

The other side of pesticides

Why farm chemicals — or plant medicine — are prescribed on Oregon farms.

By Bob Hale

I am a farmer with lands in rural northeastern Oregon. However, because my wife, Kelly, is an investment broker working in downtown Portland, I have the unique opportunity to live in both rural and urban Oregon — Hermiston and Portland.

Our farms' primary focus is vegetable production, including growing potatoes, onions, sweet corn, carrots, green peas, sugar snap peas, lima beans and peppers, producing nearly 500 million pounds per year on about 40,000 acres. We've managed to stay competitive in a rapidly changing industry by focusing on our customers. Farming is by nature inherently uncertain. Competitive challenges include consolidating buyers, the politics of water use and immigration, weather, plant disease, and currency exchange rates. Our typical customer is a restaurant chain, and we like to let them know that we control the process — from seed to sandwich.

While having dinner in Portland one recent evening, a friend's wife made the statement that she only served organically grown vegetables to her children. Being the only farmer sitting at this urban dinner table, and for that matter probably the only farmer living in our Portland neighborhood, everyone looked at me for my reaction.

I asked why she only served organic vegetables. She replied that she worried about the safety of conventionally grown vegetables because of farm chemicals such as herbicides, fungicides and pesticides. Being the good friend that I am, I called her a hypocrite.

Naturally, she asked why I said that. I replied, "Because your husband is a doctor and, more specifically, an anesthesiologist, whose occupation is administering chemicals — medicine — to people." I then asked her what she did when her children became ill. She said generally that her doctor husband "looked them over" and if necessary prescribed an appropriate medicine. I thought about it and asked the question: "If medicine is OK for people, isn't medicine OK for plants, too?"

What most urban people don't understand is the level of sophistication of our rural agricultural system. When our vegetables become ill, agronomists and scientists (plant doctors) "look them over" and prescribe an appropriate farm chemical (plant medicine). This entire process is very controlled and exhaustively regulated.

What are these processes? I'm glad you asked. Here's a guide to the procedures we follow to grow healthy vegetables:

- We take aerial infrared photographs biweekly to identify problem spots in our fields.

- We take soil and plant tissue samples and send them to state-licensed laboratories, which in turn send us back detailed laboratory reports outlining things such as field location and the levels in the soil and plant tissue of various compounds including nitrogen, potassium, boron, zinc, sulfur, calcium, copper, iron, magnesium and other elements essential for the development of healthy plants.

- We water using state-of-the-art high-tech center-pivot irrigation systems that increase both irrigation efficiencies and water conservation. These are the circles you see from airplanes when flying over Eastern Oregon.

- We monitor soil moisture by placing neutron probes in each of our fields. These probes bounce neutron waves off soil particles to determine the exact amount of moisture in the field.

- Each week, our farms' growers meet with outside consultant scientists and go over the aerial infrared photos, soil moisture reports, and detailed soil and plant tissue laboratory reports. Together, they come up with growing methodologies and implementation plans.

- If and when a problem in a field is discovered, we determine a course of action.

- We call a state-licensed crop adviser (agronomist) into action and, if necessary, this person prescribes a "plant medicine."

- Any farm chemical we use comes labeled with the legal parameters of use for that specific chemical, issued by the Environmental Protection Agency (EPA) and the United States Department of Agriculture (USDA).

- It specifies the crop, amount, growth stage, preharvest interval and weather conditions under which the product can be applied. There is a lengthy process, taking years and millions of dollars to complete — similar to the process of approving new medicines for people — to obtain EPA and USDA approval.

- The crop adviser who makes the written recommendation for the product must be licensed by the state. So must our farm employee who purchases the product and the company who makes it.

During dinner that evening it became clear to me that the concerns of my urban friends about farm chemicals were genuine. It was also clear to me that both rural and urban Oregonians want the same thing for their families: a safe, dependable and reasonably priced food supply.

At our farms, we follow the law, follow the regulations and are committed to growing and providing some of the safest and best vegetables in the world. Rather than react defensively when the topic of organic produce comes up, rural Oregon agriculture must tell our story and let urban Oregonians know exactly how we grow their food — there's nothing haphazard about the process. From my perspective, the message is simple: If medicine is OK for people, then medicine is OK for plants, too. **OBM**



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