

MANAGING HERBICIDE-RESISTANT WEEDS IN THE PACIFIC NORTHWEST

Best Management Practices (BMPs) to manage herbicide-resistant weeds are critical to the long-term sustainability of wheat production in the Pacific Northwest. Using BMPs are the most effective way to manage weeds, including herbicide-resistant weeds, especially when incorporated into a long-term weed management plan.

Start clean!

- Plant into weed-free fields and keep them weed-free.
- Plant weed-free crop seed.
- Understand weed biology, particularly timing of seed germination, seed dormancy, and seed longevity.
- Prevent field-to-field and within-field movement by starting equipment usage in weed-free areas and by cleaning equipment after use.
- Control weeds in borders to prevent weed influx into the field.

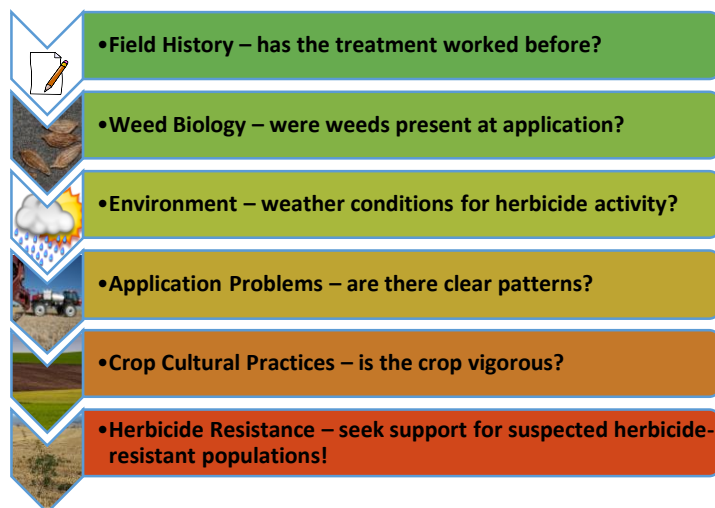
Stay clean!

- Scout fields routinely, and closely monitor the outcome of herbicide treatments. **The sooner problems are detected, the better the chance you can adjust your management strategy.**
- Use multiple herbicide mechanisms of action (MOAs) that are effective on troublesome or herbicide-resistant weeds.
- Follow the herbicide label – use the correct rate at recommended weed sizes.
- Diversify weed management practices – prevent weed seed production and reduce weed seeds in the soil seed bank.
- Use crop competitiveness and other cultural management strategies, including crop rotation.
- Use mechanical management practices, as needed.
- Manage weed seed during and after harvest to prevent weed-seed bank buildup.
- Know and understand the effects of the weed management inputs on *each weed species*.

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If weeds are present after application, determine the reason! *Consider the following:*



EM108

Seek support!

Contact your local cooperative extension office for help creating a weed management plan or if your current plan is ineffective, or see EM108: Advances in Dryland Farming in the Inland Pacific Northwest, Chapter 9, for an approach to creating such a plan.

Stay informed! Visit the resource pages of the respective universities:

UIdaho: extension.uidaho.edu/crops.aspx; OSU: agsci.oregonstate.edu/cbarc/weeds; WSU: smallgrains.wsu.edu to stay current with developments in herbicide resistance and resistance management in the region.

For specific questions or concerns, contact the WSU Weed Science Team (509.335.1719; smallgrains@wsu.edu).