

Washington Oilseed Cropping System Extension and Outreach



ISAAC J. MADSEN AND IAN BURKE
DEPT. OF CROP AND SOIL SCIENCES, WSU

The Washington Oilseed Cropping System (WOCs) project focuses on conducting research and extension to improve oilseed production in Washington. Over the past 14 years, the WOCs project has conducted research on safflower, sunflowers, flax, camelina, and canola. The WOCs research program has focused a range of research areas including but not limited to fertility, oil quality, weed management, crop density, planting date, and crop rotation. Effectively disseminating the information generated from this research is also in the purview of the WOCs project. The COVID-19 pandemic stalled many of the WOCs extension plans for the year 2020. However, webinars, podcasts, and videos were disseminated via web platforms. WOCs extension personal presented on Zoom webinars to more than 500 growers across the Pacific Northwest in the winter of 2020. The topics covered in these webinars included the most innovative research conducted as part of the WOCs project as well as important information regarding herbicide carryover. While it was disappointing to not meet with growers in person, webinars successfully reached a wider audience the previous years in person extension events. We will likely continue webinars as a core part of our extension program for the foreseeable future. In addition to webinars, three field day videos focused on canola production were recorded in collaboration with the Small Grains Extension Team. The videos focus on information regarding canola varieties, production practices, and rotations. The videos can be found in on the Small Grains website in the video library (<https://smallgrains.wsu.edu/additional-resources/video-resource-library/>). Three canola production podcasts were also recorded and can be found on the small grains podcast page. (<https://smallgrains.wsu.edu/category/podcast/>). During the 2021 growing season, the WOCs extension team will be posting weekly or bi-weekly photos of our field operations the WOCs Facebook page (<https://www.facebook.com/WSUOilseeds/>). For more information on canola varieties and production methods you can go to the WOCs website (www.css.wsu.edu/oilseeds). In the fall of 2021 and the spring of 2022 we hope to resume in person events.

Determining Optimal Foliar Fungicide Application Timing for Control of Blackleg Disease of Winter Canola and Tracking *Leptosphaeria maculans* Spore Release in Northern Idaho

KAYLA M. YEAROUT-JANOWSKI, JIM B. DAVIS, AND KURTIS L. SCHROEDER
DEPT. OF PLANT SCIENCES, UI

Blackleg disease of canola (*Brassica napus*) is caused by the fungal pathogen *Leptosphaeria maculans*. Worldwide, blackleg is one of the most destructive canola diseases, and it is an emerging problem in seed production for the Idaho oilseed industry. Researchers and growers have limited knowledge of how environmental conditions impact the pathogen's development and distribution in northern Idaho and elsewhere in the Inland Pacific Northwest.

Blackleg infection is caused by wind-blown spores (ascospores), rain-splashed spores (conidia), and infected seed, however the source of initial disease infection for the region and spore movement is unknown. Therefore, Burkard volumetric spore traps (Fig. 1) have been placed adjacent to winter canola fields to identify the main source of inoculum and weather conditions associated with spore release. These traps pump air through an orifice and deposit any particles on a piece of tape that is then used for direct visualization of spores under a microscope. Ascospores were detected between April and June 2020 at average monthly temperatures of 44



Figure 1. Burkard volumetric spore trap.