

**NCERA103 committee on Specialized Soil Amendments and Products, Growth Stimulants and Soil Fertility Management Programs.**

**Minutes of Annual Meeting - November 17, 2011 at Airport Holiday Inn, Des Moines IA**

**Representatives present:**

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Steinke, Kurt – Michigan State Univ., [Ksteinke@msu.edu](mailto:Ksteinke@msu.edu) 517 355-0271

**Representatives absent:**

Sawyer, John – Iowa State Univ., [jsawyer@iastate.edu](mailto:jsawyer@iastate.edu) 515-294-1923

**Additional participants:**

Goos, R.Jay – N.D. State Univ., [rj.goos@ndsu.edu](mailto:rj.goos@ndsu.edu)

Rosen, Carl – Univ. of Minnesota, [crosen@umn.edu](mailto:crosen@umn.edu) 612 625-8114

Warncke, Darryl – Michigan State Univ., [warncke@msu.edu](mailto:warncke@msu.edu) 517 355-0271

Jim Camberato called meeting to order at 1:00 PM.

Jim called on the Mich. State U. Rep, Kurt Steinke. Kurt informed the comm. that in Mich. the Environmental Defense Fund had aligned with the NRCS to announce a goal of a 25% reduction in the use of N fertilizer based on MSU recommendations. MSU was being bypassed in these discussions. Jim C. announced that similar plan was underway in Indiana. Considerable discussion followed on the subject.

Edwin Ritchey is the new representative from the Univ. of Kentucky replacing Greg Schwab.

Jim C. has been working thru the renewal process for the committee.

The 2010 minutes were distributed and no changes were made. Dave Franzen made a motion to approve as written. Second by Richard Ferguson. Unanimous agreement.

A bulletin SF-1581 “Nitrogen Extenders and Additives for field crops” (Sept. 2011) and authored by D.Franzen and the comm. was distributed. Two other bulletins are to be written. **Slow-release N**

**fertilizers** – include methylene ureas, coated and encapsulated products, and similar products. Led by Richard Ferguson. **Phosphate enhancing products** – include Avail, JumpStart, and similar products. Dan Kaiser will lead the writing. Comm. members were encouraged to send any data or information concerning these topics to the bulletin coordinators.

## State Reports

**North Dakota**, Dave Franzen – Report on Ocean Grown work on beets and potatoes. Rosen (MN) also looking at with potato. J.Goos lab work with NSN and other N additives. J. Goos cautioned that Fe EDDHA quality may be poor in some products even though the reported Iron in the product is accurate. He has a grad. student working on a test to quickly and inexpensively determine quality of these products.

**Kansas**, Dorivar Ruiz Diaz – reported on activity with N additives, CoRoN, NSN, Avail and micronutrients applied at low concentrations. Discussion on root and foliar uptake of urea and CoRoN. Goos reported on his “Avail do the math” paper. Discussion on SumaGrow inoculants.

**South Dakota**, Ron Gelderman – questions concerning NSN, NZone, and other N additives as well as biological inoculants. Did 2011 small plot work with AMS Accomplish claimed to enhance N efficiency. Also with the Biological Trichoderma fungi of ABM. Worked with Syngenta’s Palisade claimed to reduce lodging. Working also with Mosaic’s MES products and Dow’s Instinct.

**Illinois**, Fabian Fernandez - many questions concerning NSN and Avail. Reported on work with UCAN-23, a liquid urea calcium ammonium nitrate product in which the calcium is thought to limit volatilization. No response from the product. Looking at AMS bacterial product to enhance P availability and root proliferation. Looking at NZone with anhydrous.

**Wisconsin**, Matt Ruark – reported on work with ESN, Polyon, Super U, and Agrotain with potato in central sands region. Also had trials using N additives in SW WI on 1<sup>st</sup> and 2<sup>nd</sup> year corn. Reported on MycoApply which is a mycorrhizae product and claims to increase P uptake. Also working with a polyacrylamide product to be added to irrigation water. Only saw negative responses with this product. No response with use of Ascend (a VAM inoculant).

Roundtable discussion on gypsum use and promotion. Agvise has an online report on some work with gypsum.

**Michigan**, Kurt Steinke – questions on Instinct, Avail and NSN. SFP had ½ day meeting at two sites with 500 attendance at each. Also foliar micro questions and on Accolade, an INTX Microbial inoculant. NE MI can’t obtain several fertilizers so are using many of the micronutrient products.

**Missouri**, Peter Scharf – Not as much activity as other years. NRCS has NZone on MI approved list for CSP program. Noted Koch Fertilizer purchased Agrotain. Discussion followed that Koch is developing a new nitrification inhibitor.

Goos worked with Bioforge (Stoller) inoculant for soybean nodulation.

**Nebraska**, Richard Ferguson – Noted many products being added to “High Yield” packages by agronomists especially with nutrients and plant protection products, i.e. NSN, Avail and biological. Many of these tested in “on farm trials”. Noted that polyacrylamide was injected in one application at 30 lb/a under irrigation and has responded in 5 of 6 years since the application. About 3-4 bu/a for soybean and 6-7 for corn. Reports of using a magnetic device that releases nitrate from water.

**Minnesota**, Dan Kaiser – questions on Avail, NSN (esp. NW MN), NZone. Did work with AMS product as well and found no better fertilizer efficiency. Sold thru Loveland as Accomplish or Soil Builder. Trial with Soil Builder on potatoes with no response. Mentioned Biocat Microbials out of Shakopee MN and has four products similar to AMS. Will be doing NZone trials in 2012 on potato and corn.

Discussion ensued on Pioneer and Monsanto’s new seed treatments that contain a biological. Pioneer (handout from Ed) apparently will have all corn seed automatically coated with insecticide, fungicide and a new biological product.

**Ohio**, Ed Lentz – NSN, Avail, CoRoN interest and many micronutrients applied to many crops. Discussed green algae bloom in Lake Erie. Ohio discussion about stringent, irrational regulations pointed at fertilizer use. The discussion is promoting Avail even though there is no positive data supporting its use.

Goos made comment that impregnating urea with NZone made a very hydroscopic product.

**Kentucky**, Edwin Ritchey – Mostly questions on Avail. Grove and Murdock did trials and found no response. Noted not much sulfur deficiency in Kentucky but many putting it on. The University has no sulfur soil test. Use of Green Flag product and compost tea. Ocean Grow product also is being used.

Peter indicated MO had three years of NSN data that had an average of 7 bu/a response in very wet years.

**Indiana**, Jim Camberato – Indicated many pushing plant analysis and have very high critical levels. He provided a 30 page report to regulations dept. for CoRoN. His conclusion: no evidence to support its use.

Discussion followed on need for education on the spatial and temporal variability with plant analysis. It was felt the current upsurge in plant analysis is being used for marketing of products.

John Sawyer (absent) provided information on several products including NSTAY a nitrogen additive product by Wilowood USA out of Roseburg, OR. J. Goos had reported on lab studies using this product in the Ext.-Industry 2011 proceedings. Greenharvest contains unburned coal and claims to reduce N use, lower costs, increases soil fertility. Take-Off is a product developed at Los Alamos National Laboratory and the company Biagro is marketing it. Claims include reduced N inputs by 25 to 35%.

Meeting adjourned at 3:38 P.M.