

**2016 PEANUT VARIETY AND QUALITY EVALUATION  
ADVISORY COMMITTEE MINUTES**

**March 30, 2016  
Tidewater Agricultural Research and Extension Center  
Suffolk, VA 23437**

The Peanut Variety and Quality Evaluation (PVQE) Advisory Committee met from 10:30 a.m. to 12 noon on March 30, 2016, at the Tidewater Agricultural Research and Extension Center in Suffolk, Virginia.

The members or representatives present were:

<b>Participant</b>	<b>Business or Organization:</b>	<b>Voting Member</b>
Roger Crickenberger	NCARS Special Projects Manager – NCSU	Yes
Boris Vinatzer	Virginia Tech – Dept. of Plant Pathology	Yes
Beth Grabau	Virginia Tech	Yes
Soyon Park	Virginia Tech	No
Doug Redd	VT – TAREC – PVQE	No
Joseph Oakes	VT – TAREC- PVQE	No
Jerry Rogers	VCIA	No
Carson Daughtrey	Birdsong Peanuts	No
Mark Simmons	Birdsong Peanuts	Yes
Jeffrey Pope	Grower	Yes
Maria Balota	VT – TAREC	Yes
Bill Foote	NCCIA	No
Gail Milteer	VDACS	No
Hillary Mehl	VT – TAREC	No
Dell Cotton	VPGA	Yes
Kumar Mallikarjunan	VT – Biological Engineering Dept.	No
Bob Sutter	NCPGA	Yes
Tom Isleib	NCSU	Yes
Daryl Bowman	NC Foundation Seeds	No
Don Baker	NC Foundation Seeds	No
Tom Hardiman	VT – VCIA	No

David Langston	VT – Tidewater AREC	No
Dustin Auman	NC Crop Improvement	No
Tom Sinclair	NCSU	No
Avat Shekoofa	NCSU	No
Mike Jackson	JLA International	Yes
Carolyn Daughtrey	VT – TAREC- PVQE	No
Brenda Kennedy	VT – TAREC- PVQE	No
Dawson Rascoe	Severn Peanut	Yes
Billy Barrow	Golden Peanut Company	Yes
David Jordan	NCSU	Yes
Pam Worrell	VT – Tidewater AREC	No
Susan Copeland	NCSU – Peanut Breeding	No
Phillips Browning	VCIA	No
Frank Bryant	VT – TAREC- PVQE	No
Jimmy Laine	Wakefield Peanut Company	Yes
Jasper Bell	VT – TAREC- PVQE	No
Dan Anco	Peanut Specialist, Clemson (via skype)	Yes
Wendell Cooper	Crop Consultant	Yes

At 10:30 a.m., Dr. Maria Balota called the meeting to order and welcomed everyone. She introduced Dr. Vinatzer, the interim department head for Plant Pathology Physiology and Weed Science (PPWS) department at Virginia Tech, who would be chairman for the meeting. Dr. Vinatzer gave a brief introduction of himself and then asked everyone to introduce themselves.

Minutes from the last meeting had been sent to the committee. A motion to approve the minutes was made, seconded and the motion was approved for the minutes to be accepted.

Dr. Roger Crickenberger, from NCSU, thanked Maria and all the PVQE staff for their efforts. He noted a couple of items for North Carolina, one being a \$2 billion bond referendum that had passed which included funding for a new building that will house additional research faculty and staff. Also, a commitment has been made from the provost at NCSU and the Dean to hire new faculty members for positions that had previously been lost due to budget cuts.

Dr. David Langston, Director of Tidewater AREC welcomed everyone. He spoke of the two main topics currently at the AREC which is the upgrading of equipment to include a recent internet upgrade

that provides the service to the buildings from the administration back to the graduation student trailers and all the buildings in between. The second item is the recruitment of a field crops entomologist who will be replacing Dr. Ames Herbert who retires the end of May. Candidates will be interviewed during the next two weeks.

Dr. Vinatzer gave some additional updates for Virginia Tech. He became interim department head for PPWS last October. He said that along with the President and new Provost, the College would be going in a direction of hiring new faculty and developing more areas. They want to increase in-state student numbers as well as out of state. There is still the plan of forming a new School by combining PPWS, Crop Soil and Environmental Sciences and Horticulture departments. This process will take 1-2 years to complete.

PVQE update was given by Dr. Maria Balota. The PVQE budget was passed out which showed the budget years for 2007/2008 to 2015/2016 with the support listed for NCSU, Virginia –Carolina Peanut Association, Virginia Tech Royalties, South Carolina Peanut Growers, North Carolina Peanut Growers and Virginia Crop Improvement Association. Dr. Balota noted that there were no current royalties being received by the program. She noted that she works closely with Dr. Crickenberger of NCSU and that the SC Peanut Growers, NC Peanut Growers and the VCIA all continue to show their support with funding. Most of the funding budgeted goes to the salaries and wages for PVQE staff along with funds for supplies and travel to the planting locations.

Dr. Balota noted that the 2<sup>nd</sup> book of PVQE results had been printed and she had some hard copies if anyone wanted one. There is also an electronic PDF file that she can send out. She noted that they had worked with two producers in North Carolina and will again work with them once again this year, Mr. Taylor Slade and Mr. Danny McDuffie. She was happy to have a new collaborator in South Carolina, from Clemson, Dr. Dan Anco, who was joining the meeting via Skype.

Dr. Balota was asked about the effects of the bad weather during harvest time and she said there were only minor problems in this area for her staff to finish harvest. There was nothing that was detrimental to the results.

A PVQE update from South Carolina was given by Dr. Dan Anco, who is a peanut specialist with Clemson University. He started during the fall last year so wasn't there for the entire trial period; however he said harvest went fairly smooth even with the moisture that was present in the soil due to the heavy rains. He is preparing for the new season and will start planting in 4 weeks.

Dell Cotton asked Dr. Balota about her group having to travel to South Carolina now that Dr. Anco was in place and Dr. Balota said that her group would not have to travel and that would cut down on some expenses with the South Carolina work being done by their staff and with their equipment.

A peanut breeding update was given by Dr. Tom Isleib from NCSU. There were three handouts given. Dr. Isleib explained that the peanut lines have to pass through the PVQE program for testing before they will be released for public use. If a line does not do well during the PVQE trials, then it will be dropped. Even though NCSU is developing the lines and doing their own trials, the lines must go through PVQE for final testing. The PVQE program is very similar to what growers will do in their fields. The first handout, "Documentation for North Carolina State University Lines Entered in the 2016 Peanut Variety and Quality Evaluation Program" was explained. There are 18 lines that will be submitted to the PVQE program for 2016 which is shown in table 1 of the report. Seventeen of these lines are experimental and 16 of those have been through the PVQE trials at least once. There is one line that was not able to be tested with proper results last year due to a program with the seed in a freezer that broke down so that line will be used again this year.

Tables 2, 3 and 4 show the lines adjusted for pod/seed characteristics, blanching characteristics and fatty acid characteristics during PVQE program trials from 2011 to 2015. There was a question about the "names" of the lines and Dr. Isleib explained that the lines are given a number and then letters followed (such as 01, J, CL, Sm, T) which indicated certain qualities. A line will not be given an actual name until it is ready for production. Tables 5, 6 and 7 of the handout show NCSU trials and characteristics of pod, seed, and disease reactions. Table 8 is adjusted for sensory attribute (flavor) as evaluated by a sensory panel at NCSU.

The second handout compared line N110200J with varieties Gregory, Bailey, Wynne, and Emery. Because of inconsistent results, this line will be put back in the PVQE system this year and more results will be obtained as this could eventually be a replacement for Gregory. The line is not ready for public release yet.

The third handout was a summary of the variety situation in North Carolina for 2016.

Dr. Maria Balota led the next discussion on the PVQE multi-state project which is collaboration between 3 states (Virginia, North Carolina and South Carolina) along with the Universities (VT, NCSU and Clemson) and with producers in those states. The multi-state project is done in collaboration with the USDA. The current project which started in 2013 runs 5 years so therefore it is over with USDA in 2018. Dr. Balota would like to start now on getting discussion groups together to come up with objectives for a new 5 year multi-state project to present to the USDA. The previous project administrator was Dr. Jody

Jellison from Virginia Tech but she has left for a new position in another state. The new project administrator is Dr. David Monks from NCSU. Dr. Balota would like to start working on objectives this summer as basically some of the same objectives are used every year but to be successful with the USDA, there needs to be one or two new, different objectives based on the current industry needs. It was asked why the PVQE was in collaboration when the USDA didn't have funding on the project. It was explained that the USDA provides funding thru hatch projects which are used for faculty and other salaries. These USDA funds can only be used where there is evidence of a multi-state project. Dr. Balota was told that she should begin to get discussion groups together to give her objective ideas for a new 5 year project plan.

Dr. Balota then went on to discuss an industry need to evaluating hull cracking. She wants to have hull cracking as a new test during the PVQE trial testing. One of her technicians, Doug Redd, along with the help of the TAREC Trades Technician, Jon Stein, have built a device to test the grams of pressure required to crush pods, either seem cracked or side cracked. Dr. Balota passed out a table showing results of a recent test with just a few samples. The Bailey variety was easiest to crack while the Ga06G variety had to have the most pressure to crack. After some discussion on the aspects of the testing, it was decided that this was a good way for Dr. Balota and the PVQE staff to start the testing of hull cracking. Dr. Balota will have to come up with a methodology and procedures to capture the data.

Dr. Kumar Mallikarjunan, from the Department of Biological Systems Engineering at Virginia Tech gave a presentation on new developments in aflatoxin detection. Dr. Kumar said there was a need to do analysis of aflatoxin detection at an affordable price and outside of the lab setting at a field level. He worked with labs and did field testing in several countries and now has a device that is hand held and can be taken to the field for testing of aflatoxin. The device holds a tablet and any tablet with a camera can be used as long as the software can be installed. Samples are taken from a field, the sample is crushed and then solvents are added. A dropper is used to put the sample into a tube and then a test strip is used for results. The test strip is inserted into the device and the software reads color changes on the strip to get the results. The device costs around \$500 and the strips used costs between \$4 and \$5 each. This is much more affordable than testing at the labs. The device can actually be used for any type of lab testing strips and is not limited to just the test for aflatoxin. The device is still in the development stage so it is only available through his department at this time.

There being no further questions or business, Dr. Vinatzer adjourned the meeting and lunch was served.