

RE: Testimony on HB 4109 February 21, 2020

Chair Dembrow and Members of the Senate Committee on Environment and Natural Resources,

Insect control in Oregon's grass seed and clover seed crops is a critically important part of the overall production system. The impact to the crop and Oregon's ag industry would be extremely significant without the ability to effectively manage our insect pressures. A conservative estimate of seed production loss would be 30-40% in yield but could easily be greater and possibly up to 100% in some cases.

Oregon is the global leader in grass seed production. A conservative 40% loss would equate to an approximate \$160+ million loss to Oregon's economy and agriculture industry and families. This impact accounts for grass seed alone and does not account for the costs and impacts to the other 200+ crops grown in Oregon.

Grass and clover seed growers in Oregon do not have many registered insecticide options available to implement into their integrated pest management plans. Chlorpyrifos is a critical need for proper and effective IPM. Oregon's seed growers only have four mode-of-action classes of insecticides available for use. Of those four options, one of those does not demonstrate consistent results, and another is limited on its spectrum of insect control nor is it cost effective. If the state of Oregon eliminates chlorpyrifos, then the growers are left with only one mode-of-action option.

Proper IPM strategy in agriculture production should include the use of multiple mode-of-action classes. Without chlorpyrifos growers will be effectively limited to one, which poses challenges and will create bigger issues such as an accelerated development of pesticide resistance in insect populations, and the lack of control of all economically significant insect pests. Science has shown utilizing multiple modes of action significantly reduces the potential for resistance development. In addition, a narrower spectrum of insect control leads to insect pest left uncontrolled and additional insecticide applications and/or management techniques to protect crops.

It is important to understand that new alternatives and options are very difficult to obtain for specialty crops. Many years of research and development are needed to not only create a new and viable ingredient, but several years are needed to develop a viable use pattern that can be effectively implemented into crop production and several more years to get through the regulatory registration process. The point being new alternatives are not quick to come even though many scientists are continually working to find new options for agriculture.

If there were a new alternative presented to the seed growers today, they would not have the ability to use it for at least four years as the research and regulatory processes are carried out to grant an approval for use. The grass seed industry works very closely with the IR-4 Project, EPA and ODA to obtain new registrations for use. Four years is a minimum timeline needed to work the request through the process. Keep in mind, this is after a new material is discovered and developed, which takes many more years leading up to this point.

The point being, there are not many viable replacement options and the removal of chlorpyrifos use would leave growers in a difficult situation that will cause significant economic impact to the state of Oregon. If and when a new material is presented, then an additional several years are required to complete the regulatory review process before growers are allowed to use the material. This means there will be several years where growers will be forced to manage crops with compromised IPM strategies that will lead to new and further intensified challenges regarding insect management.

In summary, chlorpyrifos plays a critical role in the integrated pest management strategies implemented by grass and clover seed producers. The reality is that growers only have two modes-of-action classes available with chlorpyrifos being one of them. If chlorpyrifos is eliminated then there will be a tremendous stress put on the remaining class of pyrethroids, which has already shown signs of resistance development in our production systems. When considering the extended period of time needed to develop a new material and the time for the regulatory due process, it is safe to say that Oregon's growers will be met with new and intensified challenges. Oregon's grass and clover seed industries would suffer significant losses if chlorpyrifos was eliminated as an option for IPM and crop protection.

Thank you for the opportunity to provide testimony.

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