

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

Project #: 4150-1227

Final Progress Report Year: 3 of 3

Title: Extension Education for Wheat and Barley Growers

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Executive summary: New resources were added to the Wheat and Small Grains website in 2021. We also released our first phone app: WSU Variety Selection. The new app has been downloaded more than 200 times. The results from the 2021 cereal variety testing program were added to the website, the Variety Selection Tool, and the phone app. The 2021 WSU Weed Control Report was posted as were two new Weed ID quizzes. The Insecticide Mode of Action Tool was added in 2021 along with the Insect ID and Damage Quiz. Twenty-five new episodes of the WSU Wheat Beat Podcast were posted in 2021, a new episode every other week. There were also 26 new Timely Topics posted. The 2021 Wheat Academy was cancelled because of mask mandates necessitated by the COVID-19 pandemic.

Vacant positions on the Extension Dryland Cropping Systems Team remained a problem in 2021. The Team will enter 2022 three county positions down from where it was in 2018, although searches for the Columbia County and Walla Walla County positions will occur in 2022.

Impact: The Wheat and Small Grains website continues to be an important source of information for many people. For the 11-month period of January through November 2021, the site had 66,417 sessions with 52,822 unique users; this compares to 63,155 sessions with 34,808 unique users for the same period in 2020, and 49,175 sessions and 36,002 unique users in 2019. There were 104,950 pageviews, which is down from 114,379 pageviews in 2020 but up from the 88,727 pageviews in 2019. We have 1,015 subscribers to our listserv. We have 907 followers on Twitter, and 621 follows on Facebook. Most of the sessions from the US (36,723) were initiated from the state of Washington (13,476). From January through November, the WSU Wheat Beat Podcast had a total of 10,441 plays. Through November, the Weeders of the West blog had 4,727 pageviews and 95 people are subscribed to the blog listserv.

Deliverables 2019-2021:

WSU Variety Selection Phone App
Insecticide Mode of Action Tool
Weeders of the West (WoW) Blog – 40 posts
Insect & Insect Damage ID Quiz
Soil Nutrient ID Quiz
Herbicide Resistance Resources Page

Wheat Beat Podcast Episodes – 76

Timely Topics – 109

Best management practices for managing herbicide resistance (PNW754)

Integrated management of downy brome in winter wheat (PNW668 revision)

Integrated management of feral rye in winter wheat (PNW660 revision)

Harvest weed seed control: Applications for PNW wheat production systems (PNW730)

Russian thistle management in a wheat-fallow crop rotation (PNW492)

Buckwheat control in wheat (FS158E)

Hessian fly management in wheat (FS331E)

Nitrogen inhibitors: How do they work to reduce N losses? (FS333E)

WSU Weed Control Reports – 2019, 2020, and 2021

WSU Wheat Academy – 2019

WGC project number: 4150-1227 (FY 2019-2022)

WGC project title: Extension Education for Wheat and Barley Growers

Project PI(s): Drew Lyon

Project initiation date: July 1, 2019

Project year (X of 3-yr cycle): 3

Objective	Deliverable	Progress	Timeline	Communication
Add new resources to the Wheat and Small Grains website, including new publications, decision support tools and calculators, videos, and quizzes.	New and updated Extension publications, decision support tools and calculators, videos, and quizzes will be developed. Decision support tools and videos will be prioritized. An article on our Extension activities will be written annually for Wheat Life magazine.	WSU Variety Selection was developed in 2021 and is the first phone app created by the team. With the release of CoAXium wheat varieties, several Extension publications were updated in 2021. These included publications on jointed goatgrass, downy brome, and feral rye. The Extension publication on prickly lettuce was also updated in 2021. A new insecticide mode of action and comparison tool was developed in 2021.	This will be an ongoing process throughout the duration of the project.	The development of new resources were shared with growers through Timely Topic posts on the Wheat and Small Grains website, news releases, including an annual article in Wheat Life magazine, and at various education events held throughout 2021.
Provide Timely Topics and podcast episodes on a regular and frequent basis.	We will post at least one Timely Topic every other week and one podcast episode in the alternate weeks so that we have at least one new item on the home page every week.	Twenty-five new episodes of the WSU Wheat Beat Podcast were posted in 2021; one every other week. Twenty-six Timely Topics were posted in 2021. Eighteen articles were posted to the Weeders of the West Blog.	The proposed schedule will be initiated at the start of the funding cycle and continue throughout the duration of the project.	Timely Topics, Wheat Beat Podcast episodes, and Weeders of the West articles were posted to the home page of the Wheat and Small Grains website.
Develop a new one-day educational program along the lines of the Wheat Academy that can be held outside of Pullman.	A new one-day educational program held each year in at least one location outside of Pullman.	No progress was made on this objective in 2021.	We would still like to make progress on this objective, but it will not happen in this funding cycle.	When developed, information on the new educational event will be communicated to growers and crop consultants through Timely Topic posts and in future advertisements for the program, including advertising in Wheat Life.
Respond to issues of concern to the wheat industry with educational programming that is timely and relevant.	In-depth educational programs, publications, articles, videos, and decision support tools as called for by the particular issue.	An historically dry year in 2021 resulted in few of the usual problems in wheat. The 2021 podcast with the most listens was Bill Schillinger's episode on stubble height and soil water.	This will be an ongoing process throughout the duration of the project.	Educational resources and programming developed to address issues of concern were shared with growers through Timely Topic posts on the Wheat and Small Grains website and at education events held in 2021.

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