Minutes of the NE1014 Technical Group Meeting - 2007
Atlantic City, New Jersey

Thursday January 18, 2007 - Friday January 19, 2007

I. Meeting called to order 1:00pm 1/18/07, adjourned 6:30pm 1/18/07, called to order 8:00am 1/19/07, adjourned 10:45am 1/19/07

II. Introductions. Participants:

University of Florida ... Chad Hutchinson (CH), Chair
North Carolina State University ... Mark Clough (MC), Vice Chair
Ohio State University ... Matt Kleinhenz (MK), Acting Secretary
Virginia Tech University ... Richard Veilleux (RV)
Cornell University ... Don Halseth (DH)
University of Maine ... Greg Porter (GAP)
Pennsylvania State University ... Barb Christ (BC)
Rutgers University ... Mel Henninger (MH)
Agriculture and Agri-Food Canada
    Prince Edward Island ... Walter Arsenault (WA)
    New Brunswick ... Agnes Murphy (AM)
USDA-CSREES ... Ann Marie Thro (AMT)
University of Connecticut
    Experiment Station ... Kirby Stafford (KS)

III. Minutes of 2006 Meeting circulated by MC. Motion to accept minutes as presented made, seconded and accepted.

IV. CH recommends committee appointments.
   A. Site selection ... GAP, MH
   B. Resolutions ... BC, DH
   C. Nominations ... CY, MDK

V. Administrative Update (led by KS, AMT)
   A. KS received request from Jiwan Palta (JPP) of Univ. Wisconsin to join NE1014. Others on project have been asked by JPP to provide letters of support for JPP’s UW Hatch project. JPP may be interested in submitting UW material to NE1014 program. Request by JPP to join NE1014 supported by Technical Committee and will be approved by KS.
   B. Federal budget operating on a continuing resolution. Has widespread, significant effects on programs and may affect NE1014 project funding.
VI. Request for Extension and Re-Write of Regional Project
   A. For future reference, project rewrite should start before end of Year #4. Previous Re-Write was submitted in 2002 and current project expires in Sept. 30, 2007. Too late to submit full proposal; therefore, must submit a request for extension.
   B. Extension Request
      1. KS has initiated and will complete, with help from project members.
      2. Committee: CH (Chair), CY, GAP, DH/Walter De Jong (WDJ), RV
   C. Project ReWrite
      1. Committee: CY (Chair), CH, WDJ/DH, GAP
      2. AMT suggests developing proposal around USDA Strategic Plan for FY2005-2010 (home-page circulated; note 6 Goals). Previous proposal followed goals-methods-outcomes ... suggest reverse order and language for lay readers. Write first for lay audience, second for peers.
      2. Deadlines
         a) request to submit to NIMMS and first draft of proposal = 9/1/07
         b) proposal to three reviewers = 10/1/07, with request to return by 12/1/07
         c) circulation of proposal to NE1014 Technical Committee = 1/5/07
         d) proposal discussion = NE1014 Technical Committee meeting Jan. 2008
         e) proposal submission = March 1, 2008

VII. CSREES Update (led by AMT)
   A. Apologies for missing previous meetings. Many potato meetings to attend.
   Responsibilities include ALL crops.
   B. Continuing resolution of Federal Budget stalling Potato Special Grants process, forcing change in Agency, adding uncertainty to programs.
   C. NE1014 proposal submitted in Dec. 2006 is affected by Federal Budget status. Special Grants are considered “new” each year which may not be initiated under a continuing resolution.
   D. Chart of funding trends provided. USDA budget total appears “stable” with portions to HATCH, NRI and Special Grants a function of political, other processes.
   E. Discussion of whether NE1014 team could submit a NRI proposal.

VIII. Eastern Region USDA-CSREES Potato Special Grant project and proposal (led by GAP)
   A. Due to Federal budget continuing resolution, money not be available for proposal even if approved.
   B. Proposal submission deadline is very challenging. Co-PIs asked to be proactive and responsive in development of future proposals.
   C. Submission via grants.gov required much re-formatting of Co-PI supporting documents. Co-PIs will need to modify documents before sending to GAP in future submissions.
   D. Co-PIs strongly encouraged to document project impact since project progress sections are included in all submissions. Technical and non-technical components and brevity important.
   E. Report on existing project (initiated July 1, 2005) from each state needed by GAP before June 30, 2007.
F. Per AMT, impacts need to be dated (i.e., specific to a reporting period, not “recently”).
G. Be sure to acknowledge CSREES support in all project reporting, especially to industry, etc.
H. Potential changes in future submissions
   1. Univ. FL to request support, which it has not for two years.
   2. Place more emphasis on ratings of external quality (abiotic, biotic lesions and blemishes) in genotype evaluations?
   3. Explore yield-quality tradeoff?
   4. Alternative definitions of progress (e.g., in germplasm enhancement)?
   5. Evaluate material under additional conditions?

IX. Site Updates

A. New Brunswick
   1. Canadian sites may return to NE1014 testing program. Issues precluding previous participation have been resolved.
   2. Regarding total glycoalkaloid levels, the existing upper level allowed for registration in Canada is 20 mg/100g FW, which is higher than that permitted in Europe. NE1014-wide acknowledgment that levels vary with abiotic and biotic conditions and that current sampling procedures may be evaluated.
B. PEI ... ca. 100K acres; hollow heart an occasional problem; generally good yields.
C. Maine ... ca. 59K acres; high-record high yields and quality, especially north although hollow heart was an occasional problem; yield, quality very low central-south; late blight present but not a major problem; ‘Harley Blackwell’ acreage unknown but appears to be increasing (including in FL)
D. New Jersey ... excellent start to season (through June 20); too much rain and high temperatures then after; low yields (average <150 cwt/A); poor storage quality, especially of ‘Reba’; NJ acreage to diminish to ca. 2K acres
E. New York ... 20K acres planted, continues downward trend; good early spring; too much rain then after; highly variable yield across state
F. North Carolina ... 15-16K acres, small increase; relatively dry; high quality; growers pleased; IHN not a major factor in 2006 NC crop, trials; ‘Harley Blackwell’ and ‘Peter Wilcox’ (formerly B1816-5) available, performance encouraging, group encouraged to promote
G. Ohio ... decent year, specific outcome depended on planting date (early better)
H. Pennsylvania ... three trials (southeast – decent spring, too much rain after; central – dry, cool; north – excessive rain); ca. 14K acres; no late blight on potatoes
I. Virginia ... no field trials
J. Florida ... ca. 25K acres, slight decline due to loss of three growers in Hastings area; very dry year (25 in below normal rainfall); development pressure slacking but non-farming land use always a concern, little use in protecting farmland, especially north; two Hastings research locations to re-open, will emphasize nutrient movement from farmed and developed land
X. Pathology Test Reports
   A. Pennsylvania ... overall, low disease pressure in 2006

XI. Breeding Reports
   A. VTU ... working with three breeding populations supplied by K. Haynes in which all
      females are homozygous and males contribute much of the variation in specific gravity,
      carotenoid, and PVY resistance
   B. New York (DH reports for W. De Jong) ... breeder’s choice is NY139; NY126 to be
      released as ‘Lehigh’; may release NY129; NY138 and NY139 are chippers and favorite
      prospects; NY131 = ‘King Harry’, is like ‘Superior’; WDJ has other commitment 1/12-16/08 but
      hopes to participate in next NE1014 meeting
   C. North Carolina ... discussion of SolCAP project; early generation material from USDA,
      Univ. Maine, Cornell Univ. used along with products of in-house crosses; recent work explained
      <15% of variation in IHN but shows potential genetic linkage between IHN and calcium uptake;
      in 2008, will screen 17-18K single hills from in-house crosses
   D. Univ. Maine (GAP reports for Z. Ganga) ... program focus is multiple disease resistance;
      program emphasis now on russet or long-white, especially for processing; promising candidates
      for future NE1014 project evaluation are AF2413-4, AF2431-2, and AF2574-1; AF2211-9 was
      promising in grower trials in 2006, although scab, IHN, and hollow heart have been concerns;
      AF1758-7 is promising in north U.S. trials, including on-farm, but performance in south U.S. has
      been sub-optimal – decision on release pending; collaborations with Central and Western
      breeding programs increasing
   E. Agriculture and Agri-Food Canada (AM) ... written report submitted; the Potato Research
      Centre has a new scientist; accelerated release program in tenth year releases stock for industry
      evaluation and prioritization after fifth-sixth generation of field production, appears successful
      but many genotypes dropped, data not always available, requires much management, and not
      generating high amount of revenue
   F. (1/19/07) B1816-5 will be named ‘Peter Wilcox’; relatively low yields but has market
      appeal; purple skin, yellow flesh; scheduled for elimination from NE1014 project but will be
      retained for one more year; some seed available

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1/19/07

XII. Seed Orders, Shopping List, New Entries (led by GAP)
   A. History of ‘Beacon Chipper’ discussed; origin at Porter Farm in ME, does not match
      entries in MSU database
   B. Shopping List
      a. B1806-8, B1870-3, B1952-2, NYY73-49, NYB38-14, and NYB87-3 all dropped from
         the program
      b. Beacon Chipper: ME: average marketable yields greater than 100% Atlantic, good
         chip color out of storage, no external problems, moderate scab resistance, low incidence of

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hollow heart, vine maturity later than Atlantic
c. **Blazer Russet** (A8893-1): Under PVP from Idaho, advertised as an early fresh market russet with good appearance; ME: mid to late maturity, gravity acceptable for processing, appearance not great, fry color was good
d. **Dakota Diamond**: 1st year in NE1014 program; ME: chipper, good appearance, white skin, big heavy vine, fry color so-so out of storage; NC: CPB resistant; NJ: expresses IHN, good gravity
e. **Dakota Jewell**: 1st year in program; ME: smooth red skin, growth cracks and hollow heart in one of two locations; NC: poor internal quality, poor appearance
f. **AF2199-6**: NJ: low yield 53% Atlantic, no IHN, 2 out of 70 with hollow heart, some scab, some secondary growth; NY: 72% Russet Burbank, 20% IHN; ME: slow emergence, yields close to russet Burbank, no scab, decent fry color and gravity, susceptible to shatter bruise
g. **AF2211-9**: NJ: high levels of IHN and hollow heart; NC: low levels of IHN average score of 8, good gravity, yields were 90% Atlantic, appearance fair, many growth cracks, has deep apical ends, some hollow heart and brown center; OH: low set, marketable yield half the standard, 30% hollow heart, 40% IHN, fair to above average appearance; PA: many hollow heart and IHN, yield 78% Atlantic; ME: has too many external defects, gravity is good, chip color good, last year of testing
h. **AF2291-10**: ME: Breeders Choice for 2006, a chipper, outstanding yields in 2005, 90% Atlantic in 2006, gravity equal to Atlantic, chip color good, appearance fair to good, decent external quality, good scab resistance, resistance to shatter bruise, scheduled to be done testing this year; NC: 5 trials since 2003, 84% Atlantic, good gravity, good chip color, appearance fair, 47% IHN in one trial – overall 10% IHN at 8.5, some misshapes and growth cracks; PEI: yield and gravity similar to Atlantic, late maturity; OH: above average yield, chip color 4 out of storage, appearance better than good; NJ: secondary growth and heat sprouts; FL: yields 81% of Atlantic, gravity higher than Atlantic, doesn’t chip well
i. **AF2314-1**: ME: early russet, yield too low, doesn’t size well enough for market; NY: consistently low yield, pair shaped; NJ: 49% Atlantic, no internal problems; FL: 50% stands, fair appearance; NC: similar to FL; OH: average yields, marketable yields below average, better than fair appearance, no internal problems; pear-shaped
j. **AF2322-2**: ME: fresh round white, smooth skin, low yield, too susceptible to scab; NJ: defects include scab, heat sprouts and secondary growth; NC: yield good, low gravity, appearance less than fair, external defects include secondary growth, heat sprouts, and misshapes, no internal defects; PA and NY: similar to NC
k. **AF2376-5**: ME: yellow flesh, fresh market, high gravity, good appearance, smooth skin, 100% Atlantic, gravity 1.095, resistant to shatter bruise, no hollow heart, or external defects; NJ: high levels of IHN (19 out of 20) rated at 6, yields 70% of Atlantic, higher gravity than Atlantic; NC: high levels of IHN, no note of yellow flesh, chip scores were 2.5, good gravity
l. **AF2393-7**: ME: red skin, good color, small tubers, slight net, pale yellow flesh, very small, no scab; NJ: low yield 42% Superior, one hollow heart out of 60, small 30% B’s, scab susceptible, slight net; NC: yields 60% Chieftan, 1.061 gravity, small 50% in the #2 size class, good appearance, no internal problems, yellow flesh; NY: yields 58% Chieftan, 30% undersize,
2% external defects, some vascular discoloration in 2005, excellent after cooking darkening and sloughing scores

m. **AF2412-2**: ME: 1st appearance in trials, 63% Russet Burbank, fair appearance, 40% hollow heart; NJ: yields 50% Atlantic, low IHN, 1 out of 30 with hollow heart; NC yields 69% Atlantic, 1.063 gravity, fair appearance, oblong shape; PA: yields 83% Russet Burbank, 30% hollow heart, some scab

n. **AF2916-1**: ME: round white, bright skin, for the fresh market, decent scab resistance, decent shatter bruise resistance; NJ: small, yields 70% Atlantic, some hollow heart, some IHN, appearance better than fair, flat; NC: fair appearance; PA: less than far appearance, flat; NY: 3 trials, yields 93% Atlantic, 11 tubers per linear feet, high amounts of scab in 2005; PEI: yields 80% Atlantic, appearance fair

o. **Peter Wilcox** (B1816-5): ME: purple skin and yellow flesh, scheduled to be done testing this year but will be kept one more year, 3 grower trials, small yields similar to Dark Red Norland, good for direct marketing, feed back from growers has been positive, some skin problems; NY: very susceptible to Siler Scurf and Black Dot

p. **B1992-106**: NJ: yields 90% Atlantic, some hollow heart (6 out 40), gravity lower than Atlantic, chips well; NC: clone came from early generation study, yields 82% of Atlantic, gravity is 1.075, chips well, late maturity, fair appearance, no IHN, low levels of hollow heart, too netted for table may be too oblong to chip; FL: yields 110% Atlantic, appearance better than fair, heavy netted, oblong, low IHN, poor chip; OH: above average yield, good appearance, 7 out of 10 with hollow heart; PA: good yield and gravity, good appearance; ME: high specific gravity, heavy net, scab resistant, chips well out of storage; NY: chips well, yields equal to Atlantic, low external defects, significant scab in 2004, similar to Atlantic in appearance but more uniform

q. **B2152-17**: ME: red skin, yellow flesh, 107% Dark Red Norland, better than fair appearance, slight net; OH: yields greater than Dark Red Norland, more B’s than normal, no internals; NJ: no internal defects, yields 60% Atlantic, appearance better than fair, texture moderately smooth, some secondary growth, no growth cracks, and no scab; NC: yields 71% Chieftan, 1.068 gravity, mid to early maturity, moderately smooth skin, appearance better than fair, no internal problems, light yellow flesh, size medium; NY: yields 65% Chieftan, high tuber set, few external and internal defects, very good after cooking darkening and sloughing scores; FL: low gravity, better than fair appearance, moderately smooth, 35% under 1 7/8" in size

r. **B2327-2**: ME: bright red smooth skin, good appearance, similar yield to Dark Red Norland; NJ: a red ÒBÓ, 30% B’s, shape is round, variable skin texture; OH: smooth texture, no internal problems, 15% B’s; NC: yields 52% Chieftan, 1.062 gravity, moderately smooth texture, mid to early maturity, good appearance, no internal problems.; FL: 40% Red La Soda, 36% less than 1 7/8Ó, good appearance, moderately smooth skin texture; NY: yields 52.3% of Chieftan, 30% under size, very few external defects, 39% soft rot on muck soils, appearance better than good, skin texture was smooth

s. **NY137**: ME: yields 73% Atlantic, 17% scab, appearance was less than fair to fair, large tubers; NJ: yields 126% Atlantic, 13 out of 40 had IHN with a severity rating of 6, gravity was low; NC: yields 131% Atlantic, very large, low gravity, appearance better than fair, low incidence of IHN, some soft rot and misshapes; PEI: yields 88% Kennebec, fair appearance, no
hollow heart, light scab; FL: heavy yields, soft rot over 50%, appearance fair, 1.061 gravity; OH: yield lower than Atlantic and Kennebec, oblong shape, smooth skin texture; NY: yields 98% Atlantic in 8 trials, above average tuber set, low gravity, appearance better than fair to good, few external defects most of them sunburn, good after cooking darkening and sloughing scores
t. NY139 (NYY28-9): NC: yields 96% Atlantic, 1.075 gravity, netted skin, good appearance, no internal problems, some growth cracks, misshapes, and soft rot, chips well out of field; NJ: yields 96% Atlantic, some rot, no IHN, 3 out 120 with hollow heart, good chipper, shape good for fresh; ME: good yield and gravity, shatter bruise resistant, some external defects, FL: mostly round, late maturing; PA: late; OH: low stands, yields better than check, appearance less than fair, clean internals; PEI: lower yield and gravity than Atlantic, fair appearance; NY: chipped well out of 40 deg.
  u. NY140 (NYY73-49): Exhibited some resistance to insects in one trial. Yield comparable to Atlantic in NY. Does not chip.
v. NY141 (NYY41-67): Late season tablestock. High yields of large tubers in NY, lightly textured skin.
  w. NYB38-37: Tablestock, attractive tubers. low gravity. Yield potential and reaction to common scab are still unclear.

XIII. Eastern Trial Summary and Publication (led by GAP)
  A. Report from 2005 evaluations available at UM website
  B. Data from OH, NJ, Canada required for 2006 Report

XIV. Update on AMMI Analysis (led by DH)
  A. Submit data to complete analyses; will complete and post graphics at project website

XV. Update on NE1014 Website/Database Development (led by MC, CY)
  A. Adhere strictly to NCSU template in data submission
  B. Database now to include data for non-NE1014 entries but planted in replicated evaluations, 1998-present
  C. Data for entries dropped from NE1014 project will also be dropped from database
  D. Project website generally regarded as model and is prominent at search engines; what next?
  E. Presentation at 2007 PAA Meeting (poster with web access?) re: database suggested

XVI. New Business
  A. Project Re-Write will be impetus for conference calls among project participants in 2007. Later, need to report on progress of project and desire to expand funding base will be impetus.
  B. Conference calls may be held in early May 2007 and early August 2007.
XVII. Committee Reports
   A. Site Selection ... 2008 meeting in Maine (potentially Portland)
   B. Nominations ... Richard Veilleux nominated, accepted as Secretary in 2008
   C. Resolutions ... Whereas as the annual NE1014 Technical Committee Meeting has been a productive and enjoyable gathering of friends, let us resolve to:
      1. Commend Mel Henninger for the excellent (and flashy) local arrangements in Atlantic City.
      2. Commend Meeting Chair Chad Hutchinson for his able and patient leadership.
      3. Commend Greg Porter for all his efforts in continuing to organize and manage the USDA-CSREES proposal.
      4. Welcome Dr. Kirby Stafford aboard as our new project advisor and look forward to his help in our upcoming project re-write.
      5. Acknowledge Ann Marie Thro for attending the Meeting and providing important insight into CSREES.

XVIII. Adjournment 10:40am 1/19/07

Respectfully submitted,

Matt Kleinhenz