Minutes

Joint meeting - SERA-IEG-6, NEC-1007, NCR-13

September 13-15, 2004

SERA-IEG-6 Participants - See 2004 participant list at www.clemson.edu/agsrvlb/sera6 (http://www.clemson.edu/agsrvlb/sera6)

Monday, September 13, 2004
1:00 p.m.

The meeting was called to order by NEC-1007 chair, Tom Morris, University of Connecticut. Tom welcomed the group and introduced the keynote speaker, Karl Glasener, Director of Science Policy, ASA-CSSA-SSSA. Dr. Glasener's topic was scientists and policy developments and talked about a goal of uniting the agricultural community. His contact information is kglasener@agronomy.com (mailto:kglasener@agronomy.com)

Tom Morris presented a summary of a survey of the Nutrient Management Code 590 and state regulations for nutrient management. The frequency of soil testing and manure testing was discussed. The survey was prepared by Charles Mitchell, Auburn Univ., Antonio Mallarino, Iowa State Univ., Don Horneck, Oregon State Univ., Keith Reid, Ontario Ministry of Agric. Food and Rural Affairs, and Tom Morris.

Keith Reid presented a summary of Ontario's regulations. Code 590 doesn't apply - have individual province standards.

Robert Miller, Colorado State University discussed the PAP pilot program in the western states and related issues about nutrient management planning and soil testing.

The group disbanded and met at 6:00 p.m. for a banquet at Townsend Hall Commons, UD College of Agriculture and Natural Resources. The social hour was sponsored by Spectro Analytical.

Representatives: Mark Grey and Bob Dussich. The group was welcomed by Tom Sims, Associate Dean, UD College of Ag and

Natural Resources. The dinner was followed by a presentation by George Chaloupka, Univ of Delaware, regarding the early years of the Delmarva Poultry Industry.

Tuesday, September 14, 2004
8:00 a.m.

The joint group disbanded for individual group sessions.

The SERA-IEG-6 session was called to order by Ray Campbell. Ray introduced Bob Westerman, administrative advisor, who gave the administrative report. Dr. Westerman reported that the group project expires in 2007. He talked about activity with multi-state projects and reported the adoption of a uniform naming system for the group which will become Southern Coordinating Committee.

Some discussion included assigning Charles Mitchell, David Hardy, and Kathy Moore to work on getting the old publications on the web. David will also check into putting the plant sufficiency document in pdf format.

Morteza Mozaffari, University of Arkansas, reported on the restructuring of the University of Arkansas's soil testing program. Changes included extraction method, reporting units, recommendations, reporting format, and report delivery. Plan to implement July 2005.

Hugh Savoy presented information regarding soil fertility problems observed in corn, wheat, soybean, and tobacco production. Also reported on boron fertilization studies in western Tennessee and nutrient deficiencies in animals with regards to forage quality.

Business Session

Status of Bulletins and Fact Sheets:

Hugh Savoy reported that reviewers have bulletin 190 and we should have approval this fall.
Charles Mitchell reported that he would write the bulk of the cotton bulletin along with Carl Crozier and Glen Harris.
Nancy Wolf reported that the manure bulletin is complete and on the web.
Nancy volunteered to prepare a fact sheet comparing the animal waste soluble phosphorus methods.
The M3 vs. M1 conversion fact sheet (Frank Sikora) has been submitted for review. It was recommended to incorporate reviews and proceed with publishing.
Hugh Savoy and David Hardy will coordinate the CEC survey and

methods fact sheet.
No update on the fact sheet regarding quantification of differences of ICP vs. colorimetric phosphorus.
Ray Campbell will work on a report regarding the deficiency symptoms of crops in the southern region.

New Publications:

Paul Vendrell will put David Kissel's pH study in fact sheet formats for the web with David's approval.
Debbie Joines and Paul Vendrell will work on an animal and plant production requirements fact sheet.

New Business:

A motion was made, seconded, and carried to accept two drafted resolutions regarding quality assurance programs and the mission of the group. The resolutions will be finalized through the group list serve discussion, posted to the web, and submitted to NAPT and MAP committees.

Election of New Secretary
Rao Mylavarapu was elected for a two year term as the incoming secretary.

A thanks was given to Ray Campbell for his work as an officer. The meeting was turned over to the new chair, Hugh Savoy.

Due to time limitations, the individual state reports were not given during the meeting, however reports submitted in writing will be included below.

The next annual meeting is to be held in Oklahoma.

The SERA-IEG-6 meeting was adjourned at 12:00 noon

Following the individual meetings, the joint group took a field trip to the Delaware Department of Agriculture (Ag Compliance Laboratory and Nutrient Management Program) and the Perdue Farms Poultry Litter Pelletizing Plant.

Wednesday, September 15, 2004
8:00 a.m.

Tom Sims, University of Delaware, spoke on the phosphorus saturation ratio and establishing environmental thresholds for soil phosphorus. In conclusion, an approach that includes soil remediation should be adopted.

Quirine Ketterings, Cornell University, presented a comparison of Bray-1 and Mehlich-3 tests in high phosphorus soils.

Quirine also presented a talk on reducing laboratory variability of the Illinois soil N test using enclosed griddles.

Bill Jokela, University of Vermont, presented twelve years of diary manure nutrient analysis in Vermont: agronomic and environmental implications. The results indicate a decrease in P over time and an increase in Cu over time.

Antonio Mallarino, Iowa State University, reported on the field calibration of M-3 colorimetric and ICP analysis compared with Olsen and Bray tests.

The meeting was adjourned at 12:00 noon.

Minutes submitted by Kathy Moore

State Reports

Arkansas
Submitted by Morteza Mozaffari. In process of filling data entry and soil receiving positions. Changing from M3 1:7 extraction ratio to standard extraction ratio of 1:10, making change in fertilizer recommendations, change in reporting units from lbs/acre to ppm, and change in reporting format and delivery method - starting July 1, 2005. Developed procedures for measurements of soluble P, NO3, and NH4 by auto analyzer. Did a comparison study of soil test results and fertilizer recommendations for pH, EC, and extractable nutrients by the Marianna lab and a commercial lab. Plan to publish results. Revised program for fertilizer recommendations for rice to incorporate new cultivars. Marianna lab sample totals: soil - 100,014 (18% grid samples), cotton petiole - 5,318. Fayetteville lab sample totals: manure - 1,420, forage - 1,389, plant - 9,124, soil - 3,111, extracts - 10,533.

Georgia
Submitted by Leticia Sonon. Effective July, 2004, farmers are charged $6/sample for routine soil test. Fees were also increased on other tests. Evaluating new methods for soil pH and lime requirement. Measurement pH in 0.01 M CaCl2 and determine soil pH buffering capacity by measuring the change in pH after adding Ca(OH)2. Plans to implement this fall. Ongoing research on water soluble phosphorus in poultry litter. New video, "Well: What Do You Know", designed to educate rural well owners about proper construction, maintenance, and testing of private drinking water

wells. FEW lab passed the onsite audit and provisionally certified to measure bacteria in public water systems. NIR calibrations for In-vitro Total Dry Matter Digestibility have been completed and presently being validated. Georgia Environmental Protection Division doubled in sample numbers since last year. Total samples: 101,548 soil, 1,606 manure, 9,550 water, 1,861 plant, 2,100 feed, 1,100 EPD contract, 450 other.

Kentucky
Submitted by Frank Sikora, D. Reid, and Paula Howe. The soil test web site at http://soils.rs.uky.edu/ (http://soils.rs.uky.edu/) contains information on services and calculators for determining fertilizer, lime, and manure application rates. In 2003, lab analyzed 30,349 agriculture, 5,875 home lawn and garden, 601 commercial horticulture, 54 greenhouse, 6,736 research, 20 atrazine residue in soil, 327 animal waste, 28 nutrient solution, and 662 special research solutions.

Louisiana
Submitted by Jim Wang. Improvement of lab result reporting through e-mail by consolidating pages for multiple samples. Working to create a common webpage for producer to search for information. Added new C/N analyzer (LECO TruSpec CN) - now offer soil total organic C analysis. Purchased CEM MARS 5 microwave for tissue sample digestion. Evaluating Si determinations by different extraction and detection methods. Re-examining methods for sulfur and micro nutrients for sugarcane production. Research lab purchased Spectro ICP. Also used to support soil testing lab in down times.

North Carolina
Submitted by David Hardy. In fiscal year 2004, the soil testing lab analyzed 281,296 samples - up 18%. New Thermo 61E ICP purchased in Jan, 2004. New automated humic matter station purchased in Jan, 2004. Lab handles up to 2,700 samples daily. Data "flags" have been integrated into LIMS to screen data for quality. A total of 37,202 plant/animal waste/solution samples were analyzed during fiscal 2004 (41% plant, 54 % animal waste, and 4% solution). Receiving out-of-state strawberry plant samples. Digestion room renovated with two new fume hoods. Also, renovated exhaust system in the grinding room.

South Carolina
Submitted by Kathy Moore. Research lab with two technicians moved from on campus into Ag Service lab. Added new equipment

including CN Elementar Macro. Increased load of plant tissue research samples. Lab was reorganized from Extension into Regulatory. Budget will be finalized for the move the first of next fiscal year. Analyzed 34,389 soil, 5,289 plant tissue, 1,677 feed, 364 water, 1,586 manure, and 6,390 solutions.

Tennessee

Submitted by Hugh Savoy. In 2003, 19,653 soil tests were conducted and recommendations made. Soil test numbers have been higher this year so far. No major changes to the laboratory program. The Biosystems Engineering and Environmental Science Department maintains responsibility for the laboratory program in Nashville. No major changes in soils faculty. The Extension soil management position that was lost will most likely stay lost. There appears to be no current plans for filling the soil fertility position vacated due to retirement.

Virginia

Submitted by Steve Heckendorn. By the end of the year, Virginia Tech will switch from using a water pH and texture, to the Mehlich buffer to determine a lime recommendation.