

Potato Certification Advisory Committee Meeting

January 23, 2018, Kennewick, Washington

MINUTES

Voting members present: Mark Campbell, Jim Carlson, Brian Charlton, Scott Fenters, Kenneth Frost, Reagan Grabner, Greg Harris, Mike Kirsch, Rob Lane, James Macy, Mike Macy, Phil Rathbun, Sagar Vidyasagar.

Non-voting members present: Jeff McMorran (secretary), Jay Noller.

Members absent: ODA Representative (Lindsay Eng), Lon E. Baley, Dan Curry, (represented by Jay Noller)

Guests present: Nichole Baley, Terry Burr, Bill Brewer, Tami Brown, Larry Davidson, James Farris, Oscar Gutbrod, Cody Heath, Jared Leslie, Emily Lopez, James Macy, Mick Peck, Ed Stastny Jr., Darrin Walenta, Jennifer White, Solomon Yilma.

- A. Welcome and Introductions:** Meeting commenced at 9:25 AM with a welcome by chair Scott Fenters. The meeting started early due to the early ending of the Grower's Meeting. Introductions were made. All present were asked to sign the sign-up sheet and verify accuracy of contact information. Meeting was recorded and is available upon request.
- B. 2017 Minutes:** The minutes for the 2017 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 / M. Macy) to approve the 2017 minutes without changes or additions, unanimously **passed**.
- D. Program Updates:** There was no representative for the Oregon Department of Agriculture present nor an update available in the packets. Updates for OSU (Crop Science & Seed Services) were included in the meeting packets and highlights were reviewed by Jay Noller. Jay particularly emphasized retirement and replacement of Dennis Lundeen as OSCS manager, a listing of 9 new OSU Crop and Soil Science positions that have been filled or are in the process of being filled, and OSU new brand identity efforts. He mentioned a new Tri-State agreement (Idaho/Oregon/Washington) that will bring more in money for potato research. He also noted that OSU CSS will have three non-production related soil scientists talking at this year's WA-OR Potato meeting in Kennewick, enhancing CRS "Soils to Seed" program. Oregon Seed Certification Service manager is currently being replaced so no specific update was presented.
- D. Review of National Certification Meetings:** This discussion was led by Jeff McMorran with comments as needed by Tami Brown, Mike Macy, and Bill Brewer. Jeff McMorran noted that minutes from the various Certification related meetings that were held in Toronto in December of 2017, and Florida in Jan 2018 are available upon request. Some of the highlights included discussions on:
1. Zebra Chip – vagaries of detection and how to interpret results; possible need for testing in some states; disconnect between psyllids + for LSO bacteria and subsequent disease symptoms.
 2. Canadian Pesticide Restrictions - 13 pesticides noted, may result in rejection of potato shipment if loads exceed tolerance levels.
 3. Use of Mineral oil to reduce PVY Spread – mechanisms, combination with insecticides to increase efficacy, timing and needed spray intervals.

4. Spread of PVY in tractor rows – 26% in tractor row vs. 11% other rows (Russet Burbank); Likely due to vine damage and ‘border effect’ (not mechanical spread), effect especially noticeable with tuber testing vs field inspections.
5. Potato Wart and Potato Cyst Nematode updates – mostly related to acreage reductions after certain cover crops (Leche tomato) or years out of potato production.
6. Dickeya updates – testing protocols, relationship between + detections in tubers and disease incidence (very dependent on environmental conditions), prediction of outbreaks. It was not recommended that certification agencies start routine testing of lots except where problems are suspected.
7. Variation in Standards, Terminology, and Practices among States – see minutes for details. Idaho changing to 1% max for recertification, several states have adopted the FY# system for class (see note at end of these minutes). SNHP (State National Harmonization Program) and revised Necrotic Virus Management Plan discussed. McMorran reminded the group that, besides variations in terminology, the post-harvest testing requirements vary among states, and not to assume that a seed lot that is eligible for recertification in Oregon is eligible in the state they intend to ship to. He advised to always contact certification agency in the specific state/province of destination to determine their PHT requirements before the WGO is started (if possible) to assure testing requirements are met.
8. Push for Direct Tuber Testing of Post Harvest Test Samples – multiple pathogens possible from a single sample (viral and bacterial), more rapid completion of tests so reports go out earlier, herbicide injury and ‘new’ virus or virus strains would not be detected, samples must be sent to a APHIS accredited lab if exported to Canada. Suggested that lower classes (i.e. FY1, FY2) should have more tubers in the PHT than higher classes due to the lower tolerances.
9. UNECE and NAPPO Reports (see minutes) – risk based inspections (more risk = more inspections).
10. Listing of Proprietary Varieties – concern that proprietary varieties are not all listed by states in the same way on the national “Acres Certified” list published each year (see <http://seedcert.oregonstate.edu/potatoes-varieties> for list). Some show proprietary varieties in ‘other’ or ‘miscellaneous’, other states show as specific varieties. This causes confusion in understanding total acres produced. No consensus reached on how to rectify this.

E. Proposals Requiring Changes to the Standards

None had been brought forth for consideration this year.

F. OSCS Issues & Updates for General Discussion

Item 1 – Winter Grow-Out Report

With the help of a PowerPoint presentation (attached), Terry Burr, reviewed the current status of the WGO in regards to number of lots received relative to past years and the % of PVY present in these lots (see graphs in PP presentation for more information). He noted that it was a good year overall, thanks in part to a good group of student employees and more even delivery of WGO samples than last year. On the date of his report OSCS only

had one sample with over 2% mosaic, which is a considerable improvement over some previous years.

Terry then went on to discuss the new tray-based system being tried out on some of the WGO lots this year, giving the reasons why OSCS is trying out planting in trays vs soil. Yearly, there have been areas in the greenhouses that didn't grow well for various possible reasons, with uneven emergence and growth. There is also generally poor performance in lots planted in an overlap GH (planted twice in one year), as well as development of compacted soil that is difficult to adequately rip and rototill for planting. He described the specifics of how the system is being implemented (see slides for more information). Terry covered some of the increased costs of this system (trays, media, and perhaps new tables) and some of the savings (decreased planting labor, less need for multiple readings or planting of lots). He also gave several of the pros and cost of the tray system vs soil planting noting that initial results indicate that we may be able to read lots 1-2 weeks earlier, have less 'problem lots' (due to slow or poor emergence), and a higher % emergence of WGO samples (most in the 98-100% range).

Jim Carlson asked if there was transmission of soil-borne pathogens from the GH soil to the WGO samples that could affect the readings. A: There are likely many pathogens in the WGO soil after 40+ years of continuous WGO lots, but other than possibly causing some slower than optimal growth in some areas, the pathogens present are not likely to affect the reading of virus, off-types, or chemical injury normally scored against the lot. Brian Charlton encouraged the single (1 year) use of trays rather than trying to reuse trays. Those present seemed to embrace the new system, especially if they receive their reports sooner. Reagan Grabner wondered if the tray system might be amenable to more advance PCR type testing (i.e., simply cutting the tops off all the emerged plants and bulk testing by PCR), or even moving towards more extensive tuber testing for pathogens and simply using the trays for detection of off-type, chemical, and new/missed diseases the testing did not pick up. Oregon could potentially lead the way in this area.

A discussion on the use of tuber testing vs leaf testing followed.

Item 2 - Changes and Challenges with PVY testing in the WGO

With the assistance of a set of slides (attached) McMorran discussed some of the changes occurring in the virus testing program and the challenges they presented (see slides for more details). Ed Stastny ask how we go about taking 400 leaves from a lot that may include 800 or 1200 plants, do we mark off a 400 plant section to sample or use some other system? McMorran responded that inspectors generally wait until there are at least 400 readable plants in the lots and then take a 400 leaf sample, trying to make the sample as random as possible and accurately reflect the % of + Mosaic plants in the entire lot; for example if 2 mosaics are observed in an 800 tuber lot, only one leaf would be put in the sample bag. This can cause a bit of a reporting issue however if in subsequent readings of the slower-to-emerge plants more mosaic is observed. In such a case the % PVY of the virus test could be lower than the % mosaic observed, which might make interpretation of the two reports confusing. In such cases, especially when 0% PVY is reported with multiple mosaics observed (and confirmed), a note to the effect that the leaf sample was taken from symptomless plants can be added to the remarks section.

Timely reporting vs. virus testing results: Though holding all reports until all the bulk virus testing results are completed may avoid a need to occasionally revise a report to show a lower mosaic level (i.e.; when mosaic is scored on a 100% tested lot but the virus testing and follow-up testing indicate the symptoms were not conclusively caused by virus), those present felt the delay in receiving the reports was not warranted.

100% testing of scored plants: McMorran asked those present their preference for testing of all 'scored plants', as is done in some states, vs the current system of conformational testing of some scored plants in each lot. In the current OSCS system, all +/- plants are tested (PVY Kits or lab) but only a few of the 'obvious +' plants are tested in each lot. OSCS could test all scored plants but this would increase the cost of the WGO, due to increased lab and sampling time. No one present voiced a concern over the current system of conformational testing so a 100% system will not be adopted.

Item 3 – Latent Virus list & Testing Update

McMorran noted that in regards to PVY expression, the term 'latent' or symptomless varieties is a bit outdated. Ten years ago almost all PVY was the PVY_o strain that expressed symptoms reliably in all but a few 'latent' varieties like Shepody, Russet Norkotah, Winema, CalWhite, GemStar, etc. These are the varieties referenced in the Standards (page 17) which have additional testing requirements at Nuclear and G1 class, and higher tolerances in the WGO at G4 class. Since then almost all the PVY strains detected are PVY_{no} which is either symptomless or expresses very mild symptoms in most varieties. Thus, having a list of a handful of varieties that are labeled as 'latent', is a bit outdated. The use of a visual-only system to control PVY in potato varieties is not really adequate anymore. Unlike many states, Oregon has an optional PVY testing program that is used by more and more growers each year. In time Oregon growers may wish to consider making this a required program so that we can also require it of seed entering the state. There was no further discussion on this point.

Item 4 – Combined fee for applications and WGO?

McMorran noted that currently there are two fees charged for certified lots; (1) the applications fee at the beginning of the season that covers the field and harvest inspections, and (2) a Winter Grow-out fee that covers the Post-Harvest testing. The two are separated because, until a few years ago, the WGO was only required of lots eligible for re-certification, so not all lots were entered into the WGO program. Now all lots must be submitted to the WGO to be eligible for certification, thus a single fee could be charged at the beginning of the season that would cover both. The question put to the groups was if they prefer a single fee for both at the applications time, or to keep the system as it is. A question was asked as to what happens if a lot is withdrawn before the WGO, Answer: A partial refund would be credited to the grower's account.

No strong objections were voiced either way on this issue with many present favoring the single fee system, and many feeling that the refunds required would complicate the system, making the two fee system more practical. McMorran said he will discuss the single fee system with the OSCS IT staff and our new manager and report back to the group next year. It is unlikely that the system will be changed for the 2018 season.

Item 5 – Review of Appeals granted in 2017 {none}

Item 6 – General Technology Updates/reminders

McMorran reminded the group about the use of on-line applications, which includes a mapping option, and the availability of shipping certificates through the eCertification site. He also reminded the group that their “Final Repots” are available anytime on line. However, the North American Seed Potato Health Certificates (NAHC) are not because they do not originate from the OSCS database. He is happy to send PDF copies (attached to eMails) of these when requested.

G. OTHER BUSINESS

Field Year System: At the end of the preceding seed grower’s meeting a discussion was held about the use of **the Field Year System** where FY1, FY2, FY3 (etc.) would replace the current terminology for class (i.e., Nuclear, G1,G2 (etc.) in Oregon). This system has been adopted by several other states (Maine, Michigan, Wisconsin, see <http://seedcert.oregonstate.edu/sites/default/files/potato/PIE/paa-equivalencytable.pdf> for the most current equivalency table). Idaho is in the process of changing, but this will take about two years. McMorran related that one problem with the FY# system is that it can be a bit confusing when lots are downgraded, for example from FY1 to FY3 for exceeding tolerance for disease or off types. In such a case the “class” would be FY3 but the number of years in the field (which is listed on the NAHC) is only 2. He also noted that in some states that are currently using the FY# system (as well as some that use the “Generation system”) there is different class terminology reflecting the tolerances, such as “Foundation” “Registered” or “Certified” (Wisconsin) or “Class A” “Class B” (Colorado). Clear as mud? No action was taken on this issue this year but McMorran promised to add it to the agenda for the 2019 PCAC meeting.

Market Access - Bill Brewer discussed market access to Korea noting that shipment of chipping potatoes to Korea from Oregon growers is now approved as long as the seed used to plant these lots came from Oregon, Idaho, or Washington. This is due to the notation in our Standards that Zebra Chip is reported when observed during inspections (when confirmed). The limitation is only for the seed used to plant the shipped tubers, not sources from previous year’s production, so a G2 Montana lot, produced as G3 in Oregon, could be used to plant a crop shipped to Korea. He also noted that chances of shipping commercial into Canada is slim (?) and that a bilateral agreement between China and the US to allow seed shipments into China is in the works (currently only fresh potato sent directly to chippers is allowed). There was also some discussion of the continuing effort by Bejo Seed and CIP in Peru to develop the commercially viable True Potato Seed (TPS) market, especially concentrating on Africa and other areas of tropical climates where shipment of tuber-based ‘seed’ is not practical.

G. ELECTION OF OFFICERS

Scott Fenters agreed to serve as vice chair. **A motion**, to nominate Scott to fill the vice chair position, **unanimously passed**.

‘Thank you’ knives passed out to present and former PCAC member (and others present).

H. ADJOURN - Meeting adjourned at 11:30 AM

Submitted 2-4-2018 by Jeff McMorran

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

**Slides on separate document**