**Minutes – Small Fruit Crop Germplasm Committee Meeting**

**24 October 2013 10:00 AM – Beltsville, Maryland**

**Meeting led by chair, Dr. Kim Lewers, USDA-ARS**

**Minutes prepared by Christine Bradish**

1. CGC Administrative
   1. Roll Call: Kim Lewers, Pat Moore, Phil Stewart, Courtney Weber, Ioannis Tzanetakis, Penny Perkins, Andrew Jamieson, Nick Vorsa, Gary Kinard, Marty Reisinger
   2. Minutes
      1. Christine Bradish is recording this year’s (blame me for having to read a lot, students take good notes!) and we approved last year’s.
   3. Discussion on Membership
      1. Membership lasts 3 years
      2. Next meeting many members will be done with their terms, including Chair
      3. Ioannis Tzanetakis was voted in last meeting in Tampa
      4. Penelope Perkins-Veazie (NC State), Nicholi Vorsa (Rutgers University), and Andrew Jamieson (AAFC) are interested in membership and were voted in by members in attendance
   4. Next Meeting Venue – 2014
      1. NCCC212 in Corvallis?
      2. Conference call is always a possibility in tough times, ASHS is usually too expensive.
      3. It is traditionally always associated with this meeting, so the members voted to keep it with the NCCC212 meeting and for 2014 it will be held in Corvallis.
2. Gary Kinard – National Germplasm Resources Lab
   1. The small fruit committee is one of 42 germplasm committees
   2. NGRL is facing budget cuts, as is the rest of the government
   3. $70,000-80,000 for plant explorations in FY2014 for the US
   4. Data-base project with the National Agricultural Library to digitize much of the taxonomic data available
   5. GRIN system will be moving from ‘GRIN classic’ into ‘GRIN global’ system very shortly, hopefully before the end of the year. The old GRIN system was in place for about 25 years. The look and feel of this new system will be different, but hopefully better, both for internal and external users.
   6. Phytosanitary certificates for plant shipments from APHIS overseas have gone up significantly over the past 4 years ($61 per sample). Need to look at restructuring somehow to cut/redistribute these costs. Kim Hummer added after the meeting: NCGR has a deal with Oregon Dept. of Ag so our phyto costs remain low (about $18 per each – but the costs will increase over time. Corvallis asks that requestors provide their UPS or Fed Ex account number so shipping costs are kept low.
   7. What are the challenges we are having with the CGCs? Looking for feedback from each committee, comments can be sent in to Dr. Kinard in lieu of a formal survey.
   8. Chair meetings for CGC chairs have been virtual versus in person because they are logistically very difficult.
   9. Comments:
      1. Dr. Kim Lewers – only about half of the members are about to attend the meetings. Get less than 100% feedback from members on exploration proposals, and germplasm evaluation proposals – Is this normal? Gary Kinard said it is.
      2. Discussion topic by Mr. Kinard / Dr. Vorsa – what is our mission statement and purpose?
         1. This is reflected in our membership – Gary Kinard says our attendance is good or above average for germplasm committee.
         2. Dr. Weber says our mission as germplasm is apparent in that we are using germplasm to improve our crops – using the germplasm repositories as a resource to introgress and explore traits.
         3. Gary Kinard – traditionally these committees are inclusive in terms of being breeders and geneticists with a mix from federal, university, and industry partners. Each committee needs to set their own by-laws (as our committee has done) and invite more people from other groups (like nutrition, pathology, entomology, virology, etc.) to increase membership
3. NCGR Report
   1. Kim Hummer sent a report from Corvallis (USDA could not travel due to the government shutdown during the first 16 days of October) and a supplemental form and will set up a teleconference at a later date with the members. Kim Hummer suggested mid-November.
4. Plant Expeditions
   1. Recent plant collecting expeditions
      1. Vaccinium collections in National Forests this August by botanists in George Washington National Forest (VA) and Monagahala National Forest (WV). Additional sampling this October in the Smoky Mountains (TN and NC). Will use genotyping to identify the species. (Sponsored by NGRL not NCGR).
   2. Future expeditions/exchange
      1. Dr. Lewers has an acquisition request for strawberry – Anthracnose (*Colletotrichum gloeosporoides)* is moving from Florida up the coast, no resistance in material in FL, NC, and MD. NC is going to be the next to be hit. Barbara Smith has resistant material and is working on a leaf disc assay, which she’ll be willing to come up and teach. She has around 20 accessions that are resistant to all 3 species of anthracnose, but they’ve been sitting in a field and probably are infected with virus so need to be put through meristem culture and virus testing in order to be cleaned up and put in the repository. Need to put in a grant for this. Questions/comments:
         1. Should we test them for viruses? Can we start using the plants right away before putting them through meristemming?
         2. People most interested in this proposal would be Driscolls (CA), Vance Whitaker (FL), Jeremy Pattison (NC), and Kim Lewers (MD). Not so much of an issue in Northern climates like NY and Canada.
         3. Regardless of virus status, need to meristem them, clean them up and put them in NCGR so breeders have them as a resource for introgression.
         4. Where did this material originate from? Suspected from Mississippi State, LSU, Kentucky, NJ, NC. Should look through the pedigrees and see if they already possibly have the accessions? For some of the material the pedigrees may be lost.
   3. Small-fruit Collection Priority List
      1. Cranberry collection at Rutgers University – Dr. Vorsa. How to ensure that this gets entered into GRIN global system? PI number assignments and doing plant distributions are a possibility but complicated. Kim Hummer added later that she will discuss with Nick Vorsa securing this germplasm and insuring data entry into GRIN
      2. Issues run into – send material to the repository and get back word that their material was incorrectly labeled / misnamed – taxonomic issues?
      3. How do you standardize this ‘trueness to typing’ issue in a species? Often the NCGR has more than one clone of a cultivar. Do we need to go through every 10 years and test (using molecular markers or something else) to rogue out off-types? Kim Hummer added afterwards that NCGR would need extra funding to do molecular testing on a regular basis – but would be happy to do so
5. CGC germplasm evaluation grants
   1. Annual Reports
      1. Janet Slovin – received grant for FY2013. Was one of two proposals submitted to National Program Staff and had a slightly higher score from reviewer members. Plan is to go through diploid Fragaria and evaluate selections that flower under high temperature. Oral preliminary report is that 90 accessions were received from Kim Hummer two days before the federal government was shut down and the plants were stored in a walk-in cooler for three weeks. Some survived and will be planted following the meeting. Will provide annual report in 2014. Kim Hummer added that NCGR distributed many large (and small) orders for small fruit this year. This was a huge order – but because this supported Sloven et al. new CRIS project, NCGR made the effort to send every *F. vesca* as requested.
   2. Small Fruit Research Priority List (Handout)
      1. Trait prioritization for small fruit species that the breeders focus on
      2. What are the most important issues that we need to focus on so that when we send out RFPs, we can prioritize proposals that focus on the critical issues? Kim Hummer added that we are to keep in mind that the germplasm that is evaluated needs to be in the NCGR collection – so that it can be entered to GRIN-Global. Breeders’ selections that are not in the NCGR collection are not the focus of Small Fruit CGC funds.
         1. Suggestions:
            1. Fragaria – Fusarium, Anthracnose (*Colletotrichum gloeosporoides)*
            2. Rubus – SWD (non-choice)
            3. Vaccinium (cranberry ) – fruit rot complex
            4. Vaccinium (blueberry) – SWD, mummy berry?
            5. Target new faculty
            6. Target new species – haskaps, etc. They will be added to the list of small fruits and so will their trait priorities for breeding.
6. Small Fruits Breeding Programs
   1. Status of small-fruits breeding programs
      1. Andrew Jameson’s breeding program in Nova Scotia received a lot of strawberry germplasm from the Quebec program that was closed
      2. Michael Dossett form the British Columbia program has taken over the breeding program from Chaim Kempler in British Columbia. Strawberry was de-emphasized and blueberry was strengthened. The British Columbia program’s current funding has raspberries at 50% of effort, blueberries at 40% and strawberries at 10%. There is interest in the strawberries here, just not much money to support it, for a variety of reasons. Currently we are whittling down the short-day selections to those that look the most promising as fresh or dual-purpose and are no longer working on processing-only strawberries and not doing any crosses. We are hoping to start crossing strawberries again in a year or two, but with an emphasis on day-neutral varieties. A more pressing concern for this program is that, while they have funding in place for the next 4.5 years, at the moment it is entirely dependent on soft money with the breeder working on a contract basis from the industry. This, combined with the fact that my immigration status in Canada is still unsettled and I may not be allowed to stay here past spring 2014 or 2015, means that this program is still very much in jeopardy of being lost in the not too distant future.
      3. Rutgers University strawberry program looking like it may close.
      4. If any programs are in danger of closing, should contact the USDA-ARS so that the germplasm can be salvaged
      5. Driscoll’s needs to be in contact with the ARS-NPS about concerns regarding Univ of California breeding program
   2. Vulnerability statements updates
      1. New format, new statement that emphasizes the importance of the germplasm collection. Was written by Kim Hummer for strawberry and blueberry, got feedback from committee. Kim Hummer says the blueberry statement needs a lot of work. Many sections blank – need to be filled in. She’s started on Rubus and plans to have it to co-authors in November. Need to write for other crops.
      2. MUST have up-to-date vulnerability statement, website and bylaws in order to be considered a valid committee.
      3. Suggestions: need to put something about breeding program status in the vulnerability statements.
      4. Gary Kinard says NIFA and other government programs have used these statements to give out funding, so having them up to date is important
      5. If no one has any opposition or edits to the vulnerability statements, then they will be posted on the website in 1 week.
7. Other Business
   1. GRIN Global demonstration by Marty Reizeinger
8. Adjourn