North Central Crop Evaluation Committee Minutes from the 2004 Annual Meeting August 10-11, 2004 Iowa State University Ames , Iowa

Attendees:

Mike Barker – Iowa State Joe Lauer – Univ. of Wisconsin Tim Boring – Michigan State Howard Mason – Univ. of Missouri John Boyse – Michigan State John McCormick - Ohio State Charlie Brummer – Iowa State Pedro Moreira – Iowa State Kelly Day – Purdue— Indiana Len Nelson- Univ. of Nebraska Phil Devillez – Purdue Linda Pollak – Iowa State Tim Dietz – Michigan State Stacey Regula – Michigan State Sue Duvick – Iowa State Kraig Roozeboom – Kansas State Keith Dysinger – Michigan State David Schwab – Univ. of Missouri

Ralph Esgar – Univ. of Illinois Paul Scott – Iowa State Steve Fales – Iowa State John Shaffer – Penn State Wayne Haas – Penn State Lee Siler – Michigan State Scott Harkcom – Penn State Gorah Stankovic – Iowa State Brian Henry – Univ. of Illinois Naoki Takemori – Iowa State Jean-Luc Jannink – Iowa State Dick Todd - Penn State Darin Joos – Univ. of Illinois Chris Kroon van Diest - Ohio State Kendall Lamkey – Iowa State Bill Vinson - Iowa State Robbie Kerkove – Iowa State Bill Widdiecombe - Michigan State Ken Ziegler – Iowa State

The meeting was called to order at 8:00 am by host Ken Ziegler. Dr. Steve Fales, head of the ISU Agronomy Department, welcomed everyone to Iowa and Iowa State University and made a few comments about the weather –In Ames, on August 10 the record for the coldest high temperature was broken with a daily high of 65 F. I am not sure if any records were broken on August 11 but, if you asked anyone sitting on the metal seats of the –open-air—wagon on the Plant Introduction Station tour, I am sure they would say that some kind of record should have been broken. Dr. Fales continued with an introduction to the agenda for the Annual meeting, mentioning that state testing programs are an unbiased source of information for growers, that many changes are occurring in the seed industry that may affect state testing programs, that the private testing sector is growing, that the agenda included discussions on the role specialty traits and specialty crops may have on state testing programs, and that Iowa is doing a survey to gain knowledge of the relevance of the public state testing program and to determine future directions of the Iowa Crop Performance Testing program.

Introductions followed and a quick overview of the agenda was given. After that, individual state's attendees were asked to give reports on crop conditions in their state. INDIANA: experienced heavy rains early but the crops were growing normally, could be some state record yields, wheat harvest completed in June for the first time ever.

ILLINOIS: early planting season, record yields for corn, early wheat harvest, could be early soybean harvest, no reports of aphid pressure. WISCONSIN: early corn planting, eastern side of state is wet, western side of state looks good, soybeans are having development issues this year, wheat yields at 75 bu/acre. KANSAS: corn early and in good shape, soybeans and sorghum planted late, more moisture this year, wheat yields down from very good yields of last year, sorghum crop in pretty good shape for its maturity. OHIO: early planted crops are in good shape, long drawn out planting season, a lot of variability in the plots, insects not an issue—aphids wearing coats, private sector has done a great job in improving stress tolerance. MISSOURI: Rainfall resulted in a challenging spring planting season, harvest will be spread over a long period of time, could see some tremendous yields. PENNSYLVANIA: early planting for corn, Northeast got a lot of rain, some disease pressure but not too intense, looks like a good year, rained for 15 days in July, wheat harvest stretched out. MICHIGAN: Similar to a lot of the other northern states, set records for acres planted in April, lots of rain, wheat harvest was late due to dry down problems. NEBRASKA: western part is extremely dry but crop is still OK, shared a new data presentation format--a book, with advertisements, prepared by a private company. IOWA: in general the corn crop looks pretty good, the district 2 locations for corn in the far north will be quite variable because of standing water, 12 of the 21 testing sites were planted in the last week of April, forage crop looks normal for the year, soybean crop is doing well, Bruce Voss past coordinator of the soybean test now has his own private testing company called STAR, Ken Ziegler is retiring from ISU Sept. 3, 2004.

After the state reports, several aspects of both insecticide and fungicide seed treatments were discussed followed by a short break. Most states are reporting insecticide seed treatments somewhere in their reports. Ohio tried that in the past with fungicides, but the large number of treatments and their combinations made it so complex that they eventually quit reporting the fungicide information.

After the break, Kendall Lamkey presented a report titled "The Future of State Variety Testing Programs" based on a preliminary summary of results from a survey done at Iowa State University of 400 larger growers in Iowa and their comments about the present Iowa Crop Performance Tests. Topics covered included: survey results, budgets, complaints about the present testing program, competition in the crop testing arena, company participation, testing is a service, purpose or objective of the testing program, staff organization, publications, and communication and education (i.e. marketing of the testing program). A report by Paul Scott titled "Evaluating Amino Acid Content of Grain" followed. Paul discussed how the balance of amino acids in the protein content of grain is crucial to the amount of protein that is actually usable when the grain is used for feed. Lysine, Methionine, Tryptophan and Threonine tend to be the limiting amino acids. He discussed some specialty corn hybrids and reviewed methods to measure amino acids, introducing a microbial assay that is under development. Linda Pollak's and Sue Duvick's report titled "Maize Quality Traits" followed. Linda discussed their program and talked about corn quality traits, oil, starch and protein with emphasis on oil and starch. Sue discussed methods, instruments, and procedures used to measure oil and

starch traits in their lab. Linda discussed data collected from their program and the range in magnitude of the traits being found naturally in corn.

After lunch, the group toured Linda Pollak's and Sue Duvick's lab and saw how the instruments worked and the amount of labor required to collect the data for starch and oil properties. Then the group attended a presentation by Francois Torney and Jennifer McMurray from the ISU Transformation facility discussing how specialty traits can be moved from a species not related to a crop into a crop starting from a plant part, then to callous tissue, and then back to a complete plant. After that the group drove to ALMACO for a tour of their facilities where they build plot-testing equipment. ALMACO provided supper for the group cooked by the Iowa Pork Producers.

August 11, the business meeting was called to order at 8:00 am. There was a request for Iowa to share with the other states the results of the survey after the summary was completed. Kendall said he would check into it to see if it would be possible. Joe Lauer indicated that Wisconsin would offer to host the meeting in 2005 with a tentative date scheduled for August 16 and 17. A discussion followed to suggest topics to discuss at next year's meeting: 1. Overview of the UW Corn Silage testing program, 2. IA Survey follow-up, 3. Litigation Liabilities, 4. Grain quality measurements, 5. Insecticide seed treatments, 6. GMO identification of hybrids in trials, 7. Farmer cooperator contracts, 8. Getting data into Plant Management online journal (Undersander), and 9. Merging data across state lines. This list reflects the items discussed during the business meeting which included: identification in data tables of genetically transformed hybrids, identifying seed insecticide treatments, control of the seed sent in for testing, handling of agreements with farmers and paying them for land use, and regional testing across state boundaries. The business meeting ended around 9:00 am with a short break and then the group went to the Plant Introduction Station for a tour of their facilities and a cold wagon ride where we saw some of the variability that occurs in nature for several crops. The group then toured the Center for Crops Utilization Research's pilot plant where we were shown procedures for breaking corn down into its component parts on small to large scales and were shown some new uses for our crops. A pizza and pop lunch was served at the Agronomy Farm after which the Iowa Crop Performance Test's equipment was on display for all to view.

During the meeting I indicated that all participating states had hosted the meeting but it was brought to my attention that Indiana had not hosted the group yet. So, I looked at the past year's minutes and discovered that it was true. Maybe next year the group can convince Indiana to host the 2006 NCCEC meeting. Sorry about the misinformation.

Respectfully submitted

Ken Ziegler and Robbie Kerkove