

## Farmer testing mineral oil to protect potatoes

By JOHN O'CONNELL  
EO Media Group

ASHTON, Idaho — Eastern Idaho farmer Glen Atchley is conducting an experiment in his seed potato fields to determine if mineral oil can effectively protect his crops from diseases spread by aphids.

He may start using mineral oil routinely if winter seed-certification testing in Hawaii confirms the 130 acres he sprayed this season with the low-cost protectant harbor less virus than his other seed fields.

Though Atchley is a pioneer with the product in his home state, mineral oil has become a ubiquitous tool among Montana's early generation potato seed growers in recent years.

A small percentage of disease can mean a substantial economic hit in the earliest stages of seed production, including nuclear seed, which is the first seed crop planted in native soil, or the subsequent crop, called generation 1.

"For nuclear seed and generation 1, I can't think of a single (Montana) grower who isn't using mineral oil," said Nina Zidack, Montana's seed potato certification director. "A number of them are using it in generation 2, and there are some people who are using it to a limited extent in generation 3."

Atchley said he decided to give the product a try based on a conversation with Dan Lake, a Ronan, Mont., seed grower, during the National Potato Council's annual meeting in July. The product is cheap — less than \$5 per acre — but Atchley said Montana seed growers spray it on a weekly basis, and application costs can be considerable.

Atchley ultimately opted to try mineral oil in a tank mix this season because he had to aerially apply fungicides every 10 days anyway to control late blight. Atchley said an early spring led to extreme aphid pressure this season, and he used the oil in conjunction with his usual insecticide program.

"If we wind up with considerably less virus, (mineral oil) will be something we use more of for sure," Atchley said.

Retired University of Idaho Extension potato pathologist Phil Nolte once tried mineral oil in an Idaho trial, with poor results. He suspects he didn't apply the product often enough.

Montana State University plant pathologist Barry Jacobsen has assisted in mineral oil trials in Hermiston, Ore., with Zidack and Phil Hamm, director of the Hermiston Agricultural Research and Extension Center.

Jacobsen explained mineral oil blocks certain aphid-vectored diseases, such as potato virus Y, from being transmitted from an insect to a leaf, or vice versa. Once the oil dries on a leaf, Jacobsen said it doesn't easily wash away.

In the Hermiston trials, he said an integrated program involving scouting fields for infected plants, applying insecticide and using mineral oil reduced heavy virus infection by up to 80 percent. He said oil alone cuts infections in half, which is far better than insecticide alone. He said many generation 3 growers in Montana have also had great luck with spraying only field borders, given that aphids often enter fields from the edges. Jacobsen warns growers mineral oil can't be tank mixed with certain fungicides, such as Bravo.

"If I had to pick something you're going to spray, oil is by far the best thing," Jacobsen said.

# Onion growers relieved by FDA's final rule on water quality

By SEAN ELLIS  
EO Media Group

ONTARIO — Idaho and Oregon onion growers say they can live with the water quality provisions included in the FDA's final produce safety rule, which was released Nov. 13.

Two years ago, they were worried the proposed water quality provisions in FDA's originally proposed produce rule could put them out of business. But industry officials said the FDA heard their concerns and re-wrote the rule in a way that onion growers are OK with.

To go from a rule that would have seriously impacted the economics of the onion industry "to a rule that's livable for us and allows us to stay in business is a huge victory," said Kay Riley, chairman of the Idaho-Eastern Oregon Onion Committee.

When FDA first proposed its produce safety rule in 2013, it included water quality standards limiting how much generic *E. coli* bacteria could be present in agricultural water.

If the water didn't meet those standards, farmers had to immediately stop using it. Virtually none of the surface water used by onion growers in Eastern Oregon and Southwestern Idaho meets those standards.

The water quality standards still exist in the final rule.

But FDA altered them to allow growers to meet the standards, even if their water exceeds the minimum bacteria levels, if they can show through scientific evidence that bacteria dies off at a certain rate from the last day of irrigation until harvest.

The bulb onions grown in this region are left in the field to dry for a few weeks following harvest. Field trials by Oregon State University researchers have shown these onions will meet the so-called die-off provisions.



Yellow onions grown in the Treasure Valley area of Idaho and Oregon are sorted at the JC Watson Co. packing facility in Parma, Idaho, Sept. 15. Growers say they can live with the water quality provisions included in the FDA's final produce safety rule, which was released Nov. 13.

"The thing that's great about it is they actually listened to us," Riley said. "I would deem it a tremendous victory compared to what it could have been."

But the final rule still requires farmers to test their water annually, even if they meet the die-off provisions. Onion growers say the testing will be costly and time-consuming and they hope to be able to skip them.

"They are still going to require testing and that's going to be the hardest thing to deal with," said Stuart Reitz, an OSU cropping systems extension agent in Ontario. "The final rule is not ideal but it's not that bad. It's one onion growers can live with."

Reitz said the industry is working with FDA to see if it's possible an

entity such as an irrigation district could conduct water quality tests in canals and have the results apply to a large group of farmers.

"That would get each individual farm out from having to do the testing

themselves," he said. "We really need to get some more details from FDA on what type of format that would potentially be."

According to the FDA rule, farmers may use data collected by a third party,

such as an irrigation district, but the "testing data may only be shared if there is no reasonably identifiable source of likely microbiological contamination between the sampling sites and the farms involved."

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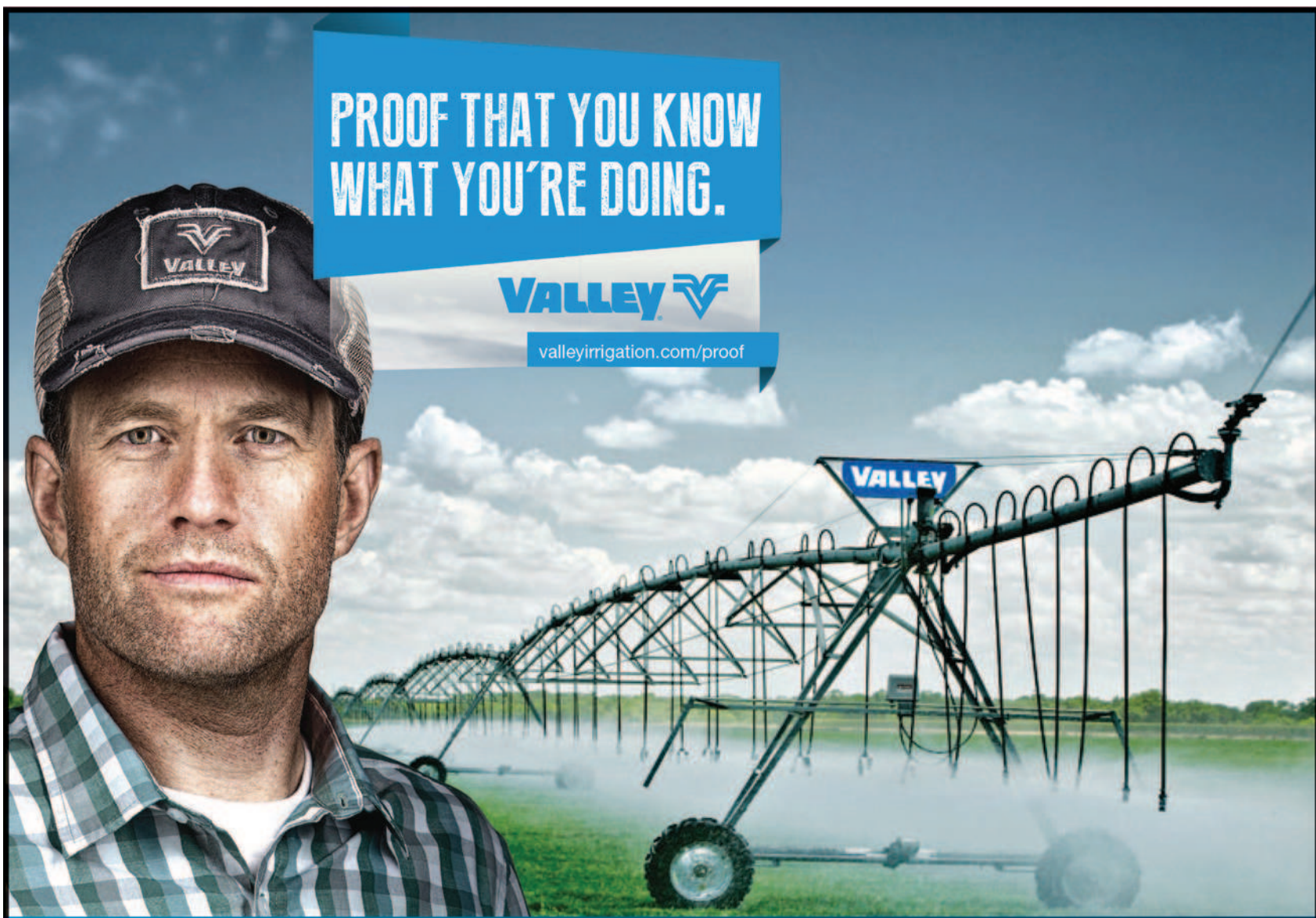


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