

USDA Plant Variety Protection Office (PVPO)
Room 3543, USDA South Building
1400 Independence Ave. S.W.
Washington, DC 20250

Board Members attending (with affiliation):

Charles Brown, Brownseed Genetics, LLC
Joonhyung Cho, University of North Carolina at Chapel Hill
Eloy Corona, Bayer Crop Science LP
Emily Dierking, Indiana Crop Improvement Association
John Duesing, DuPont Pioneer
Elizabeth Lee, University of Guelph
Stevan Madjarac, Monsanto Company
Jose Re, RiceTec, Inc.
Wendell Shauman, Shauman Farms
Bernice Slutsky, American Seed Trade Association (ASTA)
Alternate: James Sutton, Georgia Department of Agriculture

Absent:

Jianli Chen
Jose Costa
Danielle Conway
Katherine White
Alternate: David Burns

USDA and AMS staff:

Ruihong Guo, Deputy Administrator, USDA/AMS/Science and Technology
Douglas Keeler, Associate Deputy Administrator, USDA/AMS/S&T
Paul Zankowski, Commissioner PVPO
Jeff Haynes, Deputy Commissioner, PVPO

Others Attending:

Steve Bent
Alice Bonnen, Attorney, Myers Sigel, PA
Amy Curtis, Germplasm Patent Scientist, Monsanto
Steve Davies, AgriPulse
Ann de St Remy, Agriculture/Canada
Carolyn Gray
Chris Hannon, Patent Attorney, US Patent & Trademark Office (PTO)
Leah Houg, Plant Variety Protection Specialist, Syngenta Seeds

David Holm, Professor of Horticulture, Colorado State University
Katherine Koenig, Patent Attorney, Christopher & Weisberg Law Firm
Corinne Marshall, Sakata Seed Company
Minna Moezie, Patent Attorney, US PTO
Paul Nelson, Monsanto
Mike Pink, Purification Coordinator, Monsanto
Berry Treat, Director Office for Commercialization & Corporate Development
Oregon State University
Albert Tsui, Patent Attorney, Washington State University

Call to Order and Introduction

The meeting agenda was adopted. The three main functions of the Board were discussed – 1) advising the Secretary regarding the Plant Variety Protection Office's (PVPO) Rules and Regulations, 2) making advisory decisions on all appeals to the Secretary, and 3) advising the Secretary on all questions regarding public usage of the varieties. The PVPO has also used the Board's assistance by asking for their advice on PVPO procedural matters.

Topics from the Board members

A Board member reported feedback from the seed industry on the lack of PVP protection for asexually propagated plants and the value of exploring a minor change to the PVPA to eliminate this gap. A question was proposed to the Board "Should the PVPA be amended to allow asexually propagated varieties to be protected?" Following further discussion the Board approved a motion for a recommendation to be drafted about the PVPA change and emailed to all Board members for discussion and commenting.

The following recommendation was drafted and approved by email correspondence: "The Plant Variety Protection Board recommends pursuing the expansion of the Plant Variety Protection Act to include asexually reproduced plants. The Board does not identify any other necessary modifications to the Plant Variety Protection Act at this time."

PVP Office Update

The PVPO received 198 new applications year to date in FY2017. 165 applications were examined and processed with an average processing time of less than 1.4 years. 103 certificates were issued year to date. The current unprocessed inventory is 302 applications. The Board asked if many new corn applications were received this year – 60 corn applications were received to date compared to 9 corn for all of FY2016.

UPOV Meetings

A report of the April 2017 UPOV meeting was made. At that session it was decided that there will only be one fall UPOV meeting per year from here forward with the March/April meeting being eliminated. The UPOV electronic application form (EAF) was launched in January 2017 with low usage by applicants therefore there has been discussion about reducing UPOV's fee charged to encourage more use. The concept of the International System of Cooperation was discussed at a working group meeting with the plan for current member state cooperation to be discussed at a fall 2017 meeting. The concept of how best to determine varieties of common knowledge was discussed because there is increasing challenge for UPOV members to know the whole universe of all varieties – there is a plan to look into UPOV member's variety databases with possible collaboration among members. There was also a UPOV discussion on what constitutes propagating material and a revision of the EDV explanatory notes was adopted.

The UPOV Technical Working Party for Agricultural Crops (TWA) will be held in Hanover, Germany in June 2017 and will be attended by the PVPO. Revisions of UPOV technical guidelines for soybean will be discussed at this meeting. Other UPOV meetings to be attended by the PVPO include the fall general session and the Biomolecular Technique meeting in France during November 2017.

ePVP Update

The PVPO is on track for release of the ePVP later this year. The last eight crops (Corn, Oat, Barley, Wheat, Rapeseed, Triticale, Tomato and Rice) have been implemented and added to the ePVP system. Fifty five crops are now available for data entry and examination. Testing of the online portal has been conducted with several applicants and several new applications were submitted successfully.

The PVPO is requesting that applicants who are e-authenticated submit new applications using the system. The PVPO will put an ePVP link on its website but users must be e-authenticated first.

The ePVP contractor is fixing previous crops for minor issues to be completed by June 2017. The first applicant/customer training webinar is planned for June and will be announced by GovDelivery. Ongoing internal user training is conducted every other Tuesday.

With the portal enhancements scheduled for May – the system will be ready for the submission of all crops. The bulk upload application feature will be added later in the

summer. Additional applicant/customer training opportunities will become available through the summer.

The Board asked if the UPOV EAF is running and what is the integration process into the ePVP - the PVPO can receive EAF's XML code that can be imported into the ePVP in a future version. The Board asked what additional crops will be added to UPOV EAF – UPOV plans to offer all crops in the future – the PVPO would provide its questionnaire to UPOV as a prioritized list.

2017-2019 PVP Board

The PVP Board charter was renewed on January 11, 2017. The term for the 2015-2017 Board expires on May 26, 2017. A slate of candidates for the 2017-2019 Board will be presented to the Secretary in June. There is a plan for the first physical meeting of the 2017-2019 Board to be held on the Monday of the ASTA Corn Sorghum and Soybean meeting in Chicago during December 2017.

Joint Molecular Marker Working Group (MMWG) Update

The concept of morphologically indistinguishable varieties was discussed (previously termed morphological ties). This occurs when the PVPO determines that variety B is morphologically indistinguishable from existing variety A, i.e. they look the same. Molecular markers (MM) could potentially be used as supplementary evidence in a pairwise comparison to distinguish variety A from B. The question arises about “How close is too close?” and justifies the need for a threshold. This has given rise to naming this as the Threshold Model.

This technique has shown MM error rates that are very low thus allowing for a clearer determination of the difference between 2 varieties. While there is high confidence in MM data, it is necessary to determine the error rate of genotyping. The MMWG is investigating error rates based on potential variety sampling and genotyping errors. ASTA has agreed to fund \$15,000 of this project in addition to in-kind support from some seed companies.

The MMWG is also conducting an empirical analysis of expired PVP germplasm for the similarity distribution among varieties. Other planned analyses included similarity distributions of PVP x PVP breeding populations and modeling genotype distributions. The MMWG's highest priority is for the 1) Threshold model in soybean and 2) medium priority for this model with corn. The group is also looking at the previous Reference Variety Model (the EU has named this the “American model”) with medium priority in corn and low priority for soybean.

MMWG future plans include 1) providing a Threshold model recommendation and building consensus within ASTA, 2) providing a Threshold model recommendation to the PVP Board, 3) developing a peer-review publication on the Threshold model, 4) engaging in UPOV to help shape UPOV direction, 5) presenting the Threshold model to UPOV at the Technical Committee, TWA, and BMT meetings, and 6) presenting an update on Reference variety ('American') model at BMT.

Suggestions/Recommendations

The Plant Variety Protection Board recommends pursuing the expansion of the Plant Variety Protection Act to include asexually reproduced plants. The Board does not identify any other necessary modifications to the Plant Variety Protection Act at this time.

The Board meeting was adjourned.