NC-246 Annual Meeting 2016  
Agenda for Above-ground Corn Insects  
Sioux Falls, SD  
January 25-26, 2016

Holiday Inn Sioux Falls – City Centre  
100 W 8th Street  
Sioux Falls, SD 57104  
605-339-2000

Participants:

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Location</th>
<th>email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coates</td>
<td>Brad</td>
<td>USDA ARS</td>
<td><a href="mailto:brad.coats@ars.usda.gov">brad.coats@ars.usda.gov</a></td>
</tr>
<tr>
<td>Difonzo</td>
<td>Chris</td>
<td>MSU</td>
<td><a href="mailto:difonzo@msu.edu">difonzo@msu.edu</a></td>
</tr>
<tr>
<td>French</td>
<td>Wade</td>
<td>USDS AKS</td>
<td><a href="mailto:wade.french@ars.usda.gov">wade.french@ars.usda.gov</a></td>
</tr>
<tr>
<td>Fuller</td>
<td>Billy</td>
<td>SDSU</td>
<td><a href="mailto:billy.fuller@sdstate.edu">billy.fuller@sdstate.edu</a></td>
</tr>
<tr>
<td>Hofman</td>
<td>Camila</td>
<td>UNL</td>
<td><a href="mailto:coliveirahofman@gmail.com">coliveirahofman@gmail.com</a></td>
</tr>
<tr>
<td>Jensen</td>
<td>Bryan</td>
<td>U of WISC</td>
<td><a href="mailto:bmjens1@wisc.edu">bmjens1@wisc.edu</a></td>
</tr>
<tr>
<td>Ludwick</td>
<td>Dalton</td>
<td>U of Missouri</td>
<td><a href="mailto:Dclmrd@mail.missouri.edu">Dclmrd@mail.missouri.edu</a></td>
</tr>
<tr>
<td>Mason</td>
<td>Chuck</td>
<td>U Del</td>
<td><a href="mailto:mason@udel.edu">mason@udel.edu</a></td>
</tr>
<tr>
<td>McManus</td>
<td>Bradley</td>
<td>SDSU</td>
<td><a href="mailto:bradley.mcmanus@sdstate.edu">bradley.mcmanus@sdstate.edu</a></td>
</tr>
<tr>
<td>Meinke</td>
<td>Lance</td>
<td>UNL</td>
<td><a href="mailto:lmeinke1@unl.edu">lmeinke1@unl.edu</a></td>
</tr>
<tr>
<td>Mitchell</td>
<td>Paul</td>
<td>UW</td>
<td><a href="mailto:pdmitchell@wisc.edu">pdmitchell@wisc.edu</a></td>
</tr>
<tr>
<td>Montezano</td>
<td>Debora</td>
<td>UNL</td>
<td><a href="mailto:Deiagm@gmail.com">Deiagm@gmail.com</a></td>
</tr>
<tr>
<td>Ostlie</td>
<td>Ken</td>
<td>UMN</td>
<td><a href="mailto:ostli001@umn.edu">ostli001@umn.edu</a></td>
</tr>
<tr>
<td>Pereira</td>
<td>Renata</td>
<td>UNL</td>
<td><a href="mailto:renataramosp@gmail.com">renataramosp@gmail.com</a></td>
</tr>
<tr>
<td>Pereira</td>
<td>Adriano</td>
<td>UNL</td>
<td><a href="mailto:aelias374@yahoo.com.br">aelias374@yahoo.com.br</a></td>
</tr>
<tr>
<td>Peterson</td>
<td>Julie</td>
<td>UNL</td>
<td><a href="mailto:Julie.peterson@unl.edu">Julie.peterson@unl.edu</a></td>
</tr>
<tr>
<td>Porter</td>
<td>Pat</td>
<td>Texas A&amp;M</td>
<td><a href="mailto:p-porter@tamu.edu">p-porter@tamu.edu</a></td>
</tr>
<tr>
<td>Sappington</td>
<td>Tom</td>
<td>ARS, Ames</td>
<td><a href="mailto:tom.sappington@usda.ars.gov">tom.sappington@usda.ars.gov</a></td>
</tr>
<tr>
<td>Smith</td>
<td>Jocelyn</td>
<td>Uof Guelph</td>
<td><a href="mailto:jocelyn.smith@uoguelph.ca">jocelyn.smith@uoguelph.ca</a></td>
</tr>
<tr>
<td>Souza</td>
<td>Dariane</td>
<td>UNL</td>
<td><a href="mailto:Dariane_lyra@hotmail.com">Dariane_lyra@hotmail.com</a></td>
</tr>
<tr>
<td>Spencer</td>
<td>Joe</td>
<td>U of Illinois</td>
<td><a href="mailto:Spencer1@illinois.edu">Spencer1@illinois.edu</a></td>
</tr>
<tr>
<td>Springborn</td>
<td>Fred</td>
<td>MSU</td>
<td><a href="mailto:Springb2@msu.edu">Springb2@msu.edu</a></td>
</tr>
<tr>
<td>Taylor</td>
<td>Sally</td>
<td>Purdue</td>
<td><a href="mailto:taylo592@purdue.edu">taylo592@purdue.edu</a></td>
</tr>
<tr>
<td>Tooker</td>
<td>John</td>
<td>Penn State</td>
<td><a href="mailto:tooker@psu.edu">tooker@psu.edu</a></td>
</tr>
<tr>
<td>Velez</td>
<td>Ana</td>
<td>UNL</td>
<td><a href="mailto:Avelezarango2@unl.edu">Avelezarango2@unl.edu</a></td>
</tr>
<tr>
<td>Wangila</td>
<td>David</td>
<td>UNL</td>
<td><a href="mailto:Dwangila2@huskers.unl.edu">Dwangila2@huskers.unl.edu</a></td>
</tr>
<tr>
<td>Wright</td>
<td>Bob</td>
<td>UNL</td>
<td><a href="mailto:rwright2@unl.edu">rwright2@unl.edu</a></td>
</tr>
<tr>
<td>Zukoff</td>
<td>Sarah</td>
<td>KSU</td>
<td><a href="mailto:snzukoff@ksu.edu">snzukoff@ksu.edu</a></td>
</tr>
</tbody>
</table>

Monday, January 26

8:00 - Welcome: Tom Sappington  
Local Arrangements Announcements: Billy Fuller  
Introductions and additions to the agenda  
Time and Place Committee – Sarah Zukoff, Pat Porter and Fangneng Huang
Preliminary discussion: Status on possible meeting in Brazil in 2018. Possibly looking for conference grant support to help with travel costs.

Nominating Committee – Andy Michel, Chuck Mason, Joe Spencer and Chris DiFonzo

Preliminary discussion:
- New governance structure under NC-246
- Meeting organization/agenda in 2017 given new structure
- Prospective planning for officer assignments:
  - 2017: Joe Spencer will chair, Andy Michel and Jocelyn Smith will be Vice Chairs, Brad Coates will be secretary
  - 2018 (transition to 1 chair and 1 vice chair): Andy Michel will chair, Brad Coates will be Vice-Chair, secretary to be named in 2017 meeting

8:45 - Steve Pueppke, Administrator's report
   Recap of NC205 renewal as NC246, and new objectives

9:00 - Recap of Activities and Influence: Any significant communications with growers, seed/grain handling/processing industry; significant communications with state regulators; commodity commissions, etc.
   Topics included:
   - Neonicotinoids and pollinators
   - Bt resistance
   - Efficacy and risk of seed blends for mid south region
   - Stink bugs emerging pest for South East and Mid Atlantic regions
   - Chuck Mason – Status of publication NCR 327

10:00 – Break

10:30: Invited presentation:

11:14 - State Reports by Objective.

1. Investigate the relationship between pest management technologies and the agricultural environment.
   (e.g., seed treatments including non-target effects)
   States Presenting: IA, NE, NC, OH, ON, TX, SD

2. Investigate the ecology, biology, evolution, genetics, and behavior of corn arthropods.
   States Presenting: TX, SD, ON, OH, NE

12:00: Lunch break:

1:00: Continuation of State Reports
   States Presenting: MN, MI, LA, KS, IA, GA, TX, DE, NC, IL

3. Develop and assess IPM and IRM systems for the arthropod complex in corn.
States Presenting: DE, GA, IA, IL, KS, LA, MI, NC, NE, OH, ON, TX

4. Employ diverse delivery methods to disseminate information related to sustainable management of corn arthropod pests.

5:00 – Adjourn for the evening (dinner on your own)

Tuesday, January 26

8:00 - Minutes approval
   Time and Place Committee report: Members voted unanimously for Wichita, KS in Jan 23-26, 2017. Sarah Zukoff will be LAC.
   Nominations Committee report: Brad Coates nominated to be a single secretary. Will be proposed to NCCC46

8:20 - Continue State Reports by Objective

11:00 - Final business items

11:15 - Adjourn main body for Lunch

11:30 - Meeting of 2017 NC246 officers and Above-ground Subcommittee officers

NCCC46 Annual Meeting Minutes
Sioux Falls, SD
January 27-28, 2016

Wednesday, January 27 (1:30 pm - 5:00)

Call to order and welcome: (John Tooker, Chair)

Nominations committee:
- Tom Sappington reviewed current committee structure and executive
- Proposal from NC246 nominations committee (Chris D, Pat P.) to merge membership and officers for NC246.
- Committee structure options discussed and voted as above:
  - Past Chairs: Tom Sappington and John Tooker
  - 2016 Chair: Joe Spencer
  - 2016 Vice chair: Andy Michel (Jocelyn agrees to step off)
  - 2016 Secretary: Brad Coates
- Meeting length: proposal for 3 day meeting in 2017
  - Discussion on whether or not to include industry portion of meeting
  - Re-evaluate meeting length after 2017 meeting

Time & place committee:
- 2017
  - Wichita, KS proposed by NC246 committee.
Motion to accept proposed location: Chris Difonzo, second: Art Schaafsma, approved.

Additional agenda items:
- Bob Wright: Motion to prepare letter from committee to thank extension station directors who provided supplemental funding in 2013 supporting a survey of growers regarding the impacts of the NCCC46 and the regional rootworm resistance monitoring whole plant bioassay effort. Lance Meinke and Bob Wright will begin to prepare the letter.

RNAi for WCR management Ana Maria Velez Arango (UNL)

Genetics of Cry3Bb1 resistance in western corn rootworm. Nick Miller (U of IL-Chicago). Monsanto Rootworm Knowledge Grant funding.

3:20 Break

WCR refuge function. Sally Taylor (postdoc, Purdue Univ.). Monsanto Rootworm Knowledge Grant funding.


Neonic update from Ontario. Art Schaafsma (Univ. of Guelph)

5:00 Adjourn for evening

Thursday, January 30 (8:00 – 5:00)

Academic Research Licenses: Tom Sappington and Aaron Gassmann
- Review of effort to develop research agreements with seed/trait providers to overcome the restrictions on research described on seed tags.
- Remind the committee that these agreements were developed for a 5 year term; therefore, researchers need to be aware of expiration dates and begin renewal if necessary.
- Action: Chuck Mason recommended that a reminder email be sent to committee members.

Nominations Committee:
Discussion.
Motion: Elect Brad Coates as 2017 secretary and continue discussion of committee structure at 2017 meeting. Move to accept motion: Art Schaafsma, second: Bruce Hibbard, approved.

Other business: Pat Porter. ~$630 left over from San Antonio meeting. Pat would like to move to transfer the funds to cover the SD meeting if there are outstanding costs or put towards the KS 2017 meeting. Second: Chuck Mason, approved.
**Rootworm rearing:** Sharon K. Papiernik, Research Leader, USDA North Central Agricultural Research Laboratory, Brookings, SD.

- Art S. asked if Sharon could provide a fee structure for eggs.
- Kelly T. asked if we could convince corn check-off dollars to support the rearing at USDA?

**State Reports**

*Objective 1:* Coordination the evaluation and reporting of registered and experimental management options, including rootworm-resistant transgenic hybrids and new classes of insecticide chemistry.

*Objective 2:* Coordinate original research on rootworm biology, ecology, physiology, mating, dispersal, and survival, and potential changes in host range across environments and production systems.

States reporting: MI, ON, PA, OH, MO, IN, DE, WI, SD

**WCR resistance monitoring:** Bt traits in Nebraska: David Wangila (Graduate student, U. NE)

**WCR resistance to pyrethroid insecticides:** synergism and cross-resistance: Adriano Pereira (Graduate student, U. NE)

**State reports continued**

IL, MN, TX, KS, IA, NE

**Impact Statements and wrap up**

**2015 Minutes:** Pat Porter moves that we deem the minutes to be approved. Second: Bob Wright, approved.

NCCC46 meeting adjourned at 3:20 pm.