Written Testimony Related to SB 789 Carol Mallory-Smith, Professor Emeritus Department of Crop and Soil Science Oregon State University March 8, 2023

My name is Carol Mallory-Smith. I am a Professor Emeritus at Oregon State University. I was the project leader for research conducted in response to HB 2427 passed in 2013 and HB 3382 passed in 2015. Oregon State University was charged with assessing the potential for coexistence between canola and other Brassicaceae seed crops in the Willamette Valley. The data collected provided valid, science-based insight into volunteer, disease, and insect pest differences among Brassicaceae seed crops. By the last year of the research, we were monitoring 4500 acres of canola, turnip, and radish plus surveying Brassica specialty seed crops and fresh market vegetable crops. Oregon tax payers spent more than \$1,000,000 to support this research. A final report on this research was submitted to the legislature and the Oregon Department of Agriculture (ODA) on November 1, 2017.

My testimony will summarize the findings of that research and address some of the points raised in the report "Potential Economic Impacts of Lifting the Canola Ban in the Willamette Valley on Brassica Seed Producers". I am not here to support or oppose SB 789 but to address the findings of the report and to clarify other points that have been raised.

One comment that I believe is important to include in this conversation for those who may not have been involved in the discussions surrounding the 500-acre limit for canola. The 500 acres were a comprise to allow the above research to proceed. It was never perceived that the 500-acres were an agreed upon number for on-going production if the results of the study showed that canola could be grown without threat to the Brassica specialty seed industry.

The major findings of the OSU research project conducted from 2013 through 2017 were:

The results of the research provided no reasons, agronomic or biological, that canola production should be prohibited in the Willamette Valley when there are no restrictions on the production of other Brassicaceae crops. Although, there were some differences among crops monitored, there were no pest issues, insects or diseases, unique to canola compared to the other Brassicaceae crops monitored. Canola was not weedier nor more persistent than turnip, daikon radish or forage rape, nor did it have more disease incident or severity compared to turnip or forage rape. When canola emerged in the following crop, it was easily controlled. Turnip, forage rape, and radish are not restricted in their production in the Willamette Valley.

Canola fields could be isolated to avoid cross-pollination with sexually compatible species just as other brassica crops are. Canola is not sexually compatible with all other Brassicacea species so isolation would not be required for example with radish, cabbage, kale, etc.

In Oregon, isolation of canola is mandatory while isolation of Brassicaceae crops is voluntary. Isolation distances are arbitrary and vary a great deal from state to state and country to country. The methods to maintain isolation also vary. The systems use a "pinning method" where fields are identified by species and isolation distances maintained around those fields. There are different pinning systems including private, public, and combinations of the two.

Although the Willamette Valley Specialty Seed Association maintains and controls the isolation pinning maps for the specialty seed industry, it has no legal authority to do so nor are growers required to pin fields.

There are approximately 900,000 acres in production in the Willamette Valley without irrigation. More than half of those acres are planted to wheat and grass seed each year. From 2012 to 2017, there was an average of around 50,000 acres that would have been available for canola production with in the wheat and grass seed production acres. This number of acres does not include other rotational crops such as the 35,000 acres of legumes or 10,000 acres of meadowfoam that could also be planted to canola. Within this nearly 100,000 acres, there is certainly room for the number of canola acres to increase beyond the 500 that are now allowed to be grown.

The recommendations from the OSU research were:

- 1. Limit acreage of canola grown for oil to a level that would allow expansion of the industry while continuing to provide consideration for the established Brassica specialty seed industry. Based on the acres planted to grass seed and rotational crops, the expansion of canola is reasonable and feasible.
- 2. Establish a pinning system that is transparent and open to Brassicaceae seed crop and canola producers with equal rights for all.

Comments related to the report "Potential Economic Impacts of Lifting the Canola Ban in the Willamette Valley on Brassica Seed Producers" prepared for the Organic Seed Alliance and Oregon Organic Coalition:

The estimations of the number of acres planted to Brassicacea seed production aligned very closely with the estimates from the 2017 OSU report. They used many of the same data sources that were used by OSU. They used USDA and Oregon Tilth data to estimate that there are between 30 and 150 acres of organic Brassica seed grown in Oregon.

The arguments that are made within this report against production of canola such as pest, disease, and cross-pollination issues were addressed in the OSU report based on data generated in Oregon. The same pests and diseases were found across all crops including organic seed and fresh vegetable Brassica crops. Further, all Brassicacea seed stocks or transplants are required to be blackleg free according to ODA Rule 603-052-0870 which

includes with other best management plans to prevent movement of seed, volunteer control, etc.

The report suggests that there are other crops that could be grown instead of canola is incorrect based on multiple factors. There must be a market and economic return for the grower. There are agronomic and marketing issues with the production of flax. Camelina and yellow mustard are both Brassicaceae crops so the argument to put them into production is problematic if the goal is to reduce Brassicaceae crops in the Willamette Valley. Multiple research trials have shown that camelina is not well-adapted to the Willamette Valley. Data are lacking on the viability nor adaptability of safflower or sunflower as crops in the Willamette Valley but sunflower would likely need irrigation and both crops require higher temperatures than usually occur in the Willamette Valley.

I would restate that there are no biological or agronomic reasons that canola should be treated differently from other Brassicaceae crops or be prohibited in the Willamette Valley. There are enough available acres to increase canola production as long as it is grown in a manner that is compatible with Brassicaceae seed production.

The full report submitted for the 2013 House Bill 2427 is available online, on the ODA website, and has been loaded to OLIS.