

# Scientist asks growers to watch for herbicide resistance

By JOHN O'CONNELL  
Capital Press

ABERDEEN, Idaho — A University of Idaho Extension weed scientist is asking growers and agronomists to save weed seeds for research purposes in the coming season if they encounter redroot pigweed or common lamb's quarters that withstand herbicide treatments.

Pam Hutchinson suspects metribuzin herbicide resistance may be on the rise within Idaho's populations of redroot pigweed and lamb's quarters.

In 2005, Hutchinson received her first report of metribuzin resistance suspected in redroot pigweed from a grower in Shelley, who acknowledged he'd used the chemical every other year on potatoes since the 1970s.

"He said metribuzin was no longer controlling redroot pigweed, but it had controlled it really well in the past," Hutchinson said, adding that he switched to other herbicides.

More recently, growers throughout Southern Idaho's potato production area have also reported evidence of metribuzin-resistant lamb's quarters.

Hutchinson hopes to plant seeds from weeds that survive metribuzin applications for testing in a greenhouse to confirm that resistance is occurring.

Metribuzin, which inhibits photosynthesis in weeds, was one of the first herbicides approved for potatoes. It can be used before potato plants emerge, but is the only herbicide labeled for post-emer-

gence lamb's quarters control in spuds.

Hutchinson said an increase in lamb's quarters could also be the result of a weed shift, due to the fact that popular herbicides, such as glyphosate, control hairy nightshade but are less effective on lamb's quarters.

"We're using products that target the worst weeds but miss lamb's quarters," Hutchinson said, adding that there hasn't been a new herbicide chemistry released in 20 years.

Hutchinson did the research to justify a special-needs label in Idaho and Washington potatoes for Linex, a pre-emergence herbicide with strong lamb's quarters control.

Hutchinson's research ap-

plication to survey Idaho for metribuzin-resistant weeds was denied, but the Northwest Potato Research Consortium has requested a full proposal on a collaborative project involving the four Northwest weed scientists regarding trials into blending herbicides to target specific weeds and delay or prevent resistance.

"If we don't take care of (metribuzin) then we're in trouble," Hutchinson said. "There are only a few other herbicides that in potatoes will control common lamb's quarters."

She advises growers to keep a history of herbicides use and weed history in fields to help evaluate chemicals that may have worked in the past but appear to be losing their effectiveness.

## Pulse industry wants customers to take pledge

Split pea ice cream helps introduce International Year of Pulses

By MATTHEW WEAVER  
Capital Press

The U.S. pulse industry is asking consumers to take the Pulse Pledge.

By signing up for the pledge online, participants agree to eat pulses once a week for 10 weeks. In return they will receive pulse recipes via email and a chance to win prizes, said Todd Scholz, vice president of research and member services at the USA Dry Pea and Lentil Council.

The pledge is one of several promotions planned for the International Year of Pulses to increase consumption and awareness of pulse crops — dry peas, lentils and chickpeas, or garbanzo beans.

Other promotions include: The pulse industry is launching an international brand campaign. A logo will indicate which products contain pulses. The campaign will continue for three or four years, or perhaps longer.

"We hope for 20 years," Scholz said. "It will be a logo desired by the people that are making pulse products. We hope it's self-sustaining, continues on and helps market our products."

The international year kicked off Nov. 18 with a celebration in New York. Pulse industry representatives met with dignitaries at the United Nations and served dishes made using pulse products, including split pea ice cream and "pumpkin" pie made only with red lentils.

The next day, industry members talked about lentils as a solution to such world health problems as diabetes, heart disease, obesity and nutrition issues in less-developed countries.

An international "pulse feast" is slated for Jan. 6, with a meal occurring in every

Online

<http://pulsepledge.com/>

time zone. An invitation-only event will take place at noon in Pullman, Wash.

"Every hour, there will be a new pulse feast going on," Scholz said.

Each feast will be covered using social media.

A western IYOP launch event is slated for Jan. 27 at the Culinary Institute of America in St. Helena, Calif.

Farmers are considering an assessment increase to pay for the international year, the brand campaign and an endowed chair at Washington State University.

Ballots will go to Washington farmers in March, Scholz said. The current assessment is 1 percent of the net value at the first point of sale. The council is asking for a three-year increase to 2 percent.

Idaho Pea and Lentil Commission members will make the decision, but asked for an advisory poll of farmers, also slated for March.

"We expect to generate around a million dollars from Washington and Idaho per year," Scholz said.

Montana currently grows the most pulse crops in the country, so Scholz expects about \$2 million from farmers in that state.

The request comes as dry conditions caused low yields in the Palouse, with peas down roughly 20 to 30 percent and lentil yields down by 50 percent. The chickpea crop was impacted less.

"We had a terrible season, it was probably the worst year since 1977," Scholz said. "As a national industry, our yields and production are down. Of course, that's the year we choose to ask for an assessment increase. But I think the excitement is still there. The industry has a history of gathering together and assessing themselves an increase so they can meet whatever challenge it might be."



Courtesy of EcoFarm Conference

Attendees of last winter's EcoFarm Conference take a bus tour to farms on California's Central Coast in January. This winter's conference will be held Jan. 20-23 in Pacific Grove, Calif.

## 2016 EcoFarm Conference to focus on water, soil health

By TIM HEARDEN  
Capital Press

PACIFIC GROVE, Calif. — Replenishing water sources and keeping soils healthy will be key themes of this winter's 36th annual EcoFarm Conference, set for Jan. 20-23 at the Asilomar Conference Grounds here.

With the theme, "Regenerating Our Lands and Water," the Ecological Farming Association's annual gathering will include workshops on irrigation efficiency, composting, managing crop nutrients to control plant disease, supporting bee health and other topics.

"I think what we're really

highlighting this year is the relevance of our theme ... within the scope of the current issues we're facing with drought and soil health," conference spokeswoman Emily Summerlin said in an email. She noted that 2015 was designated the International Year of Soils by the United Nations' General Assembly.

"We have a soil and water 'track' that goes along with the theme, with several pre-conferences and workshops that cover irrigation solutions, composting and related topics, Summerlin said. "We are presenting these organic and ecological farming practices as a solution."

Farmers, marketers, activists, educators and others attend the yearly conference, one of the West's largest for organic and environmentally conscious producers. While the first gathering drew only about 50 people, about 2,000 now attend the conference and it has grown every year, organizers say.

Among the dozens of presenters lined up for this year's conference will be Purdue University professor emeritus Don Huber, who will discuss what he considers the "failed promises" and "flawed science" behind genetic engineering, and Andre Leu of IFOAM Organics International in Australia, who will discuss pesticide residues in

food and children's health.

The Ecological Farming Association, or EcoFarm, is a nonprofit educational organization founded in 1981. The group gets funding through various activities and projects, donations, grants, memberships and business sponsorships, according to its website.

At the heart of the group's calendar is the conference, which also features tastings of local wine and beer, live entertainment and an exhibitor marketplace. Pre-conference activities include a bus tour of local organic farms and workshops on organic agricultural research, succession planning, compost and soil health and other topics.

## Pulse organizations weigh name changes

Washington, Idaho farmers make decision in March

By MATTHEW WEAVER  
Capital Press

Several organizations representing pulse farmers are considering changing their names to reflect the International Year of Pulses.

The Western Pea and Lentil Growers Association has already voted to change its name to the Western Pulse Growers Association, said Todd Scholz, vice president of

research and member services for the USA Dry Pea and Lentil Council.

The Washington Dry Pea and Lentil Commission will decide whether to make the change to the Washington Pulse Crop Commission in March.

The Idaho Pea and Lentil Commission has considered it, but it would be more complicated because there is an existing Idaho Bean Commission, Scholz said.

The North Dakota Dry Pea and Lentil Council will have to change state law to change its name. The next time this could happen would be in 2017, Scholz said.

## Breeders working on new genetically modified sugar beet variety

By SEAN ELLIS  
Capital Press

BOISE — Two global plant breeding and seed companies are jointly developing a new sugar beet variety designed to help growers better control weeds.

The genetically engineered sugar beet will be the next generation of weed control technology in sugar beets and it will be tolerant to three different herbicides: glyphosate, glufosinate and dicamba.

"We're very excited about it. We think it's going to increase grower productivity," KWS Saat Research scientist Aaron Hummel told growers Dec. 9 during the Snake River Sugar Beet Conference.

Virtually all of the sugar beets grown on 180,000 acres in this region have been genetically engineered by Monsanto Co. to resist its popular Roundup herbicide.

Snake River Sugar Co., a cooperative of farmers that supplies sugar beets to Amalgamated Sugar Co., estimates the adoption of sugar beets is saving Idaho and Eastern Oregon growers an estimated \$22 million a year.

"We believe the (new) trait will help you continue that trend," Hummel said. "We believe (this variety) will provide growers with great options for weed control."

KWS, a plant breeding company headquartered in Germany, signed a commercial agreement with U.S.-based Monsanto this year to develop the new sugar beet variety.

Trials and development will occur over the next three years and the new variety is expected to hit the market in eight to 10 years.

Monsanto and KWS also partnered in developing Roundup Ready sugar beets.

The combination of the

three traits stacked into one variety should prevent the proliferation of herbicide-resistant weeds because any weed resistant to any of the three modes of action would be killed by the others, Hummel said.

"If (a weed) is resistant to one chemical, then the next one will probably knock it out," said Idaho sugar beet farmer Galen Lee. "I'm very excited about it."

University of Idaho and Oregon State University weed scientists last year discovered the presence of some kochia weeds in this area that are resistant to glyphosate, the active ingredient in Roundup.

Hummel said the new product will not be a silver bullet for weed control but should be integrated into a comprehensive management program.

It's not a single solution, he said, "but it's a very good solution that will help you have more options to man-

age glyphosate resistance in weeds."

UI weed scientist Don Morishita said he believes the idea of the new sugar beet variety with three traits is a good one.

But, he added, some kochia weeds are resistant to dicamba and glufosinate, which works great in the Midwest, but doesn't work as well in the dry, low-humidity environments in this region.

"I think this idea of stacking traits is a reasonable one but I'm not entirely sold that (dicamba and glufosinate) are the best two traits to stack into sugar beets grown in Idaho and Oregon," he said.

"Going by experience, weeds always find a way of developing resistance," said OSU weed scientist Joel Felix. But, he added, "It's nice to see new products, in this case a hybrid that would be able to withstand three modes of action."



Sean Ellis/Capital Press

Aaron Hummel, a research scientist with plant breeding company KWS Saat, discusses the development of a new sugar beet variety that will be resistant to three different herbicides, during a sugar beet conference in Boise Dec. 9.