

Researchers target glyphosate-resistant kochia weeds

By SEAN ELLIS
Capital Press

Researchers are now certain that kochia weeds found growing in two sugar beet fields in Eastern Oregon and Southwestern Idaho last year were resistant to glyphosate, the active ingredient in the popular weed killer Roundup.

The kochia weed is widespread in the region. Researchers are determining how widespread the resistant weeds are and developing ways to help sugar beet growers in the region deal with them.

That includes field trials designed to show growers the benefit of using multiple herbicides, in addition to Roundup, to prevent or control the development of glyphosate-resistant weeds.

Virtually all of the 180,000



Sean Ellis/Capital Press

People look at a field trial designed to show sugar beet growers in Idaho and Oregon the best treatment methods to control glyphosate-resistant kochia weeds, during a June 11 weed tour at Oregon State University's Ontario research station.

acres of sugar beets grown in Eastern Oregon and Idaho are genetically modified by Monsanto Co. to resist glyphosate.

A field trial at Oregon State University's Ontario research station set up to determine the best treatment method to

control resistant kochia weeds is being coordinated by OSU weed scientist Joel Felix and University of Idaho weed scientist Don Morishita.

It was Morishita and Felix who first alerted sugar beet growers last year they had found kochia weeds that could be resistant to glyphosate. Lab tests have since confirmed that they are.

Both said weeds don't mutate to develop resistance to a herbicide such as glyphosate. Rather, the product allows a very small population of the weeds that are naturally resistant to thrive because it kills off their competition.

That's why it's important for growers to use other herbicides, in addition to Roundup, Felix said.

Roundup might not control a very small number of resistant weeds, he said, but the

use of multiple chemistries will. Crop rotation is an important part of that approach because it allows farmers to use different chemistries, he added.

"People who are using (Roundup Ready crops) need to manage that technology by rotating their chemistries," said Greg Dean, manager of agricultural services for Amalgamated Sugar Co., which purchases the sugar beets grown by farmers in the region.

Some farmers in the area are still relying on glyphosate alone to control weeds, Morishita said.

"Any farmer who is just relying on glyphosate is really setting themselves and their neighbors up for some problems in the future," he said.

The decision on what herbicides to use is an economic

one and it comes down to the grower's call, Felix said.

But, he added, "We are stressing ... both crop rotation and the use of chemistries other than just glyphosate. As you rotate, you use different modes of action and you control weeds in all crops. By the time you get into sugar beets, you may be free of kochia if you do a good job."

Felix and Morishita are collecting weeds from different areas and will spray them with Roundup to try to determine how widespread glyphosate-resistant kochia weeds are in the region.

"It's really important for ... sugar beet growers to know if they have glyphosate-resistant weeds on their farm," Morishita said. "I think we'll have a better idea of the level of resistance later this year."

WSU website helps farmers monitor insects

Researchers scout fields for armyworm, wheat midge

By MATTHEW WEAVER
Capital Press

REARDAN, Wash. -- Washington State University researchers recommend Northwest dryland grain farmers check the university's small grains website to see if insect pests are causing problems in their area.

The website offers weekly updates on populations of wheat head armyworm, wheat midge, aphids, cereal leaf beetle, grasshoppers and Hessian fly, said Diana Roberts, regional extension specialist for WSU Extension in Spokane County.

"If (farmers are) in an area where we're reporting a potentially worrisome level, then they should be out scouting their fields," Roberts said.

The researchers combined efforts to look for the insects at 20 sites throughout Eastern Washington. Their monitoring efforts began in late May, and will continue throughout the season, depending on the insect and the species.

The combined effort will help researchers look more efficiently, Roberts said.

Reardan, Davenport and Edwall areas in Washington remain the hot spot for armyworm activity, Roberts said, although numbers appear to have peaked. That's about the right time for growers to sweep their fields for larvae, since eggs hatch about 10 days after they're laid.

Several insects could be the armyworm, a non-native and a native species, Roberts said. Researchers can't identify the species in the field by looking at the larvae, they need to look at the adult moth. But having the moth in the trap doesn't prove it's the one causing damage. The researchers need to collect the larvae in the field and raise them into adults. Efforts to do so so far have



Photos by Matthew Weaver/Capital Press

Diana Roberts, Washington State University regional extension specialist in Spokane County, inspects the floor of a pheromone trap for wheat midge June 12 along Janett Road in between Reardan and Davenport, Wash. Roberts and other researchers are checking fields in Eastern Washington once a week for wheat midge and other insects that could cause a problem for wheat farmers.



Diana Roberts, Washington State University regional extension specialist in Spokane County, looks for signs of insect activity June 12.

failed, Roberts said.

"Which species is primarily the problem is probably not important to the farmer, but it is important to scientists trying to unravel why it's taken a hundred years for it to become a nuisance," Roberts said.

Wheat fields are susceptible to wheat midge once the wheat heads emerge until anthers begin sticking out, Roberts said.

Just a few wheat midge adults in the trap don't require further action, but at least 30 would be cause for concern.



Diana Roberts, Washington State University regional extension specialist in Spokane County, uses a net to sweep a field looking for wheat head armyworm larvae June 12.

Online

<http://smallgrains.wsu.edu/wheat-and-barley-insect-pest-surveys/>

The Peone Prairie area near Spokane has shown the most wheat midge activity so far this year, she said.

"Understandably people get nervous when they see a new insect," she said.

So far the armyworm has shown the most activity, but that could quickly change, Roberts said.

"It's going to be an interesting year, with the winter we had," she said. "Everything's earlier."

Ranch worker rescued after two days pinned under ATV

By GEORGE PLAVERN
EO Media Group

CONDON, Ore. — Wheeler County authorities and volunteers rescued a local ranch worker June 14 who spent nearly two days pinned underneath an overturned ATV in the Lost Valley area north of Kinzua.

Bill Williams, 52, was taken aboard Life Flight and flown to Legacy Emanuel Medical Center in Portland.

Sheriff Chris Humphreys said Williams was found at the bottom of a sharp canyon with just his legs sticking out from under the vehicle. He was conscious and able to communicate, though clearly injured, dehydrated and suffering from exposure.

Recent temperatures in the area had fluctuated between daytime highs of 80 degrees and nighttime lows of 50 degrees.

"For the type of accident in the area he was in, and how long he was out there in only work clothes, he was in surprisingly good shape," Humphreys said. "We're very thankful for that."

Crews began searching Saturday, June 13, for Williams, who had last been seen the prior morning, according to a police report. They worked through the night before a sheriff's deputy and landowner found him early Sunday morning.

It took several hours to extricate Williams due to the difficult terrain, and move him into an area where the Life Flight helicopter could land.

"The rescue itself was amazing," Humphreys said. "On this particular situation, the helicopter landed and Life Flight medics had to work a long time to get him stabilized before transport."

Search and rescue was able to drive Williams up a side hill using a utility vehicle confiscated by police in the high-profile poaching case.

EPA must decide fate of common insecticide chlorpyrifos by June 30

By MATEUSZ PERKOWSKI
Capital Press

A federal appeals court has ordered the U.S. Environmental Protection Agency to decide by June 30 whether to prohibit chlorpyrifos, an insecticide that environmentalists say harms children.

Eight years ago, the agency received a petition to cancel the chemical's registration and allowable residues on food, which would end its legal use, from the Pesticide Action Network North America and Natural Resources Defense Council.

The groups allege that EPA has taken an unreasonable long to respond to its request while chlorpyrifos continues to cause short-term and long-term health problems in rural children.

Concerns about exposure to the chemical convinced

the EPA to phase out its home and garden uses in 2000 but the agency has "inexplicably" failed to prevent harms from agricultural spray drift and volatilization, which affect the children of farm workers, the environmental groups said.

"Exposure to chlorpyrifos, a pervasive pesticide, is impossible to avoid. Chlorpyrifos is found in food and drinking water, in the air near agricultural communities, and in breast milk," the environmentalists said. "The risk of exposure is not limited to people who choose to buy or use products containing the pesticide; it can travel windborne from where it is sprayed, and it can be tracked inside the home on the shoes and clothes of people who come into contact with its residues."

Aside from causing poisoning symptoms like diz-

ziness, seizures, confusion, vomiting, muscle spasms and even death, exposure to the chemical is associated with low birth weights, hyperactivity and "reduced newborn head circumference," which is linked to reduced cognitive ability, the petition claimed.

Despite EPA's assurances and a previous lawsuit, the agency has missed deadlines for answering the petition in 2012 and 2014, the environmental groups alleged.

"EPA, of course, will always have competing duties, but it has yet to pinpoint any pesticide-related work that

must take higher priority than evaluating the seven-year-old petition," the petition said. "EPA's continuing delay cannot be justified by any other priorities."

For its part, the EPA argued that PANNA and NRDC did not prove they're entitled to the "extraordinary remedy of a writ of mandamus," in which a court orders the government to perform its duty.

The environmental groups raised 10 "complex scientific issues" in their petition, and the EPA has responded to all but three of them, the agency said in a court brief.

The EPA proposed taking final action on those questions, which would allow the environmental groups to challenge those decisions, but they refused the offer, the agency said.

As to the remaining three questions, the EPA has been performing "complex assessments" of the chemical's health impacts while being hampered by budget shortcomings and a government shutdown, the document said.

"Thus, EPA has not unreasonably delayed action, and the Court should not take the drastic step of granting mandamus relief establishing deadlines for

EPA," the agency said. "Rather, EPA should be allowed to complete its review in a time frame dictated by sound science and in recognition of other competing priorities."

The 9th U.S. Circuit Court of Appeals has now sided with the environmental groups, ordering the EPA to notify the court of its decision by June 30.

If the agency plans to deny the petition, it must issue a final decision by Sept. 15. If the EPA plans to cancel the registration and tolerance for chlorpyrifos, it must provide the 9th Circuit with a deadline for doing so.

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