

2010 Potato Certification & Foundation Seed & Plant Materials Advisory Committee
THREE RIVERS CONVENTION CENTER
Kennewick, WA 99336

AGENDA

A. WELCOME & INTRODUCTIONS – George Rajnus

B. PRESENTING THE [2009 MINUTES](http://seedcert.oregonstate.edu/potatoes) (see: <http://seedcert.oregonstate.edu/potatoes>)

C. PROPOSALS REQUIRING COMMITTEE ACTION

Background Info (Pg)

- 1. WGO Off-Types – multiple tubers to report for large lots {*} 1
- 2. BRR inspections for commercial lots {Blue Mtn District} 2
- 3. Auto-downgrades for G1 lots not ‘unit planted’ {OSCS} 3
- 4. Proprietary Potato Varieties – Clarifying Definition {Klamath District} 3

D. ISSUES & UPDATES FOR GENERAL DISCUSSION

- 5. Varieties ‘latent’ to PVY Infection – Treatment in the Standards 5
- 6. Possible New Fee Structure For N & G1 Class Seed (discussion only)
- 7. PVY Survey - Plans for 2010 (discussion only)

E. PROGRAM UPDATES

Winter Grow-out Report	Terry Burr
Oregon Department of Agriculture	(ODA)
Oregon Foundation Potato Seed Project*	Solomon Yilma
OSU & Crops Science *	Russ Karow/Dan Curry
Oregon Seed Certification Service	Dennis Lundeen, Dan Curry

* Handout in packets

F. OTHER BUSINESS

G. ELECTION OF OFFICERS

H. ADJOURN

(1/21/10)

1. WGO Off-Types – multiple tubers to report for large lots {*}

Background: The presence of a single ‘off type’ or ‘other variety’ in a Winter Grow-Out (WGO) lot is currently scored and reported on the final report regardless of lot size. This practice does not give allowances for errors on the part of growers or WGO staff that might have resulted in a misplaced tuber. This practice also tends to raise concerns on the part of the buyer when very low ‘off-type’ scores are found on a final report (i.e. 1 plant in 1,200 or 0.08%) when no actual concern may be merited.

2010 PCFSPM ADVISORY COMMITTEE - BACKGROUND SECTION

Proposal: * Something *must come forth from a grower group on this to be presented.* Richard Macy raised objection to the original wording in 2009 and the proposal was tabled.

Considerations:

2. BRR inspections for commercial lots {Blue Mtn District}

Background: Under the current Potato Standards*1, to be eligible for certification, all acreage planted to potatoes on the 'seed farm', but not entered into the certification program for re-certification, must be inspected at least once during the growing season for the presence of bacterial ring rot. Exceptions to this rule include (1) lots planted with the grower's own certified seed (i.e., a lot grown and certified the previous season by the grower); or (2) having all seed lots produced be sub-classed 'own use only' (i.e., seed not eligible for sale as certified seed but eligible for planting as certified seed by same grower). Under these exceptions, seed certified in Oregon, but purchased from another grower, would require an inspection for BRR.

*1 - {see "GENERAL REQUIREMENTS - I. REQUIREMENT" page 8 of the 2009 Standards}.

Proposal: To change the exception above to exempt any commercial field planted with Oregon certified seed from requiring an inspection for BRR. Specifically make the following change to exception #1 above:

(1) when the lot planted is seed certified in Oregon;

Considerations: Oregon is one of the few states that allow for a certified seed and commercial to be produced on the same farm. The provision to require a BRR inspection of such commercial lots grown by a seed grower was put into place to help appease concerns that such commercial lots posed a risk to the seed produced, primarily through potential contamination with BRR. The exceptions to exempt such inspections in cases where a grower plants their own seed, or has their seed produced sub-classed as 'own use only', were added because such exemptions did not seem to pose an increase risk of BRR to anyone but the individual seed grower, and thus would not tarnish the reputation of certified Oregon seed as a whole. In the opinion of OSCS, this proposed exemption does not pose any further risk to the program or the adjacent growers.

2010 PCFSPM ADVISORY COMMITTEE - BACKGROUND SECTION

3. Auto-downgrades for G1 lots not ‘unit planted’ {OSCS}

Background: The current Potato Standards require that all G1 producing lots be ‘unit planted’ which is defined as “*Planting of a definable source by cutting tuber eyes and placing them consecutively within the row, skipping at least two hills between ‘units’*” *1. This practice was done to more efficiently detect and remove infected material from an early generation lot. Unit planting originally was restricted to ‘tuber-unit planting’ in which all seed pieces in a ‘unit’ came from the same seed tuber. In 2003 this rule was modified to allow for any ‘definable source’ as a ‘unit’ and could include a ‘tuber unit’, ‘hill unit’ or ‘bag unit’ as long as the unit did not exceed 20 feet in length (see ‘Definitions in Standards for more detail). This rule was also modified in 2003 to allow the grower of a non-unit planted lot to maintain the G1 class if no tuber-borne virus was detected during the first field inspection.

Thus if not unit-planted, a single tuber-borne virus detected on the first field inspection will automatically downgrade G1 seed to G2. If such a lot was unit-planted the grower would have the option of simply removing the ‘unit’ and maintaining the class.

Currently few growers opt for ‘unit planting’ of G1 material due to the cost and inconvenience.

{*1 See Section IX. – Part F item 3, page 13 of the 2009 Standards, and “Definitions”, Page 26}.

Proposal: Do away with requirement that G1 producing material be ‘unit planted’ and the accompanying automatic downgrade when virus is found. Lots of G1 material that were not ‘unit planted’ would be scored for any virus found on the first inspection with the ‘class’ recorded as “TBD” (to be determined), and would have to meet tolerances for virus on the second inspection (as is currently done). If the lot was unit planted, the grower could remove the unit and maintain the G1 class.

Considerations: The practice of tuber unit planting has its roots at a time when early generation material was derived from selected tubers tested and found to be free of disease. The finding of virus in one plant would likely mean the seed pieces derived from that same tuber may also be infected, even if not showing symptoms at the time of inspection. This system is not as useful under the current regime where essentially all Nuclear material is planted from ‘disease free’ minitubers derived from tissue culture plantlets. Currently few growers bother to unit plant their G1 material. Though it is practiced on some state seed farms where it has value in controlling virus detection and spread, OSCS is not aware of any other state that has this unit requirement for G1 planting.

4. Proprietary Potato Varieties – Clarifying Definition {Klamath District}

Background: In regards to ‘Proprietary Varieties’, the current Potato Standards stipulate that:

All potato material with proprietary status must have the permission from owner or agent prior to release of inspection reports or issuing final certification. Growers must complete a grower signoff on the application attesting to the fact that they have the owner’s permission to produce the specific proprietary variety. (PART VI- C, page 10).

The Standards do not, however, define what constitutes a variety as being ‘proprietary’.

2010 PCFSPM ADVISORY COMMITTEE - BACKGROUND SECTION

OSCS practice: Until recently, OSCS recognized a variety as being ‘proprietary’ if one of the following criteria were met:

- (1) It has a PVP ‘certificate issued’ or ‘pending’ status¹.
- (2) It is a pre-commercial advanced line of a university/USDA/private variety development program, requiring MTA for production.
- (3) It was considered ‘proprietary’ by way of other means of ‘protection’ such as being licensed in another country as proprietary or protected (and on public record) as long as the variety would also be eligible for protected status in the US. A simple, undocumented, claim of ownership would not suffice.

The ‘proprietary’ nature of each new variety has been based on the variety acceptance applications and any other material widely available (such as the USDA PVP web site, Canadian Registration web site, etc) as well as information provided by other certification agencies. The status so determined (‘Proprietary’, ‘Public’, ‘Experimental’, or ‘Heirloom’) is then published in the OSCS Potato Standards as such. Anyone who disputes these ‘published’ designations may then do so.

The above criteria for ‘proprietary’ would, for example, exempt a variety registered in Canada as licensed to a particular grower, but ineligible for protection in the US because it was ‘released’ prior to 1992 when PVP became applicable to potato varieties, or one that had been widely commercialized as ‘public’ in the US. Such was the case of the variety Carlingford.

The case of Carlingford: Carlingford, which was grown by two Oregon seed growers in 2009, was initially listed as ‘public’ in the OSCS database and Standards because the variety was released in 1982 by the Northern Ireland Plant Breeding Station, thus making it ineligible for PVP protection in the US. It is privately licensed in Canada to Eric C. Robinson Inc. in 1992 who has the sole rights to this variety (in Canada). The Canadian breeders right's for this variety can be found at:
<http://www.inspection.gc.ca/english/plaveg/pbrpov/cropreport/pot/app00000222e.shtml>

This decision has recently been called into question by Dan Chin of Klamath Falls. Mr. Dan Chin, informed OSCS that the listing of the potato variety Carlingford as ‘public’ is inaccurate in that it is protected in Canada. Mr. Chin’s challenge prompted an internal review of OSCS policy regarding the definition ‘proprietary’ in regards to the ‘grower approval’ requirement in the Standards. OSCS has decided that the variety Carlingford should fall into the ‘proprietary’ status based on the clarified meaning of ‘proprietary’ as it relates to this rule (see: OSCS POTATO PROGRAM – Policy Statement (#23) for details).

Proposal: To change the Standards define ‘proprietary’ as those considered ‘proprietary’ in the US only. Specifically to insert the wording “in the United States” after “proprietary status” in the first sentence of Part VI-C of the Standards (page 10) so that it reads:

C. Approval of “Proprietary” Varieties: All potato material with proprietary status **in the United States** must have the permission from owner or agent prior to release of inspection reports or issuing final certification.

{The **bold underlined** portion added}

¹ Based on query to the Plant Variety Protection Office at:
<http://www.ars-grin.gov/cgi-bin/npgs/html/pvplist.pl>;

2010 PCFSPM ADVISORY COMMITTEE - BACKGROUND SECTION

Considerations: Should this proposal pass, OSCS will need further refinement of what precisely defines what is, and is not, ‘proprietary’ in the US (in regards to the Oregon Potato Standards). Should only items 1 & 2 above (related to PVP and MTA) be considered ‘proprietary’, or are there other factors that can and should be considered (i.e., plant patents). What about ‘publicly released’ varieties that also have a PVP certificate?

D. ISSUES & UPDATES FOR GENERAL DISCUSSION

5. Varieties ‘latent’ to PVY Infection – Treatment in the Standards

Background: Varieties deemed “Latent” to PVY (i.e., those that show little or no symptom expression when infected with PVY) are treated differently than ‘non-latent’ varieties in three places in the current potato standards, including:

A. Section XIII-B, Pg 15 - The requirement for ‘latent virus testing’ in the field;

“All varieties identified by the breeder/developer or a seed certification agency as not readily expressing PVY symptoms, or recognized as showing only very mild symptoms of PVY, or of unknown PVY symptom expression, must be lab tested by ELISA (or test of equivalent accuracy) for the presence of PVY through Generation-1. “

B. Section XIV-F Table 7, Pg 16 - Winter Grow-out inspection tolerances at G4

XIV.. Winter Greenhouse Test Tolerance

Table 7 – Tolerances – Winter Grow-out (percent visible symptoms):

Factor ¹	<u>Nuclear</u>	<u>Gen 1</u>	<u>Gen 2</u>	<u>Gen 3</u>	<u>Gen 4</u>	<u>Gen 5</u>
Mosaic						
- Other varieties	0	0.25	0.50	1.00	2.00	BSA
-Latent PVY varieties^e	0	0.25	0.50	1.00	5.00	BSA

^e See definition on page 10, includes (but may not be limited to) CalWhite, Gem Russet, GemStar Russet, Shepody, all Russet Norkotah, and Winema.

C. Section XIV-F (text)

Potato varieties showing no visual symptoms when infected by PVY (Latent Virus) may be serologically tested during the winter. The percentage of plants with Latent PVY infection will be reported to the Oregon seed grower but not become a part of the official certification report or seed directory.

The spread of novel strains of PVY in the US are making the distinction ‘latent’ and ‘non-latent’ varieties somewhat dubious. The expression “unknown PVY symptom expression” (found under Latent Virus Testing Part VIII-B) may apply to most varieties infected with one of these ‘new’ strains of PVY. Researchers reporting on field and screen house trials using various strains of PVY at the 2009 WERA-089 meetings (and elsewhere) concluded that differing strains and isolates of PVY affect each variety differently. Symptom expression in some otherwise ‘latent’ varieties was observed, as well as lack of symptoms in varieties generally considered expressive by certification

2010 PCFSPM ADVISORY COMMITTEE - BACKGROUND SECTION

officials (Phil Hamm to discuss this more fully at the meeting). Idaho's decision to test all their winter grow-out material by ELISA for PVY is a reflection of this concern. The general consensus during PAA and WERA-089 discussions on this topic was that the current visual-only based inspection system used in many state's certification systems is not effective in controlling the spread of PVY (other than PVYo) and may, in fact, be one of the causes of the increase of the non-PVYo strains. **At this time most states do far more PVY testing than does Oregon.**

In light of the points made above, (1) Does the required PVY testing for "Latent Varieties" make any sense in the changing environment of PVY strains that generally do not cause reliable symptoms on potato host (regardless of variety); and (2) Should the PVY ELISA testing program at N & G1 class be expanded to include all varieties?

Proposal: Consider revising the Oregon Potato Standards to no longer recognize certain varieties as 'latent' for PVY. This would/could include (1) Eliminating the separate WGO tolerances for 'Latent PVY varieties' at G4 class; (2) Eliminating the reference that only specified 'latent' varieties need PVY testing at the Nuclear and G1 level; (3) Require PVY testing of all varieties at the nuclear and G1 level.

Considerations: Should #3 be implemented, the standards would have to be changed so that the tolerance for 'mosaic' = tolerance for PVY/PVA in lab tests. This is not the case now, PVY testing (even on 'latent varieties' is only used to determine if a lot is eligible for the "-PVY" subclass, or to confirm symptomatically positive plants. For example, a G1 lot that was visually 'clean' for mosaic during field inspections, but tested at say 10% + PVY in the latent virus testing, would still be eligible for G1 class certification, a situation that puts the whole program up for ridicule.

2010 PCFSPM ADVISORY COMMITTEE - BACKGROUND SECTION

13 Does your state currently show the Field Year on the tag?

Alaska	We use the Generation number don't mention FY. BC
California	
Canada	Canadian seed tags do not show the field year. Our seed tags have Class, Variety, Size, date and certification number.
Colorado	
Idaho	Idaho does not show FY on tags
Maine	
Michigan	We do in Michigan.
Minnesota	Minnesota does not require the FY or lot number on the tag, but we do have the capability to do so with our new tag printers
Montana	Montana does not put FY on tags
Nebraska & WY*3	No
New York	
North Dakota	ND uses a bulk certificate, indicating Generation, i.e. N, G1 etc. and class, i.e. F or C. F indicating eligible for re-certification and C not eligible. Generation changes in the seed cultar. Therefore the generation planted is the generation in the directory. The tag for bags is used sparingly and only needs to give "variety" and "grower" and "generation" when so requested.
Oregon	No, tags show class (P/N, G1 etc).
Washington	
Wisconsin	