

## **NC-1178 (Impacts of Crop Residue Removal for Biofuel on Soils) Annual Meeting Minutes**

Kansas State University, Manhattan

Manhattan, KS

June 23, 2014

### **Chair:**

DeAnn Presley  
Kansas State University

### **Secretary:**

Rattan Lal  
The Ohio State University

### **Secretary-Elect:**

Humberto Blanco  
University of Nebraska-Lincoln

### **Members in Attendance:**

Mahdi Al-Kaisi, IA  
Francisco Arriaga, WI  
Humberto Blanco, NE  
Larry Cihacek, ND  
Mohammad Golabi, GU  
Sandeep Kumar, SD  
Rattan Lal, OH (represented by Klaus Lorenz, OH)  
Randy Miles, MO  
Kenneth Olson, IL  
Gary Pierzynski, KS (academic advisor)  
DeAnn Presley, KS

### **Members Absent:**

Diane Stott, USDA-ARS  
Kurt Thelen, MI

### **Ex-officio Members:**

Tom Fenton, IA  
Birl Lowery, WI  
Tom Schumacher, SDSU

### **Guests:**

Cathryn Davis, Graduate Student, KS  
Jack He, Graduate Student, KS

The meeting was called to order by chair DeAnn Presley at 09:00 A.M., June 23, 2014 in Room 2002 Throckmorton Plant Sciences Center on the Kansas State University campus in Manhattan, Kansas. After welcome and administrative issues especially with regard to the field trip June 24, members introduced themselves briefly.

Gary Pierzynski gave an overview about the Department of Agronomy at Kansas State University, and its teaching and research activities with regard to soil science. He congratulated the NC-1178 members for the successful program renewal, and thanked Presley and Cathryn Davis for organizing this meeting.

This was followed by a discussion with regard to the state reports and how to approach absent and non-responsive members. Similar to the meeting minutes, state reports should be submitted not later than 60 days after the meeting. An internal deadline for submission to Presley was set to June 30, 2014. State reports should be kept short to the point and Ken Olson highlighted that a section on accomplishments and impacts should be included as probably most critical issue. Presley distributed state reports by Larry Cihacek and Olson as examples.

Members asking for withdrawal will receive an official response from Presley asking whether they want to stay on the email list and whether they can be listed as ex-officio. Regarding recruiting new members, Olson proposed to approach the individual first before contacting the department. Cihacek emphasized to look for incoming members who will show up at meetings regularly. Humberto Blanco suggested strongly encouraging states that do not have member to send one. Mahdi Al-Kaisi will approach Tony Vyn at Purdue. Pierzynski agreed to directly contact the department head with regard to recruiting a member from Minnesota.

The business meeting was held with the minutes of last year's meeting in Madison, Wisconsin, and minutes were unanimously approved.

Olson proposed the order of secretaries for the next years. Blanco was elected secretary elect and will be chair 2016, followed by Francisco Arriaga 2017 and Sandeep Kumar 2018 depending on confirmation in subsequent annual meetings.

Cihacek provided an overview on the history of the committee. Basically the same group of institutions/researchers is working together across states since 1984. Each program phase lasted for 5 years, beginning as NC-174 for the first 4 phases, NCT-199/NC-1017 for phase 5, and NC-1178 since phase 6 in 2010. At least one objective from previous phases is shared with the following phase, ensuring continuity in research. Cihacek emphasized that based on this successful multi-regional and multi-state program, joint research proposals should be submitted.

As some time was left in the morning, the afternoon discussion on soil C sequestration was moved to before the lunch break. Olson briefly discussed the recently published papers in SSSA journal on soil organic carbon (SOC) sequestration and on methodologies to measure it in Geoderma. Critical issues discussed were conflicting messages on the potential of SOC sequestration, misinterpretations of methodologies in the past, the 'surface soil view' of agronomists vs. the 'whole profile view' of pedologists, and the importance of establishing a valid baseline. It was emphasized that other advantages of no-till vs. plowing should be emphasized and not only its effects on the carbon budget. Pierzynski recommended to look for the reasons why some experiments show differences and compile a list. Olson concluded that all SOC input has to come in situ from plants in a closed compartment for SOC sequestration.

State reports by Guam, Nebraska, North Dakota, Illinois, Wisconsin, South Dakota, Indiana, Ohio, and Missouri followed. The reports are attached.

There was a brief discussion regarding writing collaborative papers. While Blanco proposed a review on residue removal effects on SOC, Al-Kaisi favored a concept paper related to the proposal objectives and then synthesizing the data generated by the research. However, Olson suggested that the available literature may be not sufficient for a review paper on residue removal as more than 10 years of data would be needed. Instead, Olson proposed regional papers based on the data compiled. Further,

Cihacek emphasized that for a collaborative paper data not from all regions but from a subset of field sites should be included.

The meeting adjourned at 17:30 P.M.