Submitted as testimony in support of HB 2469 for hearing on March 16, 2017 in front of House Committee on Agriculture and Natural Resources

## *I support HB 2469, a bill to restore local farmers' rights to choose their agricultural practices.*

I studied the biosafety risks of Genetically Engineered (GE) microbes and plants as a Senior Research Scientist with the U.S. EPA and worked, studied, and educated on this topic for over 30 years.

In 1992 I wrote a plan that identified U.S. Federal biosafety research needs for GE plants and at my request, EPA sponsored an international conference of scientists to help me identify "hot" topic safety research areas. The conference results were published in this new journal called Molecular Ecology. The contents of this special edition devoted to safety issues of GE plants was thought to be extremely important for decision makers around the world.

Of the 15 papers written as a result of the conference, 9 identified the need for intensive research to study cross pollination events between GE and non-GE plants. Scientists were concerned that "long-range transport of pollen could not be ruled out." The 6 remaining papers dealt with concerns over GE crop impacts on ecological effects on soil ecosystems including changes in soil fertility and function.

In those days "long range cross pollination" was meant to be measured in 10's of yards, or football field sizes; unfortunately that was not reality. This conservative estimate of pollen spread was what influenced and was reflected in the USDA's faulty concept of coexistence. In those days not one scientist anticipated the economic and legal repercussions of long distance cross pollination events between GE and non-GE plants (see Appendix).

Within 10 years of this report, we heard an OSU Weed Scientist state, "We cannot contain genes because that's not how biology works." In 2004 we learned from my former U.S. EPA colleague Dr. Lidia Watrud that GE Bentgrass seed and pollen dispersed 12 miles out of a USDA approved test site in Central Oregon, contaminated the Crooked River Natural Grasslands reserve, and left lasting environmental contamination in the region.

A second and I believe underreported GE Bentgrass seed/pollen dispersal event occurred in Western Idaho in a 2005 test. This pollen crossed and deposited in the Snake River, contaminated Oregon irrigation ditches, and lord knows how many parks and home lawns were contaminated in two states. Scotts Company has pulled out of the 10 year cleanup effort leaving Oregon taxpayers with all subsequent eradication efforts.

We now know that the pollen/seed spread goes well beyond just grass seed: **table beet and Swiss chard require 4 miles separation** to prevent cross pollination; **honey bees carry alfalfa pollen 3-5 miles** threatening both all non-GE alfalfa and organic honey production; **corn and canola pollen can travel more than 1 mile.** 

Claims that the USDA "deregulated" GE crops are safe only means they genetically do not contain new DNA derived from a plant pest. This "safety" declaration has nothing to do with cross pollination potential.

There is no scientifically credible argument that cross pollination and pesticide drift problems can be avoided through voluntary "handshake" agreements between farmers.

In the presence of nearby GE crops, Oregon farmers cannot participate in fulfilling consumer demand for GE-free crops and seed.

Oregon has extremely diverse agricultural habitats unlike the mid-west where the vast majority of GE crops are grown. Because of patent law issues, cross pollination, very different landscapes and meteorological conditions, and consumer demands, one state wide agricultural policy just doesn't make sense for all Oregon farmers.

Local farmers, local citizens, and local governments are better able to know what kinds of agricultural practices suit their own local needs. Co-existence clearly doesn't work for farmers or consumers. Local farmers need your help to protect their high value crops to satisfy increased consumer demands. I ask you to take action and restore local farmer's rights to determine what works best for them. Support HB 2469.

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Impediments to the expansion of value added Oregon organic crops:

• In 2001, Bayer Crop Sciences was fined \$750 million in damages by U.S. rice growers as a result of contamination from its GE rice coming from a test plot in Louisiana.

• China impounded and restricted importation of Pacific Northwest alfalfa due to trace amounts of GE alfalfa plant components

• The Oregon legislature and Oregon State University recognized the serious threat that Roundup resistant (RR) canola cross-pollination poses to specialty seed producers in the Willamette Valley that produce seeds of Swiss chard, Brussels sprouts, mustard, etc., all of which can be cross pollinated by the RR canola. HB 2427 was passed by the Oregon Legislature to provide funding for OSU to study the spread of RR canola pollen throughout the Willamette Valley and its impact on the \$50 million Willamette Valley specialty seed market.

• The Chinese imposed a ban on the importation shipments of a variety of GE corn from the U.S. in 2013 that had not been approved for human consumption within China. This caused an estimated \$1 billion of damages from reduced corn prices for American farmers.

• Interstate spread of RR bentgrass between Idaho and Oregon coming from USDA approved test sites have contaminated irrigation ditches,

the Snake River, the Crooked River National Grassland, lawns and parks in two states. Now Oregon taxpayers are left to pay for further monitoring, and destruction of future outbreaks of the patented GE grass.

• In 2013 the appearance of GE wheat in a small area of an eastern Oregon wheat farm caused a cessation in the wheat export into Japan and Korea, and the harvest and grain storage processes in non-GE wheat in the Pacific Northwest, including in western Oregon where no GE wheat is grown. This several month delay in harvest caused damage to wheat left exposed in the field and many farmers located far away from eastern Oregon suffered economic consequences of a small contamination event. Monsanto pays \$250,000 into wheat growers association.

• In 2000 Star Link corn not approved for human consumption in the U.S. is found in over 200 food products. Corn prices plummet and U.S. farmers file \$100 million class action lawsuit.