

Washington Grain Commission
Wheat and Barley Research Annual Progress Reports and Final Reports

Project #: 4150-1222

Progress Report Year: 2 of 3

Title: Extension Education for Wheat and Barley Growers

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Executive summary: The Extension Dryland Cropping Systems Team focused their efforts in three areas in 2016. These were: 1) the Wheat and Small Grains Website (smallgrains.wsu.edu), 2) the Crop Diagnostic Clinic, and 3) the Wheat Academy. In addition to these three focus areas, the Team responded to the crisis of Low Falling Numbers in the 2016 wheat crop with Timely Topics and a new Grain Quality Resources section on the Wheat and Small Grains website. Some noteworthy new content for the Wheat and Small Grains website in 2016 included three new dynamic decision tools: 1) Winter Wheat Herbicide Efficacy Tables, 2) Herbicide Mechanisms of Action (MOA) Tool, and 3) AMS Sprayer Mix Calculator. Additionally, three new videos on soil acidification were produced and put up on the Soil Acidification in the Inland Pacific Northwest page along with new publications on using a pH meter for in-field soil pH sampling, how acid soils interact with root diseases, and a three-part publication on agricultural lime and liming. The video series received the 2016 Outstanding Extension Educational Materials Audiovisual Award from the Extension Education Community of the American Society of Agronomy. Approximately 63 people attended the Crop Diagnostic Clinic. Forty-two percent of the participants were growers and the rest crop consultants. The Wheat Academy was held on the WSU Pullman Campus on December 13 and 14. Attendance was limited to 75 people.

Impact: Measureable impacts for the past year include a greater than 2x increase in sessions and unique users visiting the Wheat and Small Grains website compared to the previous year. For the six months of June through November, the site had 18,729 sessions with 11,542 unique users, this was up from 8,179 sessions and 4,951 unique users for the same period in 2015. In addition to three new decision tools, three new videos, and six new peer-reviewed Extension publications, the team also responded to the low falling numbers situation by providing growers with four Timely Topics on the subject and adding a new section on Grain Quality Resources to the website. On August 10, the Timely Topic titled "Washington Association of Wheat Growers Falling Number Update" was posted and received 441 pageviews in the first day. Through November, the four Timely Topics on Low Falling Numbers had received nearly 2,500 pageviews. The 2016 Wheat Academy filled in just eight days and meeting surveys were very positive for the event. Attendees included a nice balance of 38 industry and 37 farmer participants. The Crop Diagnostic Clinic was also held in 2016 and received positive feedback from attendees.

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Project PI(s): Drew Lyon,

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Project year: 2 of 3

Objective	Deliverable	Progress	Timeline	Communication
Add new resources to the Wheat and Small Grains website	Publications, decision support tools and calculators, videos, quizzes, topic forums, etc. Specific deliverables identified include dynamic weed control tables, an ammonium sulfate spray tank calculator, a soil lime application calculator, and three videos on soil acidification as well as several new publications on this topic.	New content in 2016 included three dynamic decision tools: 1) Winter Wheat Herbicide Efficacy Tables, 2) Herbicide Mechanisms of Action (MOA) Tool, and 3) AMS Sprayer Mix Calculator. Three new videos on soil acidification were produced along with new publications on using a pH meter for in-field soil pH sampling, how acid soils interact with root diseases, and a three-part publication on agricultural lime and liming.	New resources will be added every year for the duration of this grant. The specific deliverables identified will be completed in 2016.	The development of new resources will be shared with growers through Timely Topic posts on the Wheat and Small Grains website, news releases, and at education events held throughout the year.
Develop and launch subscription listserv	Subscription listserv	The subscription listserv went live on September 30, 2016. As of January 3, 2017 there were 957 subscribers to the listserv.	The subscription listserv will be available by the end of 2016.	The subscription listserv will be announced to growers through Timely Topic posts on the Wheat and Small Grains website, news releases, and at education events held throughout the year.
Improve the Wheat Academy	A highly relevant and popular program will continue to improve and a means of serving more people without losing program quality will be sought.	Registration for the 2016 Wheat Academy was completed within eight days of opening registration, with 38 industry participants and 37 farmers. This was an increase of 12 farmers from 2015. The registration fee for farmers was reduced to \$75 from \$100 in 2015 and the price for industry participants was increased to \$125.	This will be an ongoing process throughout the duration of the grant.	Information on the Wheat Academy will be shared with growers through the Wheat and Small Grains website, through news releases, and other educational events. We will also attempt to make more of the information delivered at the Academy available to people through the website.
Respond to issues of concern as they arise	In-depth educational programs, publications, and decision support tools as called for by the particular issue.	Low falling numbers were a widespread problem in 2016. Growers had many questions on the topic. The Extension Dryland Cropping Systems Team worked with Camille Steber, USDA-ARS, the WSU wheat breeders, WAWG, and the WSDA to provide information on this topic. Four Timely Topics were written and posted to the Wheat and Small Grains website. Through November, these four Timely Topics received nearly 2,500 pageviews. Additionally, a Grain Quality resources page was added to the Wheat and Small Grains website.	This will be an ongoing process throughout the duration of the grant.	Educational resources and programming developed to address issues of concern will be shared with growers through the Wheat and Small Grains website, news releases, and education events held throughout the year.