Senate Natural Resources and Wildfire Committee Written Testimony Related to HB 4059 A Carol Mallory-Smith, Professor Emeritus Department of Crop and Soil Science Oregon State University February 27, 2024

My name is Carol Mallory-Smith. I am a Professor Emeritus at Oregon State University. My testimony does not represent an Oregon State Position on this bill. I am not a farmer but I am unapologetically pro agriculture including all sectors. The only dog I have in this fight is science. I believe the best policies are based on scientific data.

I was the project leader for research conducted in response to HB 2427 passed in 2013 and HB 3382 passed in 2015. A final report on this research was submitted to the legislature on **November 1, 2017**.

I served on the Work Group appointed after the last legislation session to work toward finding a path for co-existence for **all brassica** production in the Willamette Valley protected district. Which now has become the bill before the committee today that again limits canola production but does not address coexistence. The bill kicks the **can**ola down the road until 2028, **11 years** after the OSU research report was submitted.

The 500-acre limit is **not based on research or scientific data.** The 500 acres were originally a compromise so that the OSU research could produce meaningful results. Canola is the only crop in the state with an acre cap.

My following comments are related to the science around co-existence of canola with other brassica crops.

To my knowledge there have been no new data generated or new studies undertaken that would change the recommendations put forth in the 2017 Oregon State University Report. Those recommendations were to allow expansion of canola production but protect the specialty seed industry and to require a public pinning map.

## The results of that research provide no reasons, agronomic or biological that canola production should be limited or prohibited in the Willamette Valley when there are no restrictions on the production of other brassica crops.

Canola was not weedier or more persistent than turnip, daikon radish or forage rape. When canola emerged in the following crop, it was easily controlled. Canola did it have more diseases or other pests than turnip or forage rape.

In the protected district, isolation of canola is mandatory while isolation of other brassica crops is voluntary. Isolation distances for canola at present are arbitrary and not supported by science. Canola fields should be isolated to avoid crosspollination with sexually compatible species just as other brassica crops are.

Using a pinning system where all brassica fields are identified by species and isolation distances are based on sexual compatibility would be effective for maintaining a high level of seed purity.

Members of the work group agreed for the need of a public pinning system that would maintain isolation between brassica species that have the potential to cross. **That outcome is nowhere in the bill before the committee.** 

There are about **900,000** acres of agricultural land in the canola control district.

Brassica specialty vegetable seed is grown on fewer than **4,000** acres. These crops for the most part require irrigation.

There are around **500,000** acres in field crops such as grass seed, wheat, and legumes. Most of these acres do not have irrigation. Based on the acres planted to grass seed and rotational crops, the expansion of canola beyond 500 acres is reasonable and feasible.

I would restate that there are no data, biological or agronomic that, support treating canola treated differently from other brassica crops in the Willamette Valley. Co-existence is possible as long as isolation distances between sexually compatible species are maintained.

## **Comment Gene Flow from GE crops**

The question of gene flow was raised in today's committee meeting and a reference made to research conducted by Dr. James Myers at OSU. I cannot speak to what research Dr. Myers has conducted on gene flow. However, the reference that he made to GE canola crossing with Brassica vegetable in his testimony was conducted by a student under my supervision. The crosses that he mentioned in his testimony were made with plants under greenhouse conditions in net cages with pollinators added to the cage. The results of this study cannot be compared to results which would occur under field conditions. This research was not part of the research that the Oregon Legislature directed OSU to conduct; therefore, was not included in the 2017 report.