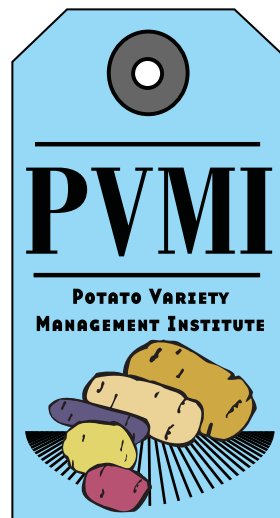


PVMI — Working to ensure the future of the Tri-State Breeding Program

In 2005, the potato commissions in WA, OR, and ID launched the Potato Variety Management Institute (PVMI) to market and promote Tri-State potato varieties. It was developed as a non-profit, grower-controlled organization to provide the infrastructure so that resources by way of license fees and royalties for the new varieties could be put back into the breeding program. PVMI also serves to increase communication and interaction with growers, processors and end users.

PVMI's main mission is to promote new varieties of potatoes in Idaho, Oregon, and Washington and further afield. As a not for profit organization it seeks to be transparent and open in all its policies and to insure the funds generated are returned to the Tri-State potato breeding program. PVMI is helping to maximize the potential success of new varieties by providing information regarding variety features and management to growers, and feedback to researchers.

For a single annual license fee, seed growers can grow and/or trial any of the PVMI varieties in a single year.



☰ Tri-State Potato Breeding Program

2009

▶ 25 Years of Breeding Potatoes for the Pacific Northwest



United States Department Of Agriculture
Agricultural Research Service

University of Idaho

Oregon State
UNIVERSITY OSU

WASHINGTON STATE
UNIVERSITY
World Class. Face to Face.

PVMI, 60380 Chickasaw Way, Bend, Oregon 97702

Phone: 541-318 1485, Fax: 541-318-7561

E-mail: jeannedebons@msn.com

University of Idaho

Oregon State University

Washington State University

USDA Agricultural Research Service

Potato Commissions of Idaho, Oregon and Washington State

US Department of Agriculture—Agricultural Research Service

- Aberdeen, ID—Rich Novy, Jonathan Whitworth
- Prosser, WA—Chuck Brown, Roy Navarre

University of Idaho

- Aberdeen, ID— Jeff Stark, Peggy Bain
- Kimberly, ID— Nora Olsen, Tina Brandt
- Parma, ID—Mike Thornton
- Moscow, ID—Lorie Ewing
- Teton, ID— Jim Whitmore

Oregon State University

- Corvallis, OR — Isabel Vales, Solomon Yilma
- Hermiston, OR — Dan Hane, Phil Hamm, Silvia Rondon, Aymeric Goyer
- Powell Butte, OR — Steve James
- Klamath Falls, OR — Brian Charlton, Darrin Culp
- Ontario, OR—Clint Shock, Erik Feibert

Washington State University

- Pullman, WA—Rick Knowles, Mark Pavek, Zach Holden, Nora Fuller

Idaho Potato Commission

Oregon Potato Commission

Washington State Potato Commission

PVMI—Potato Variety Management Institute

Program Impact

The potato variety production profile in the Pacific Northwest is changing rapidly, largely due to the efforts of the Tri-State Variety Development Program. Old varieties are being replaced by new varieties from the Tri-State Program.

In 2008, Northwest potato acreages planted with Tri-State varieties were:

Idaho – 21%
Oregon – 29%
Washington – 42%



An outstanding example of cooperative federal, state, and industry research

More Information on the Latest Varieties

Clearwater Russet



AO95154-1

A medium-late maturing variety with oblong tubers that exhibit excellent fry color out of storage, suitable for both processing and fresh market usage. It has high specific gravity, resistance to sugar ends as well as most internal and external tuber defects. It is notable for having higher protein content than standard potato varieties (38% greater concentration than Russet Burbank). It also has moderate resistance to *Verticillium*.

Owyhee Russet

A medium to late maturing variety with uniform long, medium russeted tubers of high specific gravity, excellent fry color from storage and high counts of US No.1. It is resistant to common scab and has moderate resistance to *Verticillium* wilt. It's main weaknesses are its moderate susceptibility to PVY, net necrosis and vascular discoloration.

AO96160-3



Yukon Gem

A mid-season variety with light-yellow flesh and higher yield potential than Yukon Gold (its paternal parent). Notable for its PVY and tuber late blight resistances, it has moderately low specific gravity and good resistance to tuber defects. It can be used for chipping. It is more resistant to common scab, early blight tuber lesions, PLRV net necrosis, and similar susceptibility to soft rot as Yukon Gold.



NDA5507-3Y

History

In 1984, the U.S. Department of Agriculture (USDA) recognized the national importance of the Pacific Northwest in the production and processing of potatoes and supported the establishment of a potato research breeding program.



The program was first located in Idaho to serve the potato industry in Idaho, Oregon and Washington. The objective of the program was to develop new potato varieties to replace or upgrade the dominant processing types, Russet Burbank and Shepody; the two dominant fresh market varieties Russet Burbank and Russet Norkotah; and the two major chip varieties, Gemchip and Norchip.

This became the start of the present Tri-State Breeding Program that includes the cooperative efforts of the USDA/ARS of Idaho and Washington, Oregon State University, University of Idaho and Washington State University as well as the potato commissions of the three states. Research scientists work together with Experiment Station personnel in a



coordinated program that has resulted in more than thirty new potato varieties being released since the programs inception.



List of Releases Since Inception of Tri-State

Russets—Dual Purpose

- Frontier Russet 1990
- ***Russet Legend 1998***
- Bannock Russet 1999
- ***Gem Russet 2000***
- ***Wallowa Russet 2002***
- ***Summit Russet 2003***
- Western Russet 2004 **
- ***Blazer Russet 2005***
- ***GemStar Russet 2004***
- ***Premier Russet 2006***
- ***Classic Russet 2008***
- ***Clearwater Russet 2008***
- ***Owyhee Russet 2009***

Russets—Processing

- Ranger Russet 1991
- Umatilla Russet 1998 *
- ***Blazer Russet 2005***
- ***Highland Russet 2006***
- ***Alpine Russet 2008***

Russets—Fresh Pack

- Century Russet 1995
- ***Klamath Russet 2000***
- A84180-8 2008 **

Long White— Dehy/Process

- ***Alturas 2002***
- ***Defender 2004***

Red Skin—Fresh Pack

- ***IdaRose 2000***
- ***Mazama 2000***
- ***Winema 2000***
- ***Modoc 2003***
- Crimson Red 2009 **
- ***Sunset Red 2009***

Chippers

- GemChip 1989
- ***Ivory Crisp 2002***
- ***Willamette 2003***

Specialty

- ***Yukon Gem 2006***
- ***Purple Pelisse 2009***
- ***AmaRosa 2009***
- ***TerraRosa 2009***



Bold Italics—Administered by PVMI
* Administered by OSU, ** Administered by Third Party

Information on the Latest Russets

Premier Russet



A93157-6LS

A dual purpose variety notable for its resistance to the accumulation of simple sugars following long term, low temperature storage. High yielding with high specific gravity and few external defects. Resistant to PVY^o, common and powdery scab, early dying, and tolerant of water stress. It is also moderately resistant to tuber early blight, and soft rot, susceptible to black spot bruise, *Fusarium*, and hollow heart.

Blazer Russet



A8893-1

A variety with early maturity with excellent culinary qualities. Providing high yields of No. 1 of excellent specific gravity, it is a good dual purpose type and a possible replacement for Shepody. It is resistant to scab and moderately resistant to net necrosis, dry rot and soft rot. It is susceptible to *Verticillium* wilt and moderately susceptible to PVY. It suffers short dormancy and is prone to hollow heart.

Classic Russet



A95109-1

An early maturing variety with a high % of No. 1, its attractive tubers make it suitable for fresh pack out of the field or early processing. It has high specific gravity, resistance to sugar ends, and most defects. It has moderate resistance to dry rot, but some shatter bruise has been noted.

Alpine Russet



A9305-1

A high yielding medium to late maturing processing variety good specific gravity, resistance to sugar ends, and tuber malformations. It is most notable for its tuber dormancy that is similar or superior to Russet Burbank.