

Potato Certification Advisory Committee Meeting

January 24, 2017, Kennewick, Washington

MINUTES

Voting members present: Lon E Baley, Jim Carlson, Brian Charlton, Scott Cheyne, Scott J. Fenters Jr., Reagan Grabner, Greg Harris, Rob Lane, James Macy, Mike Macy, Phil Rathbun, Sagar Vidyasagar.

Non-voting members present: Dennis Lundeen, Jeff McMorran (secretary),

Members absent: Jeremiah Dung, George Rajnus Jr., ODA Rep., Jay Noller and Dan Curry represented by Dennis Lundeen.

Guests present: Sudeep Bay, Mary Beuthin, Terry Burr, Bill Brewer, Larry Davidson, Scott Fenters, Ken Frost, Oscar Gutbrod, Mike Kirsch, Jared Leslie, Mick Peck, Tim Topliff.

I. Welcome and Introductions: Meeting commenced at 10:05 AM with a welcome by the chair Rob Lane. Introductions were made. All present were asked to sign the signup sheet and verify accuracy of contact information. Meeting was recorded and this recording is available upon request.

II. 2016 Minutes: The minutes for the 2016 meeting were included in the packets and had been emailed to members in advance. No changes were recommended. A **motion**, duly made and seconded (Grabner/Carlson) to approve the 2016 minutes without changes or additions, unanimously **passed**.

III. Program Updates:

ODA Update: No representative present.

CSS, OSS, and OSCS Updates

Crop and Soil Science (CSS), Oregon Seed Services (OSS), and Oregon Seed Certification Service (OSCS) updates were all given by **Dennis Lundeen** and were essentially review the summaries presented in the packets and handed out at the meeting. **Carlson** asked about the deregulation of GMO Bentgrass and it's affect of certification practices. Lundeen noted that this deregulation had already occurred once before and ODA is overseeing the program. OSCS would certainly be "looking for it" in C. Oregon, mostly in the way of volunteers that appear between the rows of subsequent Bluegrass plots. Agrostis is one of the largest grass genera and the potential for crossing with wild species can occur. Dennis felt the GMO Bentgrass still should be under official control.

IV. Review of National Certification Meetings: This discussion was lead by Jeff **McMorran** with comments as needed by Bill **Brewer**, Jim **Carlson**, and Scott **Cheyne** who also attended these meetings. The discussion pretty much followed the bulleted items included in the packets with little additional group discussion (see packet for items). It included the following:

- (a) **US and Canada Updates on PCN and Potato Wart:** Delimited area expanding each year, many acres tested, some areas brought out of quarantine.

(b) **UNECE report:** What UNECE is, Disease booklet, Inspection manual, Nina Z. taking over from Willem Schrage.

(c) **PVY Related Issues:** Discussion points included the SNHP & Necrotic Virus Management Plan updates, Othello plots, 'Latent' variety listings and the 'official list' (discussed in more detail below), 'Required' PVY testing, and 'Shipping point' inspections for necrotic arcs. The *required* internal necrotic arc inspection has now been officially re-defined to allow for "pre-clearance" as is practiced in Oregon. This inspection is required for any out-of-state shipments; it is not a grade inspection. **Question (Grabner):** What happens if a grower does not get the Necrotic Arc Inspection, "we have never been asked for this". **Lane** explained the process he uses (two 200-tuber samples, taken to ODA after 2 months storage, then if symptom-free after cutting a certificate is issued). Though growers have not been asked for this by other states that does not mean they will not be asked in the future. Also, if it becomes apparent that Oregon growers are routinely not getting this inspection done, Oregon may be found in violation of the NVMP (and thus SNHP). **McMorran** noted it would be hard for OSCS to enforce this rule because we don't know where lots are going at the time they become tag eligible.

Brewer also pointed out that the revised NVMP also now requires a Winter Test of all lots shipped out-of-state (even if just going 'commercial'). There is an exemption in the NVMP for lots shipped before the WGO is done. Oregon already has this requirement and exemption, lots shipped to a non-seed area within 90 days of harvest are exempt from the WGO requirement).

(d) **Dickeya:** The discussion included an update on the current situation, testing protocols, inspections, official reporting (i.e. on NAHC) and future outlook. **Gerry Saddler**, a potato expert from Scotland, talked to the group about the Scottish experiences with this disease. **Ken Frost** gave a brief review of the current situation in Oregon (several species present, fairly complex situation in term of exact ID, symptoms essentially indistinguishable from Blackleg that cause by *Pectobacterium* (f. *Erwinia*)). He noted there has been a lots of confusion over this issue and best testing regimes. Testing is voluntary in Maine, but widespread, and 24% of lots tested positive *Dickeya* sp. **McMorran** said he was not in favor of mandatory testing of this disease. It should be handled like BRR testing of lots are now where the grower handles sampling and testing outside of OSCS.

McMorran did want to inform the groups the he felt a change need to be made to **Table 5 of the Standards**, foot note C for Blackleg (pg. 16). The third line of the footnote mentions that Blackleg is caused by "*Erwinia carotovora*". This footnote will be changed to say *Pectobacterium* **and Dickeya** unless any opposition was raised at this meeting (none was). **Bill Brewer** was consulted about how this change might impact seed trade and he also felt the change should be made.

(e) **Soil-borne viruses (PMTV, TRV):** Research and Management group is changing its focus to include the soil-borne viruses Potato Mop Top Virus and Tobacco Rattle Virus. Tobacco Rattle Virus has been around in the Columbia Basin for a long time and it had not been a big issue in Oregon produced seed. There was also an extensive survey by Phil Hamm's group a few years back for Powdery scab and PMTV in soil samples

throughout Oregon.

- (f) **Mini-tuber imports into the US & Canada** (Scotland): There has been a serious concern about this proposal from Scotland due to potential to bring in an exotic disease. At minimum the proposed requirements would involve an APHIS site visit, and that parallel pathology testing of a sub-sample in Beltsville be conducted *prior* to field production. The original material could be increased in an isolation GH by the importing grower during this time however, that was still a concern. **Brewer** thought that the official position on the proposal was still ‘no change’ (i.e., all material entering the US had to be 100% tested at the Beltsville lab before being allowed entry into the US).
- (g) **Symposium: “Impact of Quarantined Pests on the Potato Industry”**. Joint Plant Protection and Certification Section symposium at the PAA summer meeting in 2018.
- (h) **APHIS Certification of Private Labs** (for export): Currently one private lab has been cleared to meet phytosanitary testing requirements for export (Agdia). This is in addition to ‘official’ BRR testing required for potato seed exports to Canada. Other labs are currently being reviewed. **McMorran** reminded the group that, in regards to BRR testing, Canadian-bound lots must be tested in an “APHIS Approved” lab, which the Hermiston lab presently is not.
- (i) **BRR spread in commercial transport trucks** (Idaho, Alan Westra): Alan talked to the Oregon Potato Seed Grower group prior to this meeting. His slides will be sent out to the Oregon-Seed-Potato list.

V. Proposals Requiring Committee Action:

A. Tolerance for Off-type/Other variety at G1

The packet materials related to why changing the tolerance for Off-Type/Other Varieties (OT/OV) at the G1 class, as presented in the meeting packet, was reviewed by McMorran. This discussion included how OT/OV are currently handled at the G1 class, with a third inspection being required after removal to maintain the G1 class. He referred to the table in the meeting Packet (Appendix A) that summarized the tolerance among other states for FY2 seed. There was some discussion as to why this tolerance varied among states and the advantages and disadvantages of moving away from a 0% tolerance for both the Nuclear and G1 class. Several voiced reservations about having anything but a 0% tolerance for any scored item (disease/OV) at the Nuclear class. **Grabner** asked about the philosophical difference among states on how this was handled, noting that in Idaho they allowed a few off-types plants in a Nuclear or G1 lot even though the official tolerance says 0%. The logic is that, in general, seed at this class is not sold but used by the same grower. McMorran noted that in the Oregon program, if the Standards says 0%, none can be found in the *final* inspection (TBD=“To Be Determined” is listed if found in the 1st inspection).

A motion (R. Macy/Cheyne) to change the field inspection tolerance of Nuclear and G1 classes for OV/OT to 0.01% was not passed on a vote of 5 to 6. **A second motion** (Fenters/Harris) to change only the G1 class field tolerance for OV/OT to 0.01% **unanimously passed**. This change affects Table 5 (page 16) of that Standards.

B. Generation Terminology Update.

McMorran reviewed the background for the proposal to change the terminology for Field Year 1 (FY1) class from Nuclear to Generation 1 as presented in the meeting packets.

Gutbrod recounted some of the history behind the current terminology. He noted that some 20 years ago, when the PAA section voted to adopt the “Limited Generation System” using the G1-G6 terminology, Oregon initially had used the FY1=G1 terminology, but because Idaho did not adopt this terminology (using “Nuclear” for FY1) Oregon later reverted to the FY1=Nuclear. The concern was that Oregon seed potato growers would be perceived as selling lower class seed (i.e. higher G#) than Idaho for the same Field Year production and be at a disadvantage.

Brewer commented that this request came from discussions at the national level where there was frustration with the lack of uniformity among states in regards to class terminology. He also noted that **Pat Cole** (Idaho Potato Commission) had expressed his desire that Idaho would also change to this terminology, but as of yet this was not being actively considered. Brewer said the desire for this change was being driven by the commercial industry who found the lack of homology among states very confusing. McMorran noted that **Alan Westra** (Idaho Crop Improvement Association) related that this topic had not come up in his time as manager of the potato program at ICIA (about 4 years) but he would bring it up at their next Advisory Committee Meeting.

There was also some discussion on the use of FY1, FY2, etc. system (FY=“Field Year”) rather than either the N-G1-G2, or G1-G2-G3 system. McMorran related that FY# did not really denote a class of seed (with tolerances for scored conditions and disease) but ONLY the number of years in the field. States that did have the FY1, FY2... system had other means to denote class (like “Class A”, “Class B”, “Class C” or “Foundation” vs “Certified”, etc.). The FY system did not easily allow for downgrading, i.e. going from FY1 to FY3 if tolerance of FY1 seed were not met. **Grabner** noted that the system used has to speak a language that the commercial customer can understand and accept.

After some additional and related discussion on this topic it was suggested that the minutes simply state that the group, as a whole, feels the adoption of the FY1=G1 system has merit and Oregon *should* switch to this system, but can not do so until most states also make this change (essentially no change from the previous position of 2001). No formal motions were made.

C. Extension of G5 for Varieties in short supply

The material presented in the packets as to the request for the extension of G5 material in very short supply for an additional year was reviewed by McMorran. He went on to emphasize that the proposal of using the EXC-3 approach to such material (as presented in the packets) may not be satisfactory to a grower if the intent was to ship seed out of state because other states may not accept this material, not recognizing the “class” of EXC-3” as legitimate. Other approaches were discussed including possibly adopting a G6 class, or using G5 with an official subclass of something like “-Ex1” to denote a special case extension of G5 class for one year. The extension of the official classes to G6 was not recommended because it extended the years in the field beyond what most states have accepted, and would reflect

badly on Oregon if this class showed up on the national comparative tables listing classes certified (especially if only done in a very few rare circumstances).

Mike **Macy** explained that this was their request for the variety MSR061-1. It was initially from the Michigan variety development 'fast track' program. They received it initially as a G2 lot and have continued clean production to the G5 level. There is interest by some growers in conducting commercial scale testing of this variety but seed for this scale testing is not available. He noted that there was mini-tubers in production now but they had the only supply of an advanced generation. It was wanted for one more year increase so there was enough material to meet the need for the large scale trials. He also noted that the lot had all zero readings in the WGO and in lab testing for PVY.

Gutbrod pointed out that the rules of certification, as presented in the 'Main' OSCS Handbook, also applied to potato certification (see the bottom of page two of the Potato Standards). The main handbook has a provision for extending the production of certification eligible material an additional 1 year if seed was in short supply (see 'Stock Seed' in the main handbook, pg 3, Item b under "Limitations of Generations"). He did not feel either a new "class" for "sub-class" was needed to extend this lot as a 'special case'. **Lundeen** agreed, citing the specific language in the main handbook. It was clarified that such an extension only allows for a single year of continued production. **McMorran** asked that a motion be made to set up an official subclass for this type of production. **Lane** felt having too many official 'exceptions' or subclasses reflected badly on the whole program and that handling the production internally would be preferred. **Carlson** also related that if the term G5 was used for such seed OSCS would have to stipulate that any such extension could only be allowed if the seed met certain standards (i.e. not just any G5 seed, regardless of virus content). **Vidyasagar** suggested that any such seed lot should have to meet at least G4 class tolerances. **McMorran** expressed a concern as to what such an additional year (even if officially allowed in the Handbook) would be called and how it would be entered into the database.

The proposal would be to allow this material to be called G5 with some note on official records that this was a special case extension to allow for an additional year of production due to extreme seed shortage of the variety.

It was decided, with no voiced objections, that this request (i.e., the extension of this specific G5 material for an additional year of certified production) could be handled internally by OSCS as a one time 'special case', without any changes to the Handbook, as long as this discussion was recorded in the minutes to relate the general consensus of the group. No official motions were made and no changes to the Standards are needed.

D. Latent Virus Testing – Allow for testing on Winter Grow-Out Sample

McMorran reviewed the material in the packet related to this issue, noting that he considered it more of a 'house cleaning' issue than a major change in the Standards. The section in the Standards on "Latent Virus Testing" (LVT) was written at a time when this was only part of the summer program and no reference to LVT being done on the Winter Grow-Out sample is made. What has been proposed is already being done for the most part when growers request PVY testing of the Winter Grow-Out sample. He reviewed the whole concept of LVT, the 'official' national listing of 'latent' varieties, and how the current Standards might be misconstrued to imply that LVT must be done on summer samples to be official. He noted

that most growers having LVT done are doing it on their WGO sample, and that OSCS considered this a preferred option in regards to reliability (representing the final product) and practicality.

With little more discussion, **a motion** (M. Macy/Fenters) to change the Standards as noted in the Packet materials to officially allow for the LVT to be performed on the Winter Grow-Out sample, **unanimously passed**

Specifically, this would change Section XIII-A as follows:

A. Leaf Sampling & Latent Virus Determination: Leaf samples will be taken in late August, **or from the Winter Grow-Out sample**, by Seed Certification personnel for virus determination. Applications for virus testing **from the field** must be made by **August 1**. A late fee will be charged for acreage applied for after August 1. **Requests for latent virus testing of a lot from the Winter Grow-Out sample should be indicated at the time the WGO sample is delivered.**

Pre-Nuclear lots must be tested for PVX, PVS, PVY, and PLRV. Testing for PVX is optional at all other classes. Nuclear* and Generation-1 lots of varieties known to be symptomless to PVY (see B below) or varieties of unknown symptom expression to PVY, must be laboratory tested for PVY. Nuclear* and Generation-1 lots known to be symptomless to PLRV (see C below) must be laboratory tested for PLRV. Testing for PVY or PLRV is optional for all other generations.

~~For varieties requiring testing,~~ **In field testing**, test results for Nuclear Class generation seed lots can be identified with specific sections of no more than 40 plants each. Only those sections with test results that exceed the tolerance will be downgraded. Any lot for which the % of removed blocks exceeds 7% will be sub-classed “Own Use Only” and not available for sale as certified seed.

For Latent Virus Testing of WGO lots, all leaves, up to 400 per lot, will be sampled.

* NOTE: Nuclear Class seed for “own use only” is exempt from the requirement for latent virus testing provided a winter grow-out sample of at least 220 tubers is submitted.

Changes would also have to be made to Table 6, footnote b under “Sampling Frequency” to say:

^b Minimum number of plants to be samples is 100. **For WGO lots, all plants, up to 400 per lot, will be sampled.**

McMorran will also review the Standards for any additional editing needed to reflect this change.

VI. OSCS Issues & Updates for General Discussion

Item 1 – Review of Appeals granted in 2016

The single appeal of 2016 involving the transfer and production of Own-Use-Only (OUO) Nuclear class material, produced by one Oregon grower, to another Oregon grower as a ‘special case’. Fenters asked if the material in question had to be sold/used by the original grower this year. Answer (McMorran): No, the ‘own-use-only’ provision of the original lots did not carry over to the second year. The second grower was aware of the reasons for the ‘own-use-only’ status (no skip rows and no LVT on certain varieties). The way the request

was made was that the second grower was growing this 'for' the original grower but OSCS really has no way to know what is happening between the growers in this regard. The appeal was basically granted because it seemed bit of a waste for the original grower to have to simply discard this Nuclear classed material, or go commercial. It is not even known if the original grower is still in the potato seed business.

Item 2 – Winter Grow-Out Report (Terry Burr)

With the aid of a graph of '% Mosaic' vs '# of samples' for the years 2013-2016 (see attached), Burr summed the Winter Grow-Out for 2016 lots noting that final readings had not been completed on 34 lots as of Monday (1-23-17) which was a bit more than usual for this meeting. All seed was planted by Christmas break and for the most part came up well. He noted that several improvements had been made to the warming rooms including racks and better air flow system so there was no over-flow issue this year and little rot. He also noted that we did have a few lots that expressed what we thought was a mild to severe 'GA affect'. Bags of tubers are dipped in a very dilute solution of Gibberellic Acid upon arrival and the lots affected appear to be either very sensitive to this treatment or had already passed through their dormancy phase when dipped.

McMorran noted that we did have some troubling cases of lots with low or zero Mosaic readings in the field that had a fair amount of Mosaic in the WGO. He attributed this to the changing PVY strain situation going from PVYo (which readily shows up in most varieties) to PVYno which is often symptomless (in the field anyway). **Carlson** asked about symptom expression in the field vs greenhouse. **McMorran** answered that, in general, symptom expression is much better in the GH than observed during the summer field readings, but he really did not know how they might compare to field winter grow-outs done in Hawaii. The GH has the advantage of very few environmental effects (frost, chemical damage, wind, insects) and the stands grow very uniformly for the most part, so symptom expression shows up well. He also expressed frustration about using the term 'latent' vs 'non-latent' for varieties when all varieties are not routinely virus tested. He said OSCS was considering testing at least 20 'symptomless' leaves of all otherwise untested lots to check for latency. **Burr** review the process used to sample and test WGO lots for PVY. He noted that ICIA has worked very well in this regard, especially with the link to North Dakota State University for strain testing. The OSU seed lab has asked about doing this testing but it seemed doubtful they could match the cost or efficiency of the ICIA lab.

Fenters asked if there was a threshold level for what constitutes a legitimate test when there was poor emergence of a lot, and if there was poor emergence, is a virus test then required. **Burr** answered that we don't have an official numeric cut-off but lots that appear to have poor emergence (say only 50%) are sometimes replanted. This is actually somewhat rare. Most lots are above 90% emergence, those less than 85% are counted while reading. OSCS does not have any official rule about required virus testing of tubers for lots with poor emergence, but this might be something to consider in the future. It should at least be a recommendation to growers. OSCS has occasionally noted that mosaic readings for unusual lots (like those with stunted plants from a 'GA effect') were being based on virus testing because symptom expression would be unreliable.

Item 3 – General Technology Updates/reminders

McMorran quickly review some of the technology updates noted in the packets. There was no discussion on these points. Growers seems pleased with the new reporting system directly from the database. McMorran noted that one of the changes he will be making next year is to include the North American Health Certificates along with each 'Final Report' rather than sending them as a complete set at the completion of the WGO for each grower.

VII. Other Business – None

VIII. Election of Officers

Mike Macy agreed to serve as vice chair and as representative to the PCAC Board. A **motion** (Carlson/Lane) to nominate him to fill be the position of POAC representative to the Certification Board, **unanimously passed**. A **second motion**, for Mike Macy to assume the position of Vice Chair of the PCAC (Fenters/Lane) also **unanimously passed**. It was suggested that, in the future, perhaps the role of vice chair should simply be assigned based on rotating alphabetically through the roster of PCAC members.

IX. Adjourn - Meeting adjourned at 12:01 PM

Submitted 2-6-17 by Jeff McMorran

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**These minutes will also available at: <http://seedcert.oregonstate.edu/potatoes>**