Wheat Disease Research and Education

South Dakota Wheat Commission  
Reporting period: July 1, 2016 – June 30, 2017

Project investigators:
Connie Strunk – Plant Pathology Extension Field Specialist, SDSU Extension Center, 2001 E. 8th St., Sioux Falls, SD 57103, 782-3290, fax - 782-3294, connie.strunk@sdstate.edu.

Ruth Beck – Agronomy Extension Field Specialist, SDSU Extension Center, 412 West Missouri, Pierre, SD 57501, 773-8120, ruth.beck@sdstate.edu.

David Karki – Agronomy Extension Field Specialist, SDSU Extension Center, 1910 West Kemp Ave, Watertown, SD  57201, 882-5140, david.karki@sdstate.edu.

Report type: Progress Report

Research Summary:  
Assistance will be provided to South Dakota wheat producers who are interested in doing on-farm research. Wheat disease education will be made available to producers through private pesticide applicator trainings, commercial pesticide applicator trainings, crops clinics, Wheat Walks, West River Field School, SDSU IPM Field School, CPT variety trials, Draper Winter Wheat Meeting, farm shows, iGrow articles, iGrow Radio spots, news releases, weekly news columns, and other educational materials as handouts. Education will also be provided to high school youth through educational displays and presentations at Women in Science in Sioux Falls.

Introduction:

- The Wheat Walk Tours will provide an opportunity for producers to receive information on identifying and managing various wheat diseases, weeds, and insects, best management fertility practices and other agronomic information. The Wheat Walks will allow producers to interact with Plant Pathology, Weed, Entomology, Soil Fertility, and Agronomy Field Specialists and/or State Specialists, discuss their concerns and get their questions answered in person. Handout material will be provided to attendees for further reference.

- Extension staff will assist with general surveys of wheat diseases occurring over a representative portion of South Dakota in conjunction with other researchers. Information is needed on the occurrence of various wheat diseases in South Dakota to help justify both research and educational efforts. Periodic visits to wheat fields will be made to document wheat diseases that are present in the field and collect samples for proper diagnosis through laboratory analysis.
Description of Accomplishments:

A winter wheat educational meeting was held in Draper, SD. The latest research information focusing on varieties and disease recommendations were shared with meeting attendees.

An on-farm research project looking at a biological product called Commence was established with a producer this fall in his winter wheat field. Stand counts will be taken but have not been as of the date this progress report was due.

Projections:

The Wheat Walks will provide an excellent opportunity for producers to get up to date, research based information and interact directly with SDSU Extension Specialists.

If we are able to obtain some more wheat seed infected with ergot, we would like to re-run the ergot study. We hope to establish a few demonstration type plots to be used in conjunction with the Wheat Walks and any other educational meeting that may be appropriate. We also would like to pursue working with wheat producers on doing some on-farm research.

Publications/Data:

The Value of Crop Residue, 7-28-16 Ruth Beck and Anthony