

Potato Certification Advisory Committee Meeting

January 26, 2016, Kennewick, Washington

MINUTES

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

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

Members absent: Lon E Baley, Dan Curry and Jay Noller (both represented by Dennis Lundeen), Jeremiah Dung (represented by Ken Frost), George Rajnus Jr

Guests present: Mary Beuthin, Bill Brewer, Terry Burr, Dan Chin, Mike Kirsch, Richard Macy, Mick Peck, Ed Stastny, Tim Topliff, Darrin Walenta, Luke Thurgood, Oscar Gutbrod, Tami Brown.

I. Welcome and Introductions: Meeting commenced at 10:00 AM with a welcome by chair Regan Grabner. Introductions were made. All present were asked to sign the sign-up sheet and verify accuracy of contact information. The meeting was recorded which is available upon request.

II. 2015 Minutes: The minutes for the 2015 meeting were included in the packets and had been emailed to members in advance. No changes were recommended.

A motion , duly made and seconded (Lane/Harris) to approve the 2015 minutes without changes or additions, unanimously passed .
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III. Program Updates:

A. Oregon Department of Agriculture - Nancy Osterbauer gave the update for the ODA. She noted that things had gone fairly well in the past year without any major problems, despite being somewhat stretched in regards to staffing. Topics covered included efforts to eradicate the cyst nematode *Globodera ellingtonae* from the Pilot Butte Experiment Station; Continuation of the Potato Cyst Nematode Survey efforts (no problems); Audit of commercial and seed growers as required for the National Seed Potato Program (letters just sent out last week); The efforts to update the "Plan for Potato Viruses that Cause Tuber Necrosis" to better reflect current practices and management strategies (nationally very little input to APHIS at this point).

B. OSU Reports - Dennis Lundeen gave program updates for the OSU Crop and Soil Science Department and Oregon Seed Certification Service/Seed Services. Printed reports for each were present in the packets. In the **OSCS update** he gave particular emphasis to: (1) The hiring of a new Inspector Tami Brown; (2) Improvements in the OSCS IP program, especially the improvements in the mapping options and iPad apps for viewing inspection and testing reports on-line; (3) The OSCS study involving the use of aerial drones in the certification inspections (so far not any potato use). Dennis also summarized the acreages of the 2015 season for all crops, noting a slight overall decrease in acreage of 1%. All such information is available on the OSCS web site in the "Activity Summary" under Reports. In regards to the **Seed Services Update** that had been prepared by Dan Curry, Dennis noted the retirement of Adriel Garay (manager of the OSU Seed Lab), and the ongoing efforts to recruit and hire a replacement and on going efforts to reduce turn-around-time of samples received at the lab and some of the current research efforts in which the lab is involved. In regards to the **Crop and Soil Science Update** prepared by Jay Noller, Dennis noted that the department is currently in the process of recruiting and hiring for several new positions as noted in the printed report in the packets and encouraged all present to become involved in the process if interested. He noted that interviews for the new invertebrate crop pest scientist (aka 'OSU slug position') interviews are being conducted next week.

Following these summaries Dennis was asked several questions. Rob Lane asked about availability of on-line applications and mapping for potatoes; Answer: not yet available but in the works. Nancy O asked how OSCS was handling security for the PDF inspection reports, noting this has been an issue for the ODA who are considering a similar program. Dennis noted that PINS, Passwords, and encryption is used and there are several security firewalls used to protect information. He has been told by our IT folks that the system is very secure. Terry Burr noted that there has been a potential problem with grass seed companies not changing their PIN numbers when an employee leaves the company, especially if the employee starts working for a different seed company. Bill Brewer noted that the list of new positions did not include replacement of Stella Coakley as Dean of the College of Agricultural Sciences.

IV. Review of National Certification Meetings: Jeff McMorran noted that the PAA/NPC Certification Section meetings were held in Washington DC this year with himself, Mike Macy, and Scott Cheyne in attendance. Potato Expo was held in Las Vegas. Highlights (as relayed by Jeff) on the meetings held in Washington DC included:

- (A) **Dickeya:** Situation & APHIS request for Black Leg samples. See talk in proceedings of the WA-OR Potato Conference by Noah Rosenzweig, Michigan State University that does a good job summarizing situation (<http://www.potatoconference.com>). Jeff noted that APHIS had sent out a request in September for Blackleg stem or tubers samples from growers' fields that might have Dickey sp. as part of a survey. Nancy O. said ODA also got this request. It was too late in the season to acquiesce to this request, and in any event Jeff did not feel OSCS had the authority (i.e. permission from growers) to collect samples from their fields not directly related to diseases specified in the standards, especially one that might result in a quarantine situation (as would be the case if *Dickeya solani* was detected). No one present voiced any objection to this lack of cooperation in the survey.
- (B) **Revised NVMP Review & Approval**, Inspector Training in Othello – Jeff noted that topic will be discussed in detail under Part V-B below so he would defer most of the discussion on this topic until then, but here simply say it was a major part of discussion at the national meeting with APHIS being frustrated that the new revised plan proposal had so little input from states. They would send it out again for comment. At this point the Bi-national aspect of the plan is being abandoned until the US agencies can agree on a unified approach to the management of PVY varieties causing tuber necrosis. Then this would be presented to the Canadians. In actuality a bi-national agreement is no longer needed because PVYntn is no longer a quarantined virus. Jeff also noted that there was a major grant issued to US potato virus researchers across the US to study the new strains of PVY. As part of this effort a training session is planned at Othello on June 20 to help field inspectors recognize PVY strains in commonly grown varieties. It is not clear at this point if this session would be open to all. Jeff will find this out and let the group know via the Oregon-Seed-Potato mailing list.
- (C) **APHIS Certification of Private Labs** (for export) – this topic was discussed in regards to shipments going into Canada, specifically in regards to testing of Bacterial Ring Rot. The Canadians require this testing be done by labs approved by APHIS (previously it had to be done by a Canadian lab). However up until this year APHIS had no mechanism to approve private labs (like Agdia) to do this type of testing. They have developed a system based on the ISTA model and currently Agdia is undergoing the approval process. Other labs will follow suit if the process is successful.
- (D) **Simplot Innate Potatoes certification** - Michele Krucker of Simplot Plant Science talked to the group, reviewing the status of Innate lines and certification in the US. All Innate I material has been deregulated, and Innate II material will be within the year. She noted that one issue in regards to certification centers around the post-harvest testing location, encouraging agencies not to use a Hawaii grow out for Innate varieties if at all possible, due to the anti-GMO sentiment in Hawaii that is reflected in some of their laws. She also related that the original names of the Innate varieties have

been changed from a 'Innate Letter-number' format (i.e. Inn Atlantic 1.0) to an actual name that reflect the parent material (for example material from Atlantic parent variety would have a name that started with A). She also discussed the types of testing that could be done to tract the Innate varieties and lines if needed. Simple GMO type testing cannot be used on this material due to the manner is transformed. She said Simplot does not expect Certification agencies to conduct this testing routinely but could if they needed to. See Part VII-A of these minutes for a continued discussion on this topic.

- (E) **UNECE Report** (and Inspector disease booklet) – Jeff pointed out that UNECE stands for the United Nations Economic Commission for Europe which is very roughly equivalent to the PAA certification section in the United States but comprised of government sponsored agencies from European countries. Jeff noted that details on the UNECE report can be found in the minutes of the PAA's meeting in Washington DC (available upon request). One item of interest to the Oregon group was the "*UNECE Guide to Seed Potato Diseases, Pests, and Defects*" (aka Inspectors Handbook) that is full of excellent full color photographs of various diseases and abnormalities of potato leaves and tubers. It was recently published and distributed to OSCS inspectors. He had received request for more copies of this booklet by growers. It is not currently available in print form but a PDF can be downloaded at: <http://www.unece.org/fileadmin/DAM/trade/agr/promotion/Brochures/SeedPotatoes/LowResolutionEnglish.pdf>
- (F) **Symposium** - "*Impact of Quarantined Pests on the Potato Industry*". The PAA Plant Protection and Certification Sections formally agreed to sponsor this symposium at the 2018 summer meetings. It is a very important topic in that any quarantine imposed on seed of commercial potatoes can have a major affect on trade. The PAA summer meetings are open to all but mostly attended by potato researchers, some company reps, certification officials, a few government employees related to potatoes, and a few local growers.
- (G) **International market implication for our certified seed program** - Bill Brewer relayed that Zebra Chip had become a potential road block in developing export trade, especially with Korea, in that they seemed to be suggesting that seed must be tested for this disease in order to qualify for import. This issue seems to have been overcome, at least for now, by having this disease listed in the Standards as a disease that is not scored against but listed if observed and confirmed.

V. PROPOSALS REQUIRING COMMITTEE ACTION

A. **BRR Testing - Update of 'Protocol on File'**

Jeff reviewed the situation with the 'Protocol on File' for Bacterial Ring Rot testing. The protocol for what constitutes a positive BRR sample has been updated and was included in the packets. He noted that, contrary to the wording of the "Proposal" in the packet, the group did not have to approve this updated version because the POAC already approved the creation of a committee of OSU pathologist last year to do so, this agenda item was simply to apprise the group of progress and allow if any input.

The group as a whole had no input, but Nancy O. asked if ELISA testing would still be allowed for BRR, observing that the attached protocol only mentioned PCR. Jeff referred back to the minutes of the 2015 meeting that stipulated the original document should be amended to (1) remove all references of IFAS as being an acceptable test; (2) Replacing the phrase "ELISA" with "ELISA and PCR" in the document; and (3) defining what constitutes a positive PCR test by using the conditions defined in the HAREC BRR protocol which would be part of the Appendix. Thus the document in the meeting packet is just the Appendix of the revised "Acceptable BRR Protocol on file" document. **Jeff said he would be sure the current document correctly reflected this connotation.**

Reagan Grabner noted that the finds of Bacterial Ring Rot in Idaho had resulted in the publication of a specific set of steps to be taken if BRR is detected in a seed lot. Does Oregon have a similar 'Action Scenario' A: Yes. There is a document entitled "*Bacterial Ring Rot (BRR) – Action Summary*" that is followed if a suspect or confirmed BRR plant or tuber is found. Jeff will send it out to the mailing list.

B. Revised “Plan for Potato Viruses that Cause Tuber Necrosis” (NVMP)

The DRAFT “*Plan for Potato Viruses that Cause Tuber Necrosis*” or aka Necrotic Virus Management Plan (NVMP) with red notations for how this document compared with the original approved document from 2004 was included in the packets. Jeff briefly summarized the major points of the new document that had changed, emphasizing those items that were currently not the practice in Oregon and might be problematic in accepting the revised version. Especially problematic is the provision that requires virus testing of all “tolerant varieties” (page 8) and the one stipulating a maximum tolerance of 2% for certification (page 9). He noted that the original document was a bi-lateral agreement between the US and Canada put into place to avoid the imposition of a quarantine for the presence of PVYntn in both countries. Since its adoption portions of this plan has been revised to make it more effective, some parts dropped (like the year 2 survey), and some parts added (like virus % limits on certified seed). As an Appendix of the original National Seed Potato Harmonization Plan, of which Oregon was a signatory, there must be complete consensus of the original signatories to accept the Draft version. Jeff noted that this has been a difficult process with APHIS receiving very little impute from the states. An appeal for more input went out.

There was very little discussion by the group on the draft plan (pro or con). Jeff said he wasn’t exactly sure what would happen if Oregon decided not to approve the new plan. If adopted by other states as part of the State National Harmonization Program for Seed Potatoes (SNHP) we could become a pariah of sorts because states that sign the SNHP are not supposed to accept seed from states that are not in compliance. He mentioned the possibility of accepting the revised plan with derogation for the unacceptable parts. This option would allow Oregon to be part of the SNHP, but it also may reflect badly on the state asking for derogation in the eyes of others. Jim Carlson (in the later “Other Business” section) said he was uncomfortable with asking for derogations to draft plan not knowing for sure just what the final draft would look like. Perhaps we should just wait until the final version is presented. Jeff did relay that he had passed his comments, as reflected in the red italic text in the packet, on to Richard Zinc who is the APHIS individual in charge of the whole NVMP update.

There was no further action taken on the draft NVMP at this time (no motion to approve, reject, or approve with derogations).

C. Update of Latent Varieties Listed in the Standards

The significance of being a “latent variety” as presented in the Standards and set out in meeting packet was reviewed. Even though having a variety included in the listing of ‘latent varieties’ technically means it must be tested for PVY at the G1 class level, this requirement is rarely enforced because exemptions allow avoiding this expensive testing when lots at this class are declared own-use-only and a winter grow out sample submitted. Jeff pointed out that the main practical impact of being on the list was the higher tolerance for these varieties in the Winter Grow-out at G4 class (5% vs 2% for other varieties). Though only 10 varieties are currently included on the OSCS latent variety list (which includes 5 Russet Norkotah selections and 5 other varieties) Jeff referred the group to the PAA Latent Variety list that has over 30 varieties that have been noted to be asymptomatic to one or more strains of PVY by the states listed on the right column. Jeff was concerned that the wording of the Standards saying that “All varieties identified by the breeder/developer, or a seed certification agency, as not readily expressing PVY symptoms” must be PVY tested, might be construed as including any variety on this list (which is not the case). He felt the original list, that was put together over 15 years ago, was likely out of date considering all the new strains of PVY that are now found in the US. He noted that Latency is also very sight specific. Russet Norkotah and Shepody (that are on both the PAA and OSCS the list) are hard to read in the field but very easy to recognize in the Oregon winter greenhouse. He also related that OSCS has found that the varieties Pike, Sage, and LaRatte seem to be at least somewhat latent based of field vs. Winter Grow-Out readings (i.e. low summer readings but unexpectedly high readings in the winter grow outs that are difficult to explain otherwise. Oscar Gutbrod related similar concerns that there is often a poor correlation between the national list and latency in our region.

Jeff also noted that OSCS does offer PVY testing for any lot from either the summer field or winter grow-out samples, and several growers have taken advantage of this option.

Regan Grabner asked if there were many acres grown that are on the PAA list that are not on our list. A: The Oregon list is pretty much what is grown in Oregon except for some of the specialty varieties and Pike which is fairly new for Oregon.

After a short discussion on this topic, a **motion** was made and seconded (Mike Macy/James Macy) and **unanimously passed**, that the varieties Pike, Sage, and LaRatte be added to the list of “Latent Varieties” in the Standards.

No further suggestion for changes to the Standards regarding latent varieties was proposed.

D. “Approved labs” - what constitutes lab 'approval'

Pointing out this was a bit of a ‘house keeping’ item, Jeff reviewed the reasons OSCS needed some type of formal approval policy regarding what constituted a ‘approved’ lab for pathogen testing and virus clean up (see the background section of the packets).

With little discussion, a **motion** was made and seconded (Fenters/Lane) and **passed unanimously**, that the a note be placed in the definition section of the Standards stating that for a laboratory to be considered ‘approved’ for disease diagnostic purposes or viral ‘clean-up’ it must meet any one of the following criteria: (1) Be a state or federal facility (including university labs, and those run by Crop Improvement Associations) whose primary purpose is diagnosis or testing of plant pathogens or viral cleanup of micropropagation material; (2) Be an APHIS approved lab for this same purpose; of (3) Be approved for this purpose by a sub-committee of at least 3 OSU plant pathologists.

E. Tomato Spotted Wilt Virus (TSWV) - Application of Standards

A supplemental page was distributed that described the situation that arose last summer when TSWV was detected in some seed lots (see packet). With the help of a PowerPoint presentation, Jeff gave a quick review of the (a) symptoms and characteristics of TSWV, (b) the specific of the finds last summer, (c) some responses received from other states, and (d) how this virus was officially ‘scored’ in Oregon (under ‘total visual virus’). The purpose of this agenda item was to bring the Advisory Committee up to date on the TSWV situation and give anyone present an opportunity to propose changes to the Standards or operational procedures regarding this virus. Ken Frost noted that, though TSWV is somewhat ubiquitous in weed hosts, the situation this last summer, regarding spread and symptoms expression in the potato crop, was likely related to the exceptionally hot summer and may not be commonplace or repeated in subsequent years. Ken also related that the Hermiston lab now uses a multiplex detection system that include TSWV along with other viruses that might be encountered in the field. Jeff noted that though the symptoms of TSWV as shown in the slides was similar to those of Alternaria leaf spotting caused by *Alternaria alternata* he would not be testing plants with these type of symptoms for TSWV unless they encounter similar symptoms to those observed this summer where the entire top branches of the plant were black.

The group seem to be fine with the way TSWV was being handled by OSCS and no changes were suggested.

VI. OSCS ISSUES & UPDATES FOR GENERAL DISCUSSION

Item 1 – Appeals granted in the 2016

Jeff briefly described the 4 appeals granted in 2015 (see packet). There was no further discussion on the results.

Jeff also noted that this annual review of the appeals made in the previous year were made so that anyone who has objections to the way the appeal was handled, or has additional questions about the policy, has an opportunity to do so.

NOTE: During the growers meeting preceding this meeting Jeff was asked to describe the appeals process used by OSCS. The concern was that the Standards say appeals must be made within 15 days, and this seems too long for appeals that are needed for Winter Grow-out readings. It was agreed that, in regards to the Winter Grow-Out appeals are very time sensitive due to the way lots are read and material discarded. It was suggested that within the Standards a section describing the current appeals process be expanded with special emphasis on appeals that occur as a result of the Winter Grow-Out readings/reports. **Jeff agreed to do this for the 2016 Standards update** (a motion is not needed).

Item 2 – Winter Grow-Out Report - Terry Burr presented the WGO report using a graph handed out at the meeting showing the number of WGO samples vs. percent Mosaic for the years 2012 through 2015. Overall the number of lots showing no mosaic was decreased slightly from last year, while the number of lots with >2% mosaic virus has decreased for the last three years. He noted at this time only a few more lots were left to be read. He noted that planting and reading went well this year. He followed with a review of how lots were handled in the WGO, including receiving samples, logging in, dipping, warming room, cutting, planting, and reading. He emphasized the steps taken to assure lots were not mixed up in the process. He also pointed out why it was important for growers to properly label the bags (inside and out) with the tags provided, using the bags OSCS provides (no center bands), and that the bags are filled with tubers because ½ full bags have poor air circulation in the warming room and are more prone to rotting. He reminded the group that growers are always welcome to come and look at their lots in the greenhouse.

There was some discussion about space and why OSCS had to request some growers hold back on shipments for a week or so until more space was available in the warming room. Was this a chronic problem? A: No, this occurred because about 70% of the lots were received within a 4-day period. This has not happened before. OSCS was looking into some ways to increase warming room capacity, like adding more shelves. There was not a problem with space in the GH this year because OSCS had acquired the 4th house again. Richard Macy asked what happens if a lot breaks down in the warming room, is the grower notified? A: It depends on how many tubers are received, the tubers that are not broken down are cut, and if there is enough they are planted and read, however if we don't have enough for a legitimate grow-out plot another sample is requested from the grower. In any event the grower is notified that there were lots of rot in the original sample when this occurs. Rots in the warming room do not necessarily reflect on how the lot will perform the next spring in the field. Richard also asked why all tubers are cut when extra tubers are sent (i.e. more than enough to meet the planting goals of 400, 800, and 1200 tubers per plot): A: All are cut to keep things random, if we only cut 4 of 6 bags received (for example) we are not randomly testing the lot because the bags are usually filled in sequential order as the field is harvested. Brian Charlton asked how sprouted the tubers are when cut, are we concerned about virus spread between tubers if cutters are not disinfected between each cut (citing a report made by Debra Inglis at the WA-OR Potato Conference last year). A: the tubers are barely peeping when cut, and though we do not sanitize between each cut, our experience and trials run by Oscar Gutbrod showed no spread between tubers that could be detected visually by the time reading are made.

NOTE: The manner in which OSCS reads and scores plants in the WGO, and how laboratory testing is used in that process, was discussed earlier in the grower's meeting. There was evidently some confusion as to how OSCS uses the ELISA results obtained for the lab. Jeff explained that when lots are 'read' healthy plants are removed and plants which show possible mosaic are 'red tagged'. Enough of the red tagged plants are then tested, either tested with PVY kits the ICIA lab as confirmatory samples give the inspectors confidence that the plants they score as mosaic are actually virus-induced mosaic. Not all red tagged plants are tested. Lab results are received in three days, which allows these results to be used in the second readings. Q: What happens if a 'red flagged' plant test negative for PVY, is it still scored? A: Except in rare cases, no, plants that score negative for PVY in the lab are not scored for mosaic, and any plants that have similar 'symptoms' are also not scored + for mosaic. Occasionally (and rarely) a plant is encountered that is a 'dead ringer' for mosaic but gives a negative for PVY using the kits or in the lab. In these cases the plant is resampled and tested for PVY (again), PVA, and PVX. Often the second test shows positive for one of these viruses, if still negative, the plant may then be sent to the Hermiston Lab for analysis. In the past these plants were positive for an unusual strain of PVY. If all of these tests are negative, the plant is not scored for mosaic, but the grower is simply informed about the unusual virus-like symptom.

Item 3 – General Technology Updates/reminders

Jeff briefly reviewed some of the IT changes that had occurred over the past year including (1) New database generated reports, and on-line access to these reports; (2) Use of iPad inspections and generation of maps stored in the database; (3) Continued increase use of On-Line Shipping Certificates and blocks for Own-Use-Only lots. Jeff noted that On-line signup and mapping (as Dennis described for our grass seed crops) is not yet available for potato crops, but this is in progress and MIGHT be on line by this year's planting season (no promises here).

Item 4 – “Having HAREC listed as an 'approved lab' by APHIS for virus and BRR testing”

This subject had been previously discussed during the national meeting update (Part IV-C). Ken stated that the approval process involved a lot of time and paperwork. It could be done but he would only do so if growers expressed a strong desire for him to do so. No one present expressed such a desire so this probably will not happen for some time. This issue is really only a factor for Bacterial Ring Rot test on seed being shipped into Canada. The Canadians require this testing be done at an 'approved lab'. Potato commercial growers and processors in the US are accepting HAREC results for BRR testing. Growers who need to ship into Canada are advised to send seed to one of the 'APHIS approved labs' for BRR testing (see Jeff for a current list).

VII. OTHER BUSINESS

A. **Innate production in Oregon?** Scott Cheyne asked if Oregon had certified any GMO potato varieties in Oregon in 2015. A: No, CSS Farms was the only grower to grow GMO in 2014. They said it was too difficult to deal with the regulations in Oregon regarding Innate 2 varieties because of the Later Blight resistance, resulting in being regulated by EPA similarly to pesticides. There was some concern that GMO potatoes might end up in unintended places, like at a starch plant. Regan Grabner asked **Luke Thurgood** of Simplot to say a few words about how Simplot is working to control the production and distribution of their Innate varieties, which he did, explaining that Simplot is using a 'closed loop system' to prevent their product from ending up where it does not belong. Though both Innate 1 and Innate II varieties had been deregulated, he noted that Simplot is still restricting production of their material to certain select growers and tightly controlling what happens to the end products and land used to produce these varieties. Luke also commented on tests that are available to test potato lots for the presence of Innate varieties should that become necessary. Are there any Innate potatoes in the commercial market at this time? A: Simplot is working on a distributor for the fresh cut potato slices on the Innate I material with a food distributor in the southern US which currently does not distribute other potato products.

B. Revisiting of the NVMP. Jim Carlson and Richard Macy felt it was wrong to just leave the current Necrotic Virus Management Plan as it is, knowing it is out of date. This discussion is summarized under Part V-B above.

VIII. Election of new Vice Chair – Scot Fenters Jr. (unanimously elected)

IX. Adjourn (12:20 PM)

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