Excerpt from the OSU Biofuel Synopsis

The decision made by ODA, in consultation with Russ Karow, to not allow canola production in a major part of the Valley is a precautionary decision. The research work that was done resulted in as many questions as answers. We know that canola will persist in the seedbank in Valley soils for at least two years, so each acre of canola that is grown is a potential problem for several years. For example, if 1000 acres of canola were planted in each of three years, in the third year of planting, 6000 acres would need to be monitored for pests or volunteer plants. If canola crops are planted in different fields but the same vicinity on a given farm, will sclerotinia spread from field-to-field? Will cabbage maggot persist from year-to-year? While volunteer canola may be controlled in follow-on grain and grass crops, will field borders and roadsides and waterways be carefully monitored? Would a few hundred or thousand or tens of thousands of volunteer canola plants with a different flowering cycle than weedy *Brassica* species significantly add to the feral *Brassica* problem we already have in the Valley? We do not know the answers to these and other questions and given the potential risk, precaution suggests not allowing canola production at this time.

[My comments: These are exactly the problems that European specialty seed areas have experienced. They lost their specialty seed production areas because of these problems.

OSU recognized these as potential problems and recommended further research in 2010. None of their recommended research has been done. Now they are asking for research dollars to do this research at the same time they are releasing canola into the valley. There is no reason to expect that in a similar climate we will not experience the same problems from canola as those of Europe. It is less than prudent to release canola prior to the research recommendations being carried out.]

Additional research and experience may offer future options for production. The following research would be particularly helpful.

- Monitor *Brassica* seed crop fields of different species planted using different methods for flowering date with the intent to determine if flowering date can be predicted.
- Conduct "spoke-wheel" or other types of pollen travel studies to determine the potential for canola cross-pollination with *Brassica* specialty seed crops under typical field conditions.
- Develop a detailed cabbage maggot monitoring program in all susceptible crops to determine if there is potential for predicting maggot outbreaks under Valley conditions. The electronic pinning system developed as part of the ODA project may be helpful in this regard.
- Develop a detailed white mold monitoring program in all susceptible crops to determine if there is potential for predicting white mold outbreaks under Valley conditions. The electronic pinning system developed as part of the ODA project may be helpful in this regard.
- Continue to track the fate of seeds lost to shatter in the canola fields that were planted by growers as part of the ODA study. The electronic pinning system developed as part of the ODA project could also be used to identify past-year *Brassica* specialty seed fields that could be monitored for seedbank *Brassica* seed and volunteer plants.
- Intensify work to identify alternate oilseed (camelina, soybean, flax, safflower, others?) or other broadleaf crops that can be profitably grown in rotation with grasses and grains in Western Oregon and would have less impact on *Brassica* specialty seed and vegetable crop production.

Recommendation for further research: Monitor *Brassica* seed crop fields of different species planted using different methods for flowering date with the intent to determine if flowering date can be

predicted. This information will be useful for decision making related to cross-pollination and intercrop insect movement.

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