newsletter Potato Research Centre

Number 12 December 2005

Plants That Changed the World: Potato

Dr. Jane Seabrook and Dr. Richard Tarn
Potato Research Centre
Fredericton, NB

Take a look at the humble potato. It's a brown, starchy underground stem that is really mostly water (80%). But this mighty potato can, with a milk product like cheese or yoghurt, sustain human life. The potato is the most nutritious of all the world's starchy food crops with more protein, vitamins and minerals than rice, wheat, sorghum or corn.

Potatoes came to us from South America in the 16th century courtesy of the Spanish conquistadors. In South America the potato was an ancient cultivated crop with many varied forms....red or blue skin, coloured flesh, and unusual shapes. And even today, potatoes served in restaurants are much more varied than we see elsewhere.

Archaeological evidence has shown potatoes, corn and other food plants being cultivated in the high Andes of South America at least 8,000 years ago. The potato, along with tomato and eggplant, is a member of the nightshade family and has over 2,000 relatives world-wide, of which less than 200 produce tubers.

The term "potato" is probably derived from "batata" – a Caribbean Arawak Indian term for sweet potato. This is not surprising as early explorers and herbalists of the $16^{\rm th}$ century often gave several different plants the same name.

The early potatoes from South America probably arrived in Spain around 1570 and were small, knobbly tubers and were only a curiosity at first. Most people were afraid to eat them. Gradually, the potato gained popularity.

A King's courtier in France posted guards around potato plots during the day and left the plots unguarded at night. Peasants figuring that anything worth guarding might be useful came and stole tubers during the night, and the potato became a common source of food

Potato Gene Resources Newsletter

The Potato Gene Resources Newsletter is an annual publication of the Potato Gene Resources Repository, Potato Research Centre, Agriculture and Agri-Food Canada. The Newsletter provides information on potato germplasm in the Repository and on issues related to the genetic diversity in the potato. The opinions expressed by authors may not necessarily represent the views of Agriculture and Agri-Food Canada.

Le Bulletin est également disponible en français.

To receive the newsletter, please contact:

Jane Percy, Editor, Potato Gene Resources Newsletter

Potato Research Centre

Agriculture and Agri-Food Canada

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So popular did the potato become, that large groups of poor people depended almost solely on the potato for food. This was the origin of the Irish potato famine in which over a million people died of hunger when the Late Blight fungus caused the potato crop to fail several years in a row. The mass migration of Irish people looking for a better way of life settled in much of North America.

Early European settlers to North America brought potatoes with them that had adapted over time to long summer days and climate of Europe, and after three hundred years of adaptation looked little like the indigenous South American potatoes. Later some potato varieties were brought to North America from Central and



South America. One of the early introductions was 'Garnet Chili', a long, red-skinned curiosity.

Potatoes grown in Canada by early settlers were not particularly well adapted to our cold spring soils and short growing season. Slowly, farmers selected strains which suited Canadian conditions. Breeding of potatoes by Canadian scientists started in 1934 at the Fredericton Dominion Experimental Farm, now the Potato Research Centre of Agriculture and Agri-Food Canada.

Currently, the Potato Research Centre is an internationally-known centre for research on potato breeding, molecular genetics, physiology, entomology and soils research. The Potato Gene Resources Repository housed at the Potato Research Centre in Fredericton maintains heirloom and Canadian-bred potato cultivars. They frequently have a display at the Fredericton Botanic Garden's Seedy Saturday. Look for an article on the Potato Gene Repository in an upcoming issue of Canada's seed savers network publication, Seeds of Diversity Canada magazine. This is part of a long-standing collaboration between research scientists and volunteers dedicated to saving Canada's heirloom seeds and plants.

Because of their high nutritional value, potatoes continue to be attractive food in developing countries. The growth in potato production world-wide is in warm climates. Much of the effort of the International Potato Centre in Lima, Peru, one of a number of crop development centres around the world, is devoted to adapting the potato as a "winter window" crop for hot climates. Several North American potato processing companies have recently opened seed potato growing facilities and french fry plants in China signalling interest in the potato to the world's most populous nation.

So the next time you tuck into a delicious shepherd's pie, perogies, poutine, or a plate of fish and chips, remember that the humble potato came to us from the high mountains of the Andes via the Spanish galleons to Europe and then with our European ancestors to Canada.

This article was originally published in the newsletter of the Fredericton Botanic Garden Association, Fredericton, NB, Canada, Vol. 18, No. 1, Winter 2006.

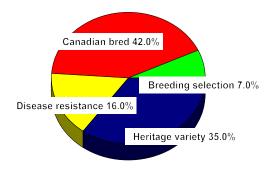
Annual Report 2005

Potato Gene Resources Repository Jane Percy

The Collection

1. Holdings

 The Potato Gene Resources Repository contains 124 clones. Of this total, 112 are maintained *in vitro* and 12 as tubers. A full listing of accessions may be found on the attached request form. The following chart shows the percentage of clones in each Repository category.



2. Accessions

- Eight clones were added to the Repository in 2006.
- AC Sunbury This variety was bred by the Potato Research Centre, Agriculture and Agri-Food Canada in Fredericton, New Brunswick. It originated from an 1978 cross of Raritan x Agitato. AC Sunbury is an early maturing, yellow fleshed variety, with high yield, and high dry matter content. The chief market is early fresh. A dry mealy texture makes AC Sunbury an excellent baking potato. In addition, it is resistant to PVY and potato cyst nematode (G. rostochiensis Ro1).
- Black Mignion/The Cup a heritage variety, submitted by George Brinson, Carmanville, NL. This variety has been grown in the area, by members of the Brinson family, since 1870. It is described in the book 'The Visitation of God?' The Potato and the great Irish Famine¹, by Austin Bourke. The reference comes from the Annals of Horticulture 1847 and states that "the common farmers prefer a new kind of potato (sometimes called Cups and sometimes Minions) to the Apple". Black Mignion/The Cup is described as a 'good flavoured Irish variety', 'with upright dark green foliage and large uneven shaped tubers of a dull reddish colour'¹.
- Earlaine Earlaine, a heritage variety, is described in Clark, C.F. and F.J. Stevenson "The Earlaine Potato, A New Early Variety", U.S.D.A. Circ. 493, 6p. 1938

 Developed and released by the U.S.D.A. from a cross of Irish Cobbler x USDA 43055, Earlaine, was described as a valuable addition to the small group of first-early varieties. The tubers are round, regular in outline, with medium shallow eyes, slightly flaked ivory-yellow skin and white flesh. Other attributes noted were a very high resistance to mild mosiac. The keeping quality was described as excellent with fertile and abundant pollen.²



- LRC 373-5 described in Lynch, D.R., Q. Chen, L.M. Kawchuk and D. Drieger 2004. Verticillium Wilt Resistant Germplasm-Release of Clone LRC 18-21 and Derivatives, Amer. J. of Potato Res. 81:295 -297 is a cross of a resistant diploid progeny of an Atlantic haploid (A373) *x Solanum chacoense* (LRC 18-21), a clone with single gene (V_c) resistance to Verticillium wilt.
- LRC4373-5b a breeding line, described in Lynch, D.R., Q. Chen, L.M. Kawchuk, and D. Drieger 2004. Verticillium Wilt Resistant Germplasm-Release of Clone LRC 18-21 and Derivatives. Amer. J. of Potato Res. 81:295 -297 is a tetraploid *Solanum tuberosum/Solanum chacoense* hybrid, derived from a cross with LRC 18-21, a *Solanum chacoense* clone with single gene (V_c) resistance to Verticillium wilt.
- Russet Burbank Bred and selected by Luther Burbank in Santa Rosa, California, around 1880⁵, Russet Burbank is also reported to have been selected by Lou Sweet from a sport of Burbank⁶. The variety is late maturing, with large, long russeted tubers and chiefly used in processing for french fries and for the fresh market
- Up To Date Up To Date, a heritage variety, was credited to the prolific British potato breeder Archibald Findlay. Originating from a cross of Patterson's Victoria and Blue Don about 1894, Up To Date, achieved much success, due to favorable yields at the time. Considered late maincrop, it became the most popular variety of the early 20th century. Seed was exported to New Zealand, and also grown in Cyprus for the British table market. The tubers are flattened oval, with flaked, cream coloured skin and flesh, and a strong flavour. Cooking quality is described as good. It is susceptible to virus diseases and wart. Salaman lists 186 synonyms for Up To Date, from names such as Alderman to Yeoman, and documents the controversy over its origins.
- Urgenta A 1953 cross of Katahdin x Furore, selected by J.C. Drost in the Netherlands is a short oval tuber, with light red skin, shallow to medium deep eyes, light yellow flesh, and is primarily utilized as a table variety. Urgenta is resistant to multiple pathotypes of potato wart⁵.

References

- ¹Bourke, Austin. <u>The Visitation of God?' The Potato and the great Irish Famine</u>. The Lilliput Press, Dublin, Ireland. 1993.
- ² 1959 Potato Handbook, Potato Varieties Issue. Published by The Potato Association of America, New Brunswick, New Jersey Volume IV, 64p., 1959.
- ³ Wilson, Alan. <u>The Story of the Potato Through</u> <u>Illustrated Varieties</u>. Balding & Mansell Ltd., Norfolk, UK, 1993.

- ⁴ Salaman, Redcliffe Natham. <u>Potato Varieties</u>. Cambridge University Press 1926.
- ⁵ Hamester, W. and U. Hils. <u>World Catalogue of Potato Varieties</u>. Bucheditions Agrimedia GmbH, Bergen, Germany, 1998.
- ⁶ Potato Association of America Variety List Russet Burbank.

http://www.umaine.edu/PAA/Varieties/russburbank.htm

- No accessions were lost from the inventory in 2005.
- As part of the MII between Plant Gene Resources of Canada and Seeds of Diversity Canada, Richard Tarn and Jane Percy investigated many Canadian and international resources for heritage potato varieties.
 Based upon the criteria of the Repository and considering the accessions already represented in the Repository, 166 heritage varieties were prioritized.

From this group, 30 heritage varieties will be selected to be virus-freed for future inclusion in the Repository. The first group have now been sent for virus freeing.

3. Evaluations

- Twelve heritage varieties were grown in an evaluation trial at the Potato Research Centre. The evaluation plot consisted of two replications of fifteen hills of the following varieties: Banana, Columbia Russet, Corne de Mouton, Crotte d'Ours, La Veine Rose, Marc Warshaw's Quebec, McIntyre Blue, Northern White, Siberian, Straight Banana. Superior and Chieftain were grown as checks. The varieties were evaluated for agronomic characteristics when harvested and evaluated for boil and bake cooking quality. Appearance, texture, flavor, sloughing and discoloration were scored.
- Twenty-four PGR clones were re-tested for resistance to PVX and PVY.
- A number of PGR clients send yearly reports of yield, cooking quality and disease reactions in their particular regions of North America.

4. Management

 Passport data for all current PGR accessions has been added to the Genetic Resources Information Network -Canadian Version (GRIN - CA). Work continues on the addition of photos of the accessions as well as descriptors and evaluation data. GRIN - CA may be accessed through the Plant Gene Resources of Canada web site http://pgrc3.agr.ca/.



- Disease testing of new in vitro accessions and clones which have been maintained *in vitro* for five years was completed. Twenty-two clones were grown in the greenhouse and tested twice in 2005. All clones were negative for PVA, PLRV, Pot LV, PVS, PVX and PVY. Results for PSTV and BRR are pending. Extra minitubers from the greenhouse growout will be offered to PGR clients in the spring of 2006.
- In vitro clones were screened for bacterial and fungal contamination, using Potato Dextrose Broth and Richardson's Broth, twice during 2005. All clones in the Repository were negative for these contaminants.
- Microtubers for 107 of the *in vitro* clones in the Repository were harvested, placed in sterile petri dishes, and sent to Plant Gene Resources of Canada at the Saskatoon Research Centre of AAFC. The microtubers will be stored at 4°C as backup to the Repository in Fredericton. Microtubers remain dormant for several months, making them an ideal system for storing germplasm.
- Several potato clones, which have been in long-term storage at 12°C since September 2003, were transferred to fresh media at 19°C and grew well. Following the success of this 2 year long-term storage trial, all PGR clones will be stored at 12°C. Fifty-seven clones have been placed in 12°C long-term to date.

5. Requests to the Repository

• Fifty-four requests for 654 clones were received in 2005. Of this number, 183 clones were distributed *in vitro*, 301 clones were distributed as field grown tubers, 63 clones were distributed as greenhouse grown minitubers, and 107 clones were distributed as microtubers. The intended use of potato clones requested from Potato Gene Resources in 2005 are tabulated below. Certification was added as a category for "Purpose of Request" in 2005.

Purpose of Request - 2006

Purpose of Request	Request	Number of Clones	In Vitro	Tubers	Mini- tubers	Micro- tubers
Breeding	3	9	5	4	-	-
Research	13	186	122	51	13	-
Demonstration	7	124	28	93	3	-
Evaluation	22	133	8	89	36	-
Preservation	8	201	19	64	11	107
Certification	1	1	1	-	-	-
Total	54	654	183	301	63	107

- The most requested clones in 2005 were Congo (23 requests), Corne de Mouton (15), Garnet Chili (14), Pink Fir Apple (14), Rose Gold (13), Cain's Irish Rocks (12), and Straight Banana (12).
- The destination of requests by country is shown in the following table.

Number of Requests by Country of Destination

Destination	No. of Requests
Canada	49
United States	2
The Netherlands	1
Russian Federation	1
China	1
Total	54



• The destination of Canadian requests by province is shown in the following table

Number of Requests by Canadian Province of Destination

Destination - Canada	No. of Canadian Requests
Newfoundland and Labrador	1
Prince Edward Island	1
Nova Scotia	3
New Brunswick	17
Quebec	10
Ontario	8
Manitoba	1
Saskatchewan	3
Alberta	3
British Columbia	2
Total	49





Five Year Compilation of Clones Distributed from the Potato Gene Resources Repository 2001-2005

Year	Total Requests	Requests for Breeding, Research, or Certification	Requests for Evaluation, Preservation, or Demonstration	Total Clones	Mini-tubers/ Tubers	Micro- tubers
2001	22	10	12	144	76	0
2002	32	13	19	218	148	0
2003	29	12	17	232	171	0
2004	39	18	21	496	405	0
2005	54	18	36	654	364	107
5 year total	176	71	105	1744	1164	107



Repository Items of Interest

Communication

- Requests for information about the Repository, the availability of clones, clone descriptions and pedigrees, and techniques for handling *in vitro* material were received throughout the year.
- The annual Potato Gene Resources newsletter has a distribution of 270.
- Newsletter #11 was listed on the weekly checklist of the Depository Services Program, Communications Canada, August, 19, 2005. It may be viewed at http://publications.gc.ca/ in Weekly Checklist 05-33 (August 19, 2005) Departmental Publications -Agriculture and Agri-Food Canada-Research Branch.
- The newsletter may now be accessed through a link on the Potato Research Centre website at http://www.agr.gc.ca/science/fredericton/index.htm.
- A presentation was given at the Northeast Potato Forum in 2005: Li, X.Q., Haroon, M., Seabrook, J., Tarn, R., Murphy, A., Coleman, S., De Boer, S.H., Ward, L., Percy, J., Douglass, K., Burns, V., Li, S.Q. and Stevens, B. (2005) Cluster Analysis of Potato Heritage Varieties Based on DNA Fingerprints. Northeast Potato Technology Forum, March 15-16, 2005, Fredericton, New Brunswick, Proceedings pp16-17.
- Jane Seabrook and Jane Percy co-authored an article entitled <u>Canada's National Potato Gene Repository</u> for submission to the Seeds of Diversity Canada magazine.
- An article originally written for the Potato Gene Resources newsletter and co-authored by research scientists Henry De Jong and Agnes Murphy, "La pomme de terre Congo: Variété ancienne à chair bleue et aux noms et usages multiples", was reprinted in the Seeds of Diversity Canada magazine No. 18/3, Autumn 2005, a special issue dedicated to vegetables.
- The Farm Focus magazine, November 15, 2005 reported on Open Farm Day, held across Atlantic Canada on September 25, 2005, see Display item # 5.
 The article featured a photo taken on the day, of the Potato Gene Resources display, at Good Spring Farm, Keswick Ridge, NB.
- Richard Tarn wrote an article entitled "Is it Congo or British Columbia Blue?" for <u>Top Crop Manager/</u> <u>Potatoes in Canada 2005</u> about the DNA fingerprinting of the blue fleshed clones in the Repository.
- A computer disk of photos of the clones and activities of the Repository was prepared for the use of Seeds of Diversity Canada. SoDC are in the process of preparing a new slide show for their organization and had requested photos of heritage potatoes, *in vitro* plants, and displays.
- Potato Gene Resources completed a questionnaire on potato collections, distributed by the Centre for Genetic Resources, The Netherlands and commissioned by the Global Crop Diversity Trust.
- Margie Luffman, Curator, Canadian Clonal Gene Bank, Harrow Ontario, included information about the Repository in "SoDC and AAFC: A Beautiful Friendship", an article with photos which was published in the SoDC magazine, No 18, 1/2 Spring 2005.

Displays

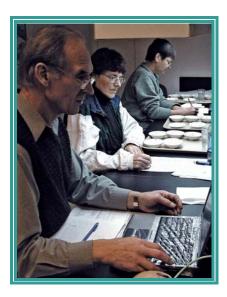
- Potato Gene Resources participated in the Atlantic
 Canadian Organic Regional Network (ACORN) 5th
 Annual Winter Conference, Trade-Show, and
 Post-Conference Tour in Fredericton February 24-27,
 2005 at the Fredericton Inn., Fredericton, NB. PGR's
 display was of interest to many participants who asked to
 receive the newsletter and requested germplasm.
 ACORN's Conference consisted of numerous
 presentations under three streams (concurrent sessions);
 Livestock, Retailing/Marketing, and Horticulture. Over
 35 guest speakers including producers, agrologists,
 researchers and other professionals from Atlantic
 Canada, Ontario, Quebec, and the US, participated in the
 event. ACORN's website is www.acornorganic.org/.
- The Fredericton Botanic Garden Association sponsored a Seedy Saturday in conjunction with Seeds of Diversity Canada in February 2005. Dr. Jane Seabrook coordinated a display of material from Potato Gene Resources.
- A display was presented during the Potato Breeding 2005 Advanced Release Open House, held February 18th at the Delta Hotel, Fredericton, NB, to promote new selections to industry. *In vitro* potato plants as well as minitubers and field tubers were displayed. Potato Gene Resources Repository newsletters with request forms and a handout describing the individual clones were also available.
- Thirteen PGR clones were planted as twenty hills in the demonstration plot at the Benton Ridge Potato Breeding Substation to provide tubers for displays.
- Potato Gene Resources participated, with other groups, in an "on farm" display held as part of New Brunswick Open Farm Day, on Sunday, September 25. Local organic producers, Karen and Brock Davidge of Good Spring Farm, Keswick Ridge, NB, hosted the day. A display of heritage potato tubers, in vitro plants and copies of the PGR newsletter and accession lists were presented. The event was organized by the Agriculture Producers Association of New Brunswick/Association des producteurs agricloes du Nouveau-Brunswick (APANB), http://www.nbfarm.com/main.htm, in conjunction with Canadian Agriculture and Food Celebration month in October.

Visitors

- Dr. Benoit Bizimungu, Research Scientist, Lethbridge Research Centre, visited the Repository on February 15th, during the 2005 Breeding Collaborators' Meeting, held at the Potato Research Centre
- Bailey Gardner, a Grade 9 student at Fredericton High School, visited the Repository during "Take Our Kids to Work" on November 2.



 Dr. Loretta Mikitzel, Potato Physiologist, NBDAFA, Potato Development Centre, Wicklow, NB and Karen Davidge, Organic Farmer, Good Spring Farm, Keswick Ridge, NB, visited the Repository on December 7, and participated in a cooking quality trial of heritage potato varieties.



Travel

 Richard Tarn attended the annual technical meeting of the USDA potato germplasm collection project in Corvallis, Oregon in June.

The Repository and the Seed Potato System

Richard Tarn
Curator
Potato Gene Resources Repository
Agriculture and Agri-Food Canada
Potato Research Centre

• The Potato Gene Resources Repository provides *in vitro* plantlets and greenhouse or field tubers for breeding, research and heritage preservation. While extensively tested for freedom from disease, the plantlets and tubers distributed by the Potato Gene Resources Repository are produced outside the Canadian Seed Certification System and are not eligible for Certification.

The Canadian Seed Potato Certification System operates under the Seed Act and its Regulations. Certification begins with tested plantlets established *in vitro* in a facility accredited for this task by the Canadian Food Inspection Agency. The plantlets are used to produce greenhouse tubers which then go to the field in a limited generation system, at each step meeting strict standards specified in the Regulations.

The Potato Gene Resources Repository is not accredited for seed production by the CFIA.

Potato Research Centre Website

http://www.agr.gc.ca/science/fredericton/index.htm offers an overview of the mandate, resources and achievements of the Centre. The research studies being conducted at the Centre as well as the staff associated with those studies are highlighted. Links to the Potato Research Network and to other agriculture and potato related websites are also available.

Plant Gene Resources of Canada

Canada's Plant Germplasm System is a network of Centres and people dedicated to preserving the genetic diversity of crop plants, their wild relatives and plants present are unique in the Canadian biodiversity. The system plays a significant part of Agriculture and Agri-Food Canada's commitment to the Canadian Biodiversity Strategy in response to the Convention on Biological Diversity.

The Plant Gene Resources of Canada (PGRC) website located at http://pgrc3.agr.ca/index_e.htm includes information on PCRC and the multi-nodal system of germplasm conservation in Canada as well as opportunities to search for germplasm on the Genetic Resources Information Network-Canadian version (GRIN-CA).

Dr. Ken Richards, Research Manager, Plant Gene Resources of Canada, may be contacted at richardsk@agr.gc.ca.

Personnel of the Potato Gene Resources Repository Potato Research Centre

Richard Tarn - Potato Breeder
Agnes Murphy - Plant Pathologist
Trudy Dalton - Potato Breeding Technician
Jane Percy - Potato Gene Resources Technician
Donna Wilson - Plant Pathology Technician
Andrew Gardner - Supervisor
Steven Allaby - Greenhouse Person
Danny Burnett - Greenhouse Person
Sylvia Holder - Greenhouse Person



POTATO GENE RESOURCES REPOSITORY - AVAILABLE CLONES, DECEMBER 2005

Clones are available as in vitro plants or as tubers (*), as indicated.

Two test tubes or two tubers (as available) of each clone will be shipped at the cost of client.

ABNAKI* F 58050 AC BELMONT F 66041 AC BLUE PRIDE F 79055 AC BRADOR F 79070 AC CHALEUR F 87084 AC DOMINO FINGERLING AC NOVACHIP FORTYFOLD AC RED ISLAND **FUNDY** AC SUNBURY* **GARNET CHILI** ACADIA RUSSET **GRAND FALLS** ANGELINA MAHONEY'S BLUE GREEN MOUNTAIN*

ANSON HAIDA AVON HOUMA

BANANA HINDENBURG*
BATOCHE HUNTER
BELLEISLE HURON
BLACK MIGNION/THE CLIP JEMSEG

BLACK MIGNION/THE CUP JEMSEG
BLUE MAC JOGEVA YELLOW ESTONIAN

BLUE MAC BLUE SHETLAND

BRIGUS KESWICK BRITISH COLUMBIA BLUE KIFLI

CAIN'S IRISH ROCKS LA VEINE ROSE/LA BELLE ROSE

K113-1

CALICO LENAPE
CANDY CANE LIBERTAS*
CANSO LRC 373-5
CANUS LRC 4373-5B
CARIBE LUMPERS

CARIBOO MacINTOSH BLACK CARLTON MANOTA*

CHINOOK MARC WARSHAW'S QUEBEC CONESTOGA MCINTYRE BLUE CONGO MIRTON PEARL

CORNE DE MOUTON MRS. MOEHRLE'S YELLOW

CROTTE D'OURS FLESHED
CUPIDS MOURASKA

DONNA MYATT'S ASHLEAF
DORITA* NIPIGON

EARLAINE* NISKA

ERAMOSA NRBK 01 to NRBK11

NORTHERN WHITE NOVA SCOTIA BLUE OAC ROYAL GOLD OAC RUBY GOLD OAC TEMAGAMI PINK FIR APPLE PINK PEARL PURPLE CHIEF RAMBLING ROSE

RARITAN RED GOLD

RICHTER'S JUBEL

RIDEAU

RIVER JOHN BLUE ROSE GOLD ROYAL KIDNEY

RUBY PULSIVER'S BLUENOSER

RUSSET BURBANK*

SABLE

SAGINAW GOLD SHARON'S BLUE

SHEPODY SIBERIAN SIMCOE SKERRY BLUE

SLOVENIAN CRESCENT STRAIGHT BANANA

TOBIQUE TRENT UP-TO-DATE* URGENTA*

USDA41956* USDA X96-56

WHITE RURAL NEW YORKER*

YAM YORK

YUKON GOLD





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Research Branch Direction générale de la recherche

POTATO RESEARCH CENTRE

POTATO GENE RESOURCES REPOSITORY REQUEST FORM

Name	Date	
Organization		
Mailing address		
	Postal Code	
Shipping address		
	Postal Code	Country
Telephone		
Fax		
Personal information gat	hered on this form is used in or	der to respond to your request for tubers or plants. If you have any questions or the Percy, Potato Gene Resources (506) 452-3160.
	Please refer to available cl	
2. 3.		
''	onal clones on a separate sl	
		st 5 weeks)
		tended use of the requested clones (research, breeding, evaluation, or
Clone description	ns required?	
	ached if Phytosanitary Ce Courier account num	ertificate required? Aber or alternate shipping arrangements

Please send this form to:

Potato Gene Resources Repository

Attention: Jane Percy

Agriculture and Agri-Food Canada

Potato Research Centre, P.O. Box 20280

Fredericton, New Brunswick Canada E3B 4Z7

E-Mail: peryj@agr.gc.ca
Telephone: (506) 452-3260
Facsimile: (506) 452-3316





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Greenhouse Grown Minitubers Available

March 2006

Limited quantities of the following potato varieties are available for distribution as virus-free, greenhouse grown minitubers, harvested December 2005

Please contact Potato Gene Resources, at the address below, to request the varieties, which are available in 2 to 3 tuber lots on a "first come, first served" basis.

1. Donna	5. Mouraska
2. Fingerling	6. Red Gold
3. Fortyfold	7. Simcoe
4. Houma	

Potato Gene Resources Potato Research Centre Agriculture and Agri-Food Canada P. O. Box 20280 Fredericton, NB E3B 4Z7

Attn: Jane Percy

Tel: (506) 452-3160 Fax: (506) 425-3316 Email: percyj@agr.gc.ca





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AGRICULTURE AND AGRI-FOOD CANADA POTATO GENE RESOURCES REPOSITORY

REQUEST TO RECEIVE AN ELECTRONIC VERSION OF THE ANNUAL NEWSLETTER

We are now able to distribute the annual Potato Gene Resources Repository Newsletter in electronic format. If you wish to receive future Newsletters by e-mail, in pdf (portable document format), please send your e-mail address to:

Jane Percy
Potato Gene Resources Repository
Agriculture and Agri-Food Canada
Potato Research Centre
P.O. Box 20280
Fredericton, N.B.
Canada E3B 4Z7
Tel. (506) 452-3160
Fax (506) 452-3316
E-mail percyj@agr.gc.ca

Please note that we will continue to send the printed Newsletter to those who do not ask to receive it electronically. We recognize that maintaining contact with you

