# University of Idaho Snake River Weed Management Tour and Field Day Aberdeen R&E Center Tuesday June 25, 2024

**Registration:** 8:00 to 9a **Tour:** 9a to noon **Sponsored Lunch** noon to 1p

## Tour Stops 9a to noon:

#### Potato

Two- and Three-way Herbicide Tank Mixtures

• Field demonstration of how tank mixtures should have Herbicide Site of Action Overlap for Herbicide Resistance Management. Mixing in the tank herbicides with different Sites of Action controlling the same weed is called Overlapping Sites of Action. Overlap can help prevent or delay the development of herbicide resistant weed populations.

Palmer amaranth and Waterhemp herbicide resistance:

- Plant identification demonstration: These weeds have recently been identified in Idaho and detected from west to southcentral Idaho. A survey will take place in eastern Idaho this growing and post-harvest seasons. Growers, ag industry, University and USDA personnel are being asked to help with this endeavor.
- The Northwest Potato Research Consortium has funded a project to survey for these weeds in eastern Idaho and for screening resistance with potato herbicides.

Anthem Flex Alone and in Tank Mixtures

• Anthem Flex is a pre-mix of pyroxasulfone and carfentrazone. It recently received a Supplemental Label for use in Potatoes. The trial demonstrates effective rates and tank mixtures.

Effect of Simulated Excess Rainfall on Potato Herbicide Injury

• Excess rainfall has been a phenomenon in the recent years in southern Idaho. This study compares the impact of excess rainfall occurring shortly after application of four preemergence herbicides with different solubility and will lead to a better understanding of symptomology. Excess rainfall is simulated with sprinkler irrigation.

Vine Kill Speed x Timing: Effect on Blackspot Bruise

• Trial results showing how a fast kill (sulfuric acid) at a late timing to mature tubers can still reduce the incidence of Blackspot Bruise in susceptible potato varieties

Herbicide Site of Action Demonstration: Potato Crop Injury

• Tour attendees participate in a quiz to identify the herbicide Site of Action causing the specific injury to potatoes from preemergence and postemergence applications simulating drift and carryover. Field diagnostics can be improved with this exercise.

## **Other Crops**

IR-4 Quinoa Herbicide Screening: PrePlant, Preemergence, and Postemergence trials:

• Idaho is the largest producer of quinoa in the U.S. and herbicide labels are needed for best possible production. The IR-4 program has designated trials at the Aberdeen R&E Center for 2024.

ISDA Specialty Crop Block Grant Project - Herbicide tolerance in condiment mustard:

• A trial is being conducted at the Aberdeen R&E Center with funding from an ISDA Specialty Crop Block Grant to determine herbicide tolerance of condiment mustard under irrigation. Few herbicides are labeled for this crop. This initial data will be used in an IR-4 proposal.

Interaction of herbicides and fungicides in barley:

• Growers have informed Dr. Jared Spackman of interactions between herbicides and fungicides in barley. Results of this study will aid in determining what is happening in the field.

## **Pest Management Updates:**

- Diseases and Insects in Potatoes and Rotation Crops
- Potato Variety Development including metribuzin variety tolerance trials
- Cover Crop Research potato herbicide application with a pea cover crop

Pesticide Applicator Recertification: 4 credits No RSVP needed Ouestions – contact

Potato Cropping Systems Weed Scientist

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**NOTE:** Kimberly R&E Center
University of Idaho Snake River Weed Management Tour and Field Day
Wednesday June 26, 2024
Albert Adjesiwor <u>aadjesiwor@uidaho.edu</u>
Registration 8-9a. Tour 9a to noon followed by sponsored lunch