

## Minutes of the Annual Meeting

Project Number: NC-140  
Project Title: Rootstock and Interstem Effects on Pome- and Stone-fruit Trees  
Period Covered: October 1, 2007 to September 30, 2008  
Date: November 11-12, 2007

Presiding: Dr. Harold Larsen  
Meeting convened: November 11, 9:00 am

Harold Larsen welcomed the group and reviewed the agenda.

**Motion: A motion was made and seconded to adopt the agenda as amended. Motion passed unanimously.**

**Motion: A motion was made and seconded to accept the minutes as is. Motion passed unanimously.**

### Attendees:

B. Black, Utah State University	R. Elkins, University of California
B. Randal, Ohio State University	R. Marini, Pennsylvania State University
D. Miller, Ohio State University	R. Moran, University of Maine
E. Hoover, University of Minnesota	R. Parra, INIFAP - Sierra de Chihuahua
G. Fazio, Cornell University	R. Pokharel, Colorado State University
G. Lang, Michigan State University	S. Castgnoli, Oregon State University
G. Reighard, Clemson University	T Roper, University of Wisconsin
H. Larsen, Colorado State University	T. Lindstrom, Utah State University
J. Clements, University of Massachusetts	T. Robinson, Cornell University
J. Masabni, University of Kentucky	T. Yoon, Kyungpook National University
M. Kushad, University of Illinois	V. Gonzalez, FPC-Mexico
M. Newell University of Maryland	W. Autio, University of Massachusetts
M. Parker, North Carolina State University	W. Cowgill, Rutgers University
P. Domoto, Iowa State University	

### Future meeting sites:

2008 – Mexico - Terrence Robinson (chair), Emily Hoover will write the annual report and Brent Black will take and prepare meeting minutes.

Two scenarios were presented to the group:

1. Four day meeting –Arrive on Nov 7 (Friday) and tour Nov 8 and 9<sup>th</sup>. Organized around the symposium in Mexico (Wed 12<sup>th</sup>/Th 13<sup>th</sup> /Fri 14<sup>th</sup>). . Fly to Chihuahua City (from Houston or Dallas). Fly either Continental (3) or American (1). From Chihuahua City take a tour of the industry Sat. Casa Grande on Sunday, through mountains to XXX, Meeting starts on Monday, Tuesday in Cuauhtémoc Fly back on Wed from Chihuahua City (CUU). The dates are still under discussion, but the format is set.
2. Arrive on Sunday and skip the tour and just have the business meeting

This decision was tabled for members to ask more questions. Decision was made Tu. am, that the tour would be included. Members will travel to Chihuahua City Nov. 7<sup>th</sup> and finish on 12<sup>th</sup> and fly home on Wed. Nov 13<sup>th</sup>.

2009 – Minnesota – Emily Hoover (chair), Brent Black will prepare the annual report. The secretary for the minutes will be appointed when the decision for 2111 is made next year.

2010 – Utah – Brent Black (chair)

It was noted that none of the Canadians who have plantings were in attendance. Reasons were varied but their absence was noted. Discussion also ensued about other fruit meetings in “competition” with NC140 timing (specifically small fruit meeting and grape meeting).

### **Report from the Administrative Advisor**

Bill Randle, head Ohio State University, is the administrative advisor for the group. Attending this meeting, Bill had a number of objectives one was to get to know the group and the issues facing NC140 and bring suggestions to the group.

Since agreeing to become AA, the role of AA to the group includes:

- National Budget Issues
- NCRA Office Updates
- CSREES News
- Project Timelines Awareness

Impact of NC groups is becoming increasingly important to CSREES. NC140 does have impacts on record, but should consider including a part of the regular annual meeting to discussing recent impacts that can be documented across the group. Because the groups activities are long-ranging, updating impacts may be an every other year activity.

AA’s responsibility also is to keep the list of participants current, so if any members have changes and suggestions, these can be included or eliminated from the participant list.

Web page looks good and remains current which is something the NCAC4 looks at in mid-term evaluation. Publications and presentations also have been a major part of annual reports, something which is again important when evaluation occurs.

All members need to make sure their information for themselves and others at their site are up to date. Members can do this on line. Each state needs a contact person but others can be in the database. Please add technicians if they need to know about protocols.

Discussion with Dr. Randle:

Members asked about any feed back from administrative review of project renewal. The only feedback was that the project was approved. Dr. Randle offered that the proposal was well written and met the standards set of renewal. This is a highly thought of project.

A question arose about whether the USDA still has the Secretary of Agriculture award exists. USDA award will be pursued by Dr. Randle – he will follow up with the undersecretary of ag (former dean of GA).

The point was made that this committee has close ties with industry which has led to research that has been pursued. The outreach component is strong via the web site (NC140.org), state grower's groups as well as the dwarf fruit tree association. Regional funds have allowed this group to stay together. The NC140 concept would like to be duplicated in Europe – but had only had 3 years of funding and thus it did not continue. This research is long term in nature and the regional funds have allowed the objectives to stay long term.

### **Ongoing cooperative plantings**

1998 Cherry – Greg Lang reported:

- Western sites of the sweet cherry planting were discontinued with report sent out by Frank Kappel.
- The Eastern sweet cherry planting will was terminated at the end of 2006. Greg Lang will be writing up the report. Some cooperators are leaving planting in (UT, WI). UT will be doing root sampling (destructive). NY will be doing a pruning severity study for at least 2 years. CO sampling nematodes and canker. MI looking at fruiting spurs.
- The Eastern tart cherry planting will terminate at the end of 2007. Protocol will be sent by Dr. Lang. Send data to Greg Lang by Jan. 15, 2007.

1998 Apple Terence Robinson reported:

- Terence Robinson still collecting a bit of data outstanding. APS journal publication.

1999 Apple – Wes Autio

- Wes distributed report (on line). Data submission is Jan. 15<sup>th</sup> 2008 same as 2007. Discussion about data collection above and beyond standard data was discussed and is included in the protocol. Read through the protocol with additional data required. Page 5 has overall summaries. Wes pointed out that there was a significant interaction with site/rootstock but this does not necessarily mean there is biological importance. Discussion about nomenclature of the Geneva rootstocks ensued. CG5202 should be called CG202 (as there are 2 distinct clones of 4202 and 5202). Is 4814 going to be named? It is currently a candidate. 7707 will not be released. 5179 probably is not going to be named.

2001 Peach – Greg Reighard reported

- Paper will be sent out to cooperators and will want comments back by Jan. Paper should be out in 2008. When wrote 1994 planting paper, comments AFTER the paper published. When the draft arrives, review carefully. Send data to Greg Jan. 15 2008

2002 Peach – Rachel Elkins reported for Scott Johnson.

- Cooperators need to think about authorships. (Discussion about who and how many cooperators for each site was discussed). The first page of the handout is for cooperators to fill out. The paper is just about finished. Review information in handout(s). If a cooperator did not attend the meeting, they need to get back to Scott.

2002 Apple – Wes Autio reported:

- Wes distributed protocol sheet (same as previous years). The paper that summarizes the 5 year planting is being written and will be out end of Nov 2007. Cooperators review and need to get back to Wes by early Dec. Each of these stocks should be semidwarfing or semivigorous. The trees with the wrong rootstock will be more dwarfing than B.9 and

similar to M.27. Once data are corrected for mistaken rootstocks they should be sent to Wes Autio by Jan 1, 2008. Please also send a note to Wes with an explanation of any trees identified with the wrong rootstock.

2002 – Cameo Trial – Jon Clements reported

- The planting is in MA and NJ with Cameo as the scion and G16, M9 and B9 rootstocks. G16 produces the largest tree with no difference in yield efficiency. NJ trees are bigger (2X) than MA. Purpose was for outreach. 5 year summary data will be published in APS.

2002 Pear – Steve Castagnoli reported

- The trials are in OR and WA. Data was shared for this year as a handout. The 2 states reported data independently. There were questions about the commercial status of Pyro233. Columbia Basin nursery has it but how much is being propagated was not reported.

Pyrodwarf has underperformed – not precocious, suckers, low yields, and lower fruit size.

2003 apple – Rich Marini reported:

- 2003 dwarf trial - most sites sent data but some are missing. See table in handout. Data submission was requested by mid-February so a draft paper for review will be available next Nov. Rich is proposing for data collection of the core set to look at pair wise comparison (discussion ensued as the best way to pool variance). Measure burr knots, tree ht/spread. Rich will send protocol to cooperators (with added columns).

2003 apple physiology – Rich Marini reported

- Data analysis has begun. Rich discussed the appropriateness of covariance within the report. Rich walked through the data analysis from the paper. Keeping the crop density throughout the growing season was discussed as well as other ways to analyze the data. When to publish was discussed. Protocol will be sent out. Rich suggested to choose 2 scaffold branches to count flowers instead of whole tree. Sampling error was discussed if only choose 2 branches. Discussion ensued as to what additional data should be collected.

2002 Peach physiology – Rachel reported for Scott. The 5 year report has been started with a draft will be available around the end of the year.

2004 Pear – Steve Castagnoli reported on this trial – NY, WA, OR and NS. Pyrodwarf not doing well in this trial either. Taylor's Gold is not producing well in NY. The conclusion was it was a nonprecocious scion cultivar. CA concurred.

2005 Pear – Steve Castagnoli reported that this trial was planted in a number of locations with varying scion cultivars. Data coordination is being done by Steve.

2006 apple replant – Terence Robinson reported on this trial that is replicated in 10 sites Terence noted what data was missing from sites in previous years. He handed out a protocol. The trees were to be allowed to fruit at 5 fruit/cm<sup>2</sup>. There was variation as to whether trees were allowed to crop. Follow protocol as handed out.

2006 cherry physiology – Greg Lang reported on the 4 sites of this trial. Next year will be the first cropping year. The discussion on the apple crop load data analysis will be helpful. Crop load treatments will be applied for 2009 cropping year

Terence Robinson announced the upcoming (Aug 4-8, 2008) hosted at Geneva NY. (web site [www.nyaes.cornell.edu/hort/ishs/](http://www.nyaes.cornell.edu/hort/ishs/) ) Abstracts are due March 1, 2008.

A paper on the history of NC140 is being written.

## **Future plantings**

**Web Site:** the web site challenge is to keep up to date on the publications. There are links to the abstracts (e.g. ASHS) and if nonmembers want to then buy the article they can. Were publishing APS papers as pdfs on site. Cheryl and Win were talking about getting the NC140 member papers on line. APS is negotiating than ISHS to put articles on line through ISHS. This might preclude giving the article away. The bibliography for NC140 group has been developed for the paper on the history of NC140.

List serve is also maintained by Jon and Win. Web site is a source of rootstock research for researchers and growers.

## **State/Province Reports**

Members present shared results from their NC 140 plantings as well as other rootstock plantings that are on going. By December 1 - All members need to send abstracts to Terence and must include the publication list.

## **Dates of importance for cooperators:**

Nov. 15 – upload full state report to web site (nc140.org)

Dec. 1 – abstract of state report for inclusion of annual report

Jan. 15 (for most plantings) – data submission to coordinator. Date may vary for different plantings, check the protocols for your plantings