



Plant Variety Protection Board Meeting Minutes Chicago, Illinois - April 24 - 26, 2019

Meeting Location:

Holiday Inn Chicago O'Hare Area
5615 N Cumberland Avenue
Chicago, IL 60631

Wednesday, April 24th

1:00 pm Introductions and Opening Remarks by Ruihong Guo, Ph.D., Science & Technology Program Deputy Administrator

- Participants from USDA: Bruce Summers, Chris O'Hagan, Ruihong Guo, Brian Ikenberry, and Mark Hermeling, and Jeffery Haynes
- Participating PVP Board Members: John Beuttenmuller, Brent Burchett, Eloy Corona, John Duesing, Josh Freeman, John Heaton, Patrick Kole, Stevan Madjarac, Heidi Nebel, Albert Tsui, Kathy White, and Charles Brown
- PVP Board Members unable to Participate: Shannon Douglass, Kelly Keithly, James Sutton, and Wendall Shauman
- Participants from industry: Paul Nelson, Rosetta Newsome, Abigail Struxness, Craig Regelbrugge, and Audrey Charles

1:30 pm Welcoming remarks by Bruce Summers, Agricultural Marketing Service Administrator. Bruce Summers congratulated the members of the board for their appointments by the Secretary of Agriculture and thanked them for their time in support of the Plant Variety Protection Office (PVPO). Bruce covered major areas that the Agricultural Marketing Service (AMS) is involved with, including grading, market news reporting, the 22 check-off programs, marketing orders, food procurement purchasing program, the National Organic Program, Hemp production regulations and the 25 initiatives from the 2018 Farm Bill that directly affect AMS. Bruce continued to provide an overview of the Plant Variety Protection (PVP) Act and announced that seed propagated Hemp applications are officially accepted by the PVPO on this day.

1:45 pm Hemp Update from the PVPO. Sexually propagated hemp varieties are allowed under the current PVP Act, and with the announcement from Bruce Summers, AMS Administrator, applications can officially be accepted on April 24, 2019. The hemp objective description of variety (Exhibit C) form has been completed and is available from the electronic Plant Variety Protection (ePVP) system and as a PDF form from the PVPO Website.

Germplasm deposit requirements are the same as other sexually propagated varieties and are required to be made at the Agricultural Research Service (ARS) Fort Collins deposit

starting on January 1, 2020. The hemp filing letter provides further instructions for seed deposits with due dates and late fees.

The hemp Exhibit C form mirrors the International Union for the Protection of New Varieties of Plants (UPOV) Test Guideline (TG) Table of Characteristics (TC) with the minor addition of quantitative fields. The examination for distinctness will be conducted by comparing known varieties worldwide, the most similar variety and UPOV comparison varieties. The PVPO is seeking assistance from Canada and Australia, as well as other countries with hemp experience.

Asexually reproduced hemp varieties will qualify for PVP Protection when the final rule for implementing the PVP Act amendment is published. The current hemp Exhibit C form covers both sexually propagated and asexually reproduced varieties. Germplasm deposits will be required at the Bigelow Laboratory in East Boothbay, Maine. Both sexually propagated and asexually reproduced varieties require a signed statement verifying that the variety has 0.3% or less delta-9 tetrahydrocannabinol (THC) concentration level by an approved method of detection.

2:00 pm ASTA Molecular Marker Working Group Update and Presentation by Paul Nelson. The presentation covered: Molecular Marker 101; Significance of MM in the US context and forming of the Working Group; and Working Group activities and outcomes. MMWG has continued its study and research on the potential use of DNA marker method to distinguish soybean varieties. The group has written two draft papers for eventual publication. The first paper is on the development and validation of the molecular marker and sampling methodologies. The second paper is on establishing the criteria for the use of SNP data for eligibility of candidate cultivars for PVP certificates. The timeline for finalizing both papers is June 2019 and presentation at the next PVP Board meeting later in 2019. The MMWG Chair will present findings and the status of the two papers at the UPOV Biochemical and Molecular Techniques (BMT) meeting in October 2019, and a presentation by PVPO at the UPOV Technical Committee meeting in November 2019 will be explored. A comprehensive presentation of the study outcome and PVPO's planned actions is also being considered for the 2020 UPOV BMT meeting, which will be hosted by the US.

PVP Board members expressed support and appreciation for the group's work and for PVPO's collaborative approach. PVPO has been working closely with the MMWG and will provide a presentation regarding how this method will be used by the office at the next PVP Board meeting.

5:00 pm Adjourn

Thursday, April 25th

8:30 am Thoughts from Previous Day. The PVP Board members asked for copies of the presentations being provided at the meeting. There was a discussion of the International Community of Breeders of Asexually Reproduced Ornamental and Fruit Plants (CIOPORA) meeting that was held recently in South Africa. The PVPO was represented at

the meeting by Dr. Ruihong Guo, where an update on the progress of the proposed rule to include asexually reproduced varieties was provided.

There was a continued discussion of how molecular markers are being used around the world. Several PVP Board members suggested that the PVPO work more closely with the European Union (EU) Community Plant Variety Office (CPVO) to see if information can be shared. In addition, molecular markers could prove useful in the determination of Essentially Derived Varieties (EDV) by owners of protected varieties. The International Seed Federation (ISF) has threshold guidelines for EDVs and it was suggested that the PVPO take a closer look. There was also mention of the Seed Association of the Americas (SAA) and how they are moving forward with the use of molecular data.

There was a question regarding the UPOV Electronic Application Form (EAF) and if a user can see the list of countries that a variety is protected in from the dashboard. The PVPO responded that this was not a feature of the EAF system at this time but may be something available in the future.

Does the PVPO need to change the regulations to reduce fees? The response is yes, the fee schedule and hourly rate is published in the regulations and requires a Federal Register notice with a comment period to update fees. Many PVP Board members indicated that the fees should remain as they are now to cover unexpected expenses in the future and for additional staffing of the PVPO. Regarding staffing, it was suggested that PVPO investigate internship opportunities for upcoming and recent college graduates.

8:45 am

PVPO Program and Staff Update. A presentation on the PVPO program priorities, ePVP System, UPOV and Staffing was provided. The program priorities include completing the rule-making process to implement the PVP Act amendment to include asexually reproduced plants for a PVP certificate. Other priorities include training of the staff on the examination of asexually reproduced plants, maintaining the current workload, training of the two new plant variety examiners and implementing release 5 of the ePVP System.

The ePVP System can accept application forms for over 100 plant species, which include most of the major sexually propagated varieties and potatoes. A total of 80 applications were submitted through the ePVP System out of the 182 applications received so far in FY 2019. Asexually reproduced crop forms will be added to the ePVP System for electronic submission by the end of the year to coincide with the published final rule.

Electronic payment of fees is available from the ePVP System and by the pay.gov website available to the public. The ePVP System allows bulk upload of corn applications at this time and with the next release the top 5 crops will be added to allow bulk upload of applications. In addition, the next software release will provide a direct interface between the ePVP system and UPOV EAF PRISMA system as well as additional portal and examination enhancements.

The PVPO has examined over 180 species and issued over 13,800 certificates of protection over the years; it receives on average 480 applications per year and maintains a processing time of 1.5 years from application receipt to issuance. The top incoming crops over the past 10 years were soybean, corn, wheat, cotton, and potato.

The PVPO is active in the UPOV administrative and technical meetings throughout each year. The PVPO provided presentations at the UPOV general meeting, CIOPORA meeting, and will present at the BMT meeting in October 2019. The PVPO continues to support the UPOV PRISMA system and has received six lettuce applications since the launch of the system in 2017.

The PVPO currently consists of one acting commissioner, six plant variety examiners, one program analyst and one new plant variety examiner that will start the end of May 2019. Dr. Paul Zankowski, commissioner of the PVPO continues his detail with the USDA office of the chief scientist for an additional year. The program also receives support from the Department IT Services and the Science & Technology Program Resource Management Office.

10:30 am Plant Variety Protection Act Amendment from the 2018 Farm Bill – Proposed revisions of PVP Regulations and Rule-making Process. A side-by-side comparison of the existing PVP regulations and proposed regulations was provided to the PVP Board members. Once the proposed rule completes a regulatory impact assessment and review by the Office of General Counsel, and goes through Departmental clearance, it will be published in the Federal Register with a 60-day comment period. The PVP Board members requested that PVPO conduct outreach to stakeholders to inform them of the published proposed rule and highlight major changes. The PVP Board also requested that the proposed rule include a deposit waiver option for species that may not be conducive to long-term storage by tissue cultures and cryogenic freezing, after an extensive discussion about the challenges and feasibility of germplasm deposit for some species. Board members supported a “range of possibilities” approach.

1:30 pm Program Implementation Plan (New forms, germplasm deposit, DUS examination, reference varieties, farmer saved seed provision, research exemption, etc.). The PVPO has a deadline of December 20, 2019 to publish the final rule that includes asexually reproduced varieties as a result of the amendment to the PVP Act from the 2018 Farm Bill. The goal of the PVPO is to publish the final rule by September 2019 so the office can start accepting application in October 2019.

The PVPO is currently developing the Exhibit C forms for the expected asexually reproduced crops using the UPOV TCs, and will share draft forms with key stakeholders. The US Exhibit C form for asexually propagated crops will mirror the UPOV TG Table of Characteristics

With regard to the use of the Bigelow Laboratory as the designated depository, Board members suggested a visit by PVPO to the facility to ensure capacity, quality and other details.

PVPO expects that the DUS examination process for asexually-reproduced crops will be similar to the established process for examining sexually-propagated varieties. Following current PVPO practice of accepting DUS reports (in place of the Exhibit C) from other UPOV countries for sexually propagated crops that do not have established databases with PVPO, we anticipate accepting DUS reports for asexually reproduced crops, where appropriate.

“Right to save seeds” does not apply to asexually reproduced varieties. Saving an asexually reproduced crop and replanting in a subsequent year would be infringement under the amended PVPA.

6:00 pm PVP Board Comments and Recommendations

1. The Board commends
 - The PVPO for the considerable work and planning done to design, build and implement the rules, regulations, system and processes required to incorporate asexually propagated varieties into the U.S. PVP structure.
 - The efforts of the PVPO to establish the electronic PVP filing system and to optimize their internal processes while keeping fees stable for applicants.
2. The Board recommends that the PVPO
 - Continue its involvement in international meetings seeking to harmonize and strengthen global PVP/PBR education, coordination, implementation and enforcement to ensure improved plant varieties can be protected for the benefit of domestic and global agriculture.
 - Serve as a champion within UPOV and in bi-lateral discussions
 - to endorse and promote the findings, conclusions and recommendations coming from the soybean molecular marker project, executed by the Joint ASTA-PVP Office Molecular Marker Working Group; and
 - to advocate for wider acceptance and use of DNA markers by PVP offices globally to assess similarity and distinctness in the PVP process and for PBR enforcement.
 - Take a proactive approach to enable and incorporate the use of DNA markers to deal with challenges expected to come from new and emerging crops seeking PVP.
 - Investigate closely and critically Bigelow’s capability and capacity to receive and preserve deposits for asexually propagated plant varieties being protected by PVP, and identify and consider potential alternatives, such as a waiver upon request to allow PVP applicants to maintain the voucher specimen and to attest on a periodic basis that the voucher specimen is being maintained and still viable.
 - Work with ASTA, AmericanHort and AUTM to ensure public and private sector applicants for PVP are aware that updated rules and regulations going into effect in Q4 2019 will include a change in the payment schedule for the U.S. PVP process.
3. The Board encourages the PVPO
 - To continue engaging with PVP/PBR agencies in various countries (e.g., Canada), regions (CPVO) and with UPOV to drive increasing and consistent alignment regarding the standards for morphological characteristics being used to administer plant variety protection.

- To select and train candidates as potential future staff to ensure the PVPO can access the knowledge and experience needed to grow capacity in the near future.
- To consider when and how to bring into the PVPO an individual with relevant knowledge and expertise regarding plant genomics and DNA markers to support PVPO's efforts to incorporate DNA markers into the PVP process.
- To continue working with the US PTO to explore and identify opportunities for synergy and coordination in connection with their respective plant IP protection domains.

6:30 pm Adjourn

Friday, April 26th

All presentations and discussions were completed on April 25-26, 2019 so no meetings were held on this day.