MINUTES OF THE NE 1014 TECHNICAL MEETING – 2005

Date: January 15, 2005

Presiding Officers: Craig Yencho (NCSU) Chair; Zenaida Ganga (UM) Vice-Chair; Chad Hutchinson (UF) Secretary

Participants:
Cornell University: Don Halseth
Walter De Jong

University of Florida: Chad Hutchinson
J. Marion White
Doug Gergela

University of Maine: Zenaida Ganga,
Greg Porter
Steve Reiling

North Carolina State University: Craig Yencho
Mark Clough

Ohio State University: Matt Kleinhenz

Virginia Polytechnic University: Susan B. “Rikki” Sterrett

Rutgers University: Mel Henninger

USDA-ARS: Kathy Haynes

Venue: Contemporary Resort, Walt Disney World, Orlando, Florida

Agenda Items:

1. Call to order, additions to and approval of agenda
   • Call to order 8:10 - Craig Yencho
   • Meeting agenda was introduced; addition or revision was solicited; agenda approved (Marion White and Don Halseth)

2. Introductions
   • Skipped

3. Minutes of last meeting – C. Hutchinson
• Minutes from the 2004 meeting were presented and moved for acceptance by Chad Hutchinson; second by Mel Henninger

4. Appointment of Committees – C. Yencho
• Site Selection – Mel Henninger and Greg Porter
• Resolutions – Craig Yencho and Don Halseth
• Nominations – Kathy Haynes and Zenaida Ganga

5. Local Arrangements – C. Hutchinson/M. White
• Chad Hutchinson and Marion White advised that the registration fee would be approximately $85 for the meeting. They also asked for a final count of those who would be attending the evening dinner at the Hawaiian Luau.

• The committee was advised that the Special Grant can only be submitted for a one year period. At this time, the appropriation is annual therefore the grant period has to be annual.

• A mid-term review of all projects will be conducted. No final details on the conduct of the review; however, the guidelines are being written and may be finalized by late February or early March. It was noted that NE1014 is 1 ½ years into a 5 year renewal.

7. Cooperative State Research, Education, and Extension Services (CSREES) Report
• No report offered.

8. Eastern Region USDA-CSREES Potato Special Grant project update – G. Porter
• Proposal deadline continues to move forward. The deadline in 2004 was November. Although the grant is fairly easy to put together, Greg advises that we do not procrastinate in preparing the documentation. Please make sure deadlines are met appropriately so that the grant opportunity is not missed.

• Greg Porter appreciated the help on the progress report from Don Halseth and Zenaida Ganga.

• Greg Porter is expecting some cuts in the proposed funding levels but he expects these to be similar to the previous year.

• Zenaida Ganga suggested that the group should revisit the objectives and approaches of the proposal based on suggestions from the reviewers submitted to Greg. Likewise, there is now a geneticist in Maine that may want to be involved in the proposal.
• Craig Yencho: A molecular emphasis should be included. However, funds are limited so the geneticist may need to use CSREES money to enhance their proposals.

• Greg Porter: The geneticist should be included but questioned where the money would come from.

• Craig Yencho: A molecular project should have a field component that $3-5k from the Special Grant could cover. Some part of his project should have a field component that could be funded. This is not NRI and maybe $3-5k could be included in the project.

• Greg Porter: If you have concerns, please submit them well ahead of the deadline so that they can be evaluated by the group before the deadline.

• Greg Porter: This past grant was the fourth proposal as a joint project. The first proposal was submitted Jan 2002 and funding began July 2002. The grant was terminated June 30, 2004. To tie up loose ends with contractors, UM needs evidence that each sub-contractor has completed its requirements. So, each subcontractor needs to evaluate the plan of work and report on the completion of each identified task.

The second grant has a termination date of June 30, 2005 so please start preparing the report now.

• Craig Yencho congratulated Greg Porter for his hard work on the project.

9. State, Federal, and Provincial Site Reports

Prince Edward Island – None Given

Nouveau Brunswick
• Report submitted via email by Richard Turn et al. Staff changes read by Craig. They would like to begin participating as soon as the “regulations” regarding bacterial ring rot are met. No one at the meeting new the particulars of the regulations.

Quebec – None Given

Florida
• MarionWhite: Hastings 17,000 acres in 2004. No longer any production in Homestead. Commercial contracts are very slow. Low-carb potato acreage around 2,500 acres this year.

Maine
• Trials were very high yielding but had too much rain, above normal rain for every month in northern Maine. Rain and late blight have resulted in storage problems. Average yield was 320 cwt/A. Russet Burbank quality was good. Demand for fresh potatoes is suffering. Processing demand was better but production was high. Greg Porter is testing all lines for black spot bruise and shatter bruise. 62,000 acres are planted to potatoes in Maine. Greg Porter indicated that more potential this year for late blight in seed production but occurrence was pocketed in the limestone area. Testing program has started again for late blight certification and is funded by the state.

New Jersey:
• Decent growing season. Heavy rain was isolated. Mel Henninger’s plots were missed for the most part. Pretty good harvest situation for NE material in the first week of harvest. Significant rot during late harvest. Light heat necrosis. More hollow heart than IHN. ‘Superior’ yields were the worst he ever had. Mel Henninger washed all potatoes this year before grading. This resulted in a slightly higher rate of pick-outs but grading was easier. 3,000 acres of potatoes in New Jersey in 2004. Could be a drop of 10% in 2005.

New York- Upstate & Long Island
• Don Halseth: Acreage was down to 20,500 acres. Lowest level since 1915. 3,000 acres on Long Island. Wet year. Some flooding on low lying muck fields. Some flooding on upland fields as well. In 2003, yields were very high but market was soft and 10% of the crop was dropped. In 2004, yields were average but movement is slow and price is low. Very discouraging for growers. Late blight in several areas of upstate NY. A few fields had to be killed because of it. Storage is fairly good and growers are sitting tight.

North Carolina
• Mark Clough: Late frost, rainfall spotty. Some soft rot is wet areas. Some areas in the south were dry and size was off. However, it was a decent season, yields were average. Because of the warm spring, bad corn borer problem. Many growers and NCSU missed important spray window and corn borer knocked the tops back.

• Craig Yencho: Craig moved on campus. Mark Clough took on more responsibility including an 80/20 research/extension split. North Carolina had 17,000 acres in production this year. Keith Masser has opened a joint venture of a potato flaking (Keystone Potato Products) business is in SE Penna. Manager is a former grower, Ray Meiggs. Plant is scheduled to open the end of January.

• Mark Clough: Movement all season was slow. Black Gold was moving 2 trucks a day at the beginning of the season instead of 40.

Ohio – Not Given
Pennsylvania – Not Given

Virginia
  • Rikki Sterrett: Early season was cool. Late season was warm leading to IHN. Rainfall in June and early July resulted in high IHN in some clones because of an early dry spell. Long season, 114 days which benefited skin set on early varieties. Rainfall late ruined the russet and chip trials. Black heart was bad in commercial production. Soft rot was bad because of burst lenticels. Had a slow fresh and chip season. Acreage will be down for ’05.

10. Comments from Industry Representatives?
  • No representatives present.

11. Pathology Test Reports

Mel Henninger: New seed piece treatments to reduce silver scurf. Increasing problem in Fresh Market production in NJ. Reba and Yukon Gold have a big problem. Seed piece treatments are not working. Not protecting daughter tubers. Black dot may be part of the same complex.
Mark Clough: Pathologist in North Carolina recommended Maxim.
Mel Henninger: Maxim was no help in trials.
Don Halseth: Maxim was a notch or so better in appearance but not enough to improve marketability. No benefit of seed piece treatments on yield but just a slight improvement on silver scurf.

12. Breeding Reports

Report by Walter De Jong: Favorite lines are NY125, NY 126, and NY129. NY126 and NY129 will probably be the next to be released. NY129 would be the first GN resistant red. NY125 and NY126 will be the breeder’s choices.

NY120 has done well for a few years. Grower picked up NY120 this year and he and the chip company like it. Hopefully, what the grower grew may be different than what Walter’s program has been distributing.

Adirondack Blue (S45-5) and Adirondack Red (T17-2) have been released.

Greg Porter: NY commercial lines in Maine: Monticello up to 40 seed acres a couple of years ago. Got one chip grower to grow it but has dropped to 7 seed acres because of FL contracting issues. Grower in Maine was skeptical because of black spot bruise but had great storage with the potato. Went back to seed grower and wanted more. Buyers in New Brunswick are now paying more than Maine and all seed is going to Canada.

Greg Porter: Marcy was on large scale chipping test this year because of scab resistance. Rave reviews because of yields and scab resistance. Reba was a disaster. Many growers did not harvest it because of rot in the field.
Report by Kathy Haynes: Named 1806-8 and 1816-5 as breeder’s choices for this year. B1816-5 is behind in seed production because of bad seed year. Several new clones are going into NE1014 project including B1763-4, B1870-3, B2274-2, B2291-7, 2319-1 (yellow flesh more intense than YG), and 2319-3 (yellow flesh).

- Combining study for IHN will be repeated in ’05.
- The horizontal late blight study with Barb Christ has finished with 12 clones resistant to late blight identified. For 2005, clones will be evaluated in West Virginia to all races of late blight.
- Diploid late blight evaluations will continue for one more cycle with Barb Christ.
- Recurrent breeding scheme study in diploids with Barb Christ has been completed. Three loci associated with early blight resistance. May uncover more QTLs for early blight resistance not associated with lateness with future screening.

Craig Yencho and Mark Clough: 1816-5 should be released for the specialty market. Real winner.

Report from North Carolina:
- ‘Harley Blackwell’ in significant acreage with three growers in 2004. Season started well but went bad. Circular cracking (star crack) on HB that left them dumbfounded. Couple of growers may buy a load or two this year. The growers that had it got stung and are backing off a little in 2005.

- MS student used bulk segregation analysis to evaluate IHN. From this analysis, one marker explains 17% of the occurrence of IHN. This is an area that NCSU can contribute greatly because little is know about the genetic or physiological basis. Significant acreage has been lost yearly due to IHN.

- Mark Clough and Craig Yencho still do crossing but focus will shift to specialty types.

Report from Maine:
- Promising two clones are AF1758-7 (Reeve’s Kingpin) and AF1808-18. AF1808-18 may not make it because of external defects.

- AF1758-7 table stock, disease resistance (GN, net necrosis, common scab and powdery scab and Verticillium Wilt). Sometimes netted. This year had very good yield. Enough seeds are available to evaluate the clone in a larger scale; if interested contact Zenaida Ganga

- Breeder’s Choice: AF2206-9 and AF2211-9. Both are chippers. AF2206-9 is medium late. AF2211-9 is in the SFA trials is medium early, with bright skin and good appearance. Yields comparable to ‘Atlantic’ but has very good chip color
• AF875-15 has been licensed for Canadian production.

• This year, no crossing was conducted because of greenhouse construction. Did evaluate about 30,000 single hills and five sets of yield trials separated for russets, round whites, and reds. Disease screening in the field were also conducted.

13. Seed Orders, Shopping List, new entries – G. Porter

A9014-2: Good in NJ, NY good. Good in Maine good cooking tests. No PVY in Maine. Poor appearance in NC but is a “russet”. Yield not stellar. FL: Lots of shapes.

AC Red Island: FL: Dark skin, attractive, slightly netted. NJ: Netting and IHN are moderate, tuber type varies from long to oblong. VA: IHN severe. NC: IHN is a problem. ME: IHN high. NY: Bad vascular discoloration. ME: high black spot bruise potential.

AC Sunbury: NJ: poor yields compared to superior of YG but same IHN as Red Island. High gravity few points less than ATL. ME: poor yields, niche as early fresh but yields have not been good and susceptible to scab, 3% HH over all trials. VA: rot last year. NC: yield moderate average gravity, appearance fair, no IHN in two seasons, a little hollow and brown center. NY: yld 90% superior, 28% HH in a HH year. FL: high gravity like ATL.

AF1808-18: NY: Russet trial in ’04 88% of Burbank in Mkt yield, 20% HH. NJ: 45% yld of Superior; No IHN, low HH. ME: External defects high GC, SB, MS. Two commercial trials in ’04 and had severe sunburn.

AF2115-1: FL: High gravity, high total yld, bright and smooth skin, late. NJ: scabby, hasn’t evaluated since ’02. NC: poor appearance, good gravity in 2 of 3 years, yld is 78% of ATL. Very lumpy. Drop. NY: good yld, poor appearance, no internal defects, slight knobs. ME: not impressive in trials.


AF2215-1: NJ: high gravity, low yld, heat sprouts and 2nd growth. FL: high gravity, poor yld. NC: culled 52 and 22% of tubers in two trials because of primarily misshapes and scab. App poor. ME: good chipper but poor yld.

AF2222-2: FL: small size good yld. ME: good chip color, low SG, low yld. NJ: small tubers, low yld, good chipper. NC: low yld and SG. – will be dropped

B1806-8: ME: yellow flesh fresh, variable color, no netting, smooth skin, susceptible to scab, black spot bruise scores high, moderate to high HH. NJ: gravity average, tuber type descent, average yield, scab problem. NC: yld good (105% ATL), good gravity for
table stock, fair appearance, no IHN, some soft rot, variable color, too netted? FL: good ylds, slightly netted.

B1826-1: Dropped.

NDTX731-1R: FL: dark skin color, good yld, some brown center NJ: good yld, low SG, slight net, low to moderate IHN. NC: good yld, low gravity, slight to medium net, nice appearance, no IHN, some brown center. VA: one grower that really likes it but netting can be a concern. ME: slight net, brighter than NY129. Would like to keep it in the program another year.

NY120: ME: split personality, high black spot bruise, good chipping, low yields, seed supply may be mixed. NJ: good yld, possible chipper, need source confirmation. NC: low gravity, appearance fair, star cracking “could be G x E effect”. FL: high ylds and high gravity. NY: very bad after cooking darkening scores when boiled.

NY125: Breeder’s choice. NJ: 117% of superior, need better tuber appearance, flat tubers occasionally, no internal problems, NC: yld close to ATL, SG is mid-to high for table stock, YF-1, variable shape, no IHN and very little soft rot. NY: 113% over ATL, 11 tubers per linear foot, 40oz average weight, good ACD scores, doesn’t chip out of 40 F. ME: good ylds, good appearance, YF-1 to YF-½, small tuber size. VA: scab susceptible

NY126: ME: shining star for yld, round to oblong shape, chip color good, SG respectable, misshapes are tolerable below 5%, low black spot bruise, could be a duel purpose potato, YF- NJ: good yld, growth cracks, variable appearance, IHN slight, HH in the last two seasons, chips well out of the field. NC: yld equal to ATL, similar gravity to ATL, good appearance, little IHN, low HH, low Vascular Ring, YF-1, oblong to round tuber shape, good size. FL: good yld in Florida, netted. NY: good ACD and sloughing,

NY127: NJ: 107% of ATL in 12 trials, susceptible to scab with deep bud ends, consistent high yields, will chip, very round, variable appearance, no internal problems, sticky stolons. ME: total yields good, appearance poor, deep eyes and scab, does not chip well out of storage. FL: great yld, moderate gravity, huge plants. NY: good yld, 12 tubers per linear foot, 4.1 oz tuber average, very good consistent appearance, no internal defects, some scab, ACD and sloughing acceptable, Walter (RO2 resistance, scab susceptible, would like to see it dropped).

NY128: NJ: gravity not as good as ATL. Tuber rot in 2 of 3 years, good looking tubers, nice round. Internal light. NC: 4 trials, slightly less yield than ATL, good gravity, nice chipper, very round, average appearance, light IHN, deep apical eyes and stem end, very ATL looking. FL: high total ylds, small, very late, some points. NY: average yld, large set, 5% HH, 6% vascular discoloration, ACD are good but it sloughs. ME: good chipper, yld like ATL, some HH, netted, small tubers. NY (Walter): RO2 resistance.
NY129: FL: high total yld, small size, good gravity, slight net, very round, dark skin color, grower trials in 2005. NC: moderate ylds, low gravity, pretty potato, slight net, round, late maturing vine. NJ: excellent ylds, good eats, late potato. VA: late potato with a lot of skinning. ME: high yields, uniform tuber shape, late maturity and netting are a concern. NY Walter: Dad wanted it. Industry should make a decision on if we should keep.

SC8801-2: ME: long, variable appearance, skin has russet scab and dark lenticels. NJ: some IHN, oblong tubers, GC a problem. NC: stopped looking at it in ’01 and haven’t looked back.


- In old bulletin, results across all regions were summarized in the back of the book. Kathy Haynes asked for a crop summary for the USDA germplasm report. Summary should be on the website because it may not be readily accessible because of the timing of the germplasm report publication. How can this summary information be better used? Over the years, useful components have been added – disease tolerance and tuber characteristics. Greg feels it provides him a good overview of the varieties and their widespread adaptability.

- Don Halseth: Summary should be included on the website.

- Greg Porter: Publication on the website is not conflict for Germplasm report. Would you please send trial results before the NE1014 meeting? The report could be put together by the spring of each year.

15. USDA-ARS Germplasm Report – K. Haynes

- Is there a use for printing a Germplasm Report? A survey was conducted and the results were split. It takes a month to edit. 300 are ordered and half go to foreign libraries. In the US, lack of support because of web based access in individual programs. 15% of expendable budget is used on the report.

- A general consensus from the group is that the information is valuable. An effort should be made to publish the data either on the web or on a CD. Editing of submitted documents should be left to the individual submitters. The information should be published as submitted.

16. AMMI analysis of NE1014 data – D. Halseth

An extensive overview of how the varieties perform under different growing conditions was presented. AMMI is an insightful tool to relate genetic response to the environment.
17. NE1014 website/database development – D. Halseth / M. Clough

- www.hort.cornell.edu/potatone1014/

- The website is up. Website, graphics suggestions are welcome, collage, blurb on each cooperator, link to each individual website, picture of each cooperative, 5 year plan on site, regional document from Greg. Should we continue individual state reports in details or should we just do the combined summary.

- Other things on the page: minutes, new varieties, production profiles, AMMI analyses or other models, links to all other databases, breeding projects, and variety profile pages.

- Last year, after considerable discussion, a formal request was put in to the special grant for a server. However, it was taken out because of budget cuts. It was included again in this round of budgets. Need to discuss as a group this is worthwhile. Do we need to determine if this money should be kept in the budget even if the budget is cut again?

  Rikki Sterrett: Motion: I so move that the funding for the server for the web base management should be maintained in the budget.

  Second: Don Halseth

  Unanimous vote in favor of the motion.

  No discussion

18. Annual Report Forms – NE-1014 Vice-Chair –Z. Ganga

Steve Reiling: Reports are due within 60 days after the meeting occurs. Minutes should be out within 30 days. Impacts should be documented.

19. Old Business

No old business

20. New Business

No New Business

21. Committee Reports

- Site Selection: Kathy Haynes nominated as site selection chair. 1/14-15/04. Site to be determined.
Greg Porter nominated, Mel Henninger seconded

- Nominations: Mark Clough was nominated as Secretary

Greg Porter nominated, Walter De Jong seconded.

- Resolutions:

  Whereas as the NE1014, technical committee meeting has been a productive and enjoyable gathering of friends, let us resolve to:

  i. Commend Greg Porter, again, for his efforts in managing the USDA-CREES proposal;
  ii. Commend Chad H. and Marion W. for their efforts on local arrangements;
  iii. Commend the NE-1014 2004-05 season officers, for their services Craig Yencho (Chair), Zenaida Ganga (Vice-Chair), and Chad Hutchinson (Secretary);
  iv. Commend Don Halseth and Mark Clough for their work on NE-1014 website and database.
  v. Thank Steve Reiling for his continuous support and guidance on our behalf.

Marion White moved for acceptance of the resolutions; Greg Porter seconded the motion.

22. Adjournment

Zenaida Ganga moved for adjournment. Rikki Sterrett seconded the motion at 2:48 p.m. on the first day!!!