Comments relating to ODA’s proposed mitigation options for chlorpyrifos
By Jeff Stone, Executive Director, Oregon Association of Nurseries
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Director Taylor, on behalf of the Oregon Association of Nurseries (OAN) please accept the following comments on proposed mitigation options for chlorpyrifos and related chemistry classes used on agricultural crop production. These comments are expansive relating to direct content on the issue at hand but also reflections surrounding the process led by your excellent department.

The OAN has been an active stakeholder in the chlorpyrifos workgroup. The nursery industry came to the table in good faith to discuss with a myriad of views to explore appropriate science-based restrictions on products containing chlorpyrifos that protect public health and safety while fulfilling critical pest control needs of land managers. For some, this issue is binary, and several groups attempted to pass legislation to ban the chemistry class altogether despite active participation in a workgroup attempting to achieve middle ground. This is profoundly disappointing.

The Economic Footprint of the Nursery and Greenhouse Industry

The nursery and greenhouse industry are the state’s largest agricultural sector, and the industry ranks third in the nation, with over $996 million in sales annually to customers in Oregon, the rest of the United States, and abroad. In fact, nearly 75% of the nursery stock grown in our state leaves our borders – with over half reaching markets east of the Mississippi River. Oregon’s elite growers send ecologically friendly green products out of the state and bring traded sector dollars back to Oregon.

Nursery association members represent wholesale plant growers, Christmas tree growers, retailers, and greenhouse operators. Our members are located throughout the state, with our largest nursery growing operations found in Clackamas, Marion, Washington, Yamhill and Multnomah Counties.

The debate over chlorpyrifos is becoming theological

The OAN has a diverse membership that encompasses several production types and green goods sold throughout the United States and around the globe. How plants remain pest and disease tolerance is not only a cultivation effort, but it is expected of the plant buying customer base. The use of pesticides, especially in Oregon over the five years, has
become polarized and made into a series of decisions that establish winners and losers. The association and its membership do not condone application of any pesticide that is not allowed through scientific rigor and the label. OAN also finds the anti-pesticide point of view is one based out of a limited set of facts. The workgroup was created to do was to provide space to have a constructive conversation, not fodder for overly litigious interest groups using the time as “free discovery”

Keep the process focused

The OAN joins Oregon Farm Bureau (OFB) and Oregon Forest Industries Council (OFIC) on several base issues surrounding the integrity of the ODA workgroup.

1. Increasing buffers around schools is consistent with the approach proposed in House Bill 4109 in 2020 by a few members of the workgroup OAN and others weighed in, at the request of legislators, on a minority report to the legislation. Fortunately, the legislative body recognized that the bill was ill timed while work was still being done by stakeholders. If ODA considers this mitigation measure, then we recommend that school buffers for chlorpyrifos be tailored to type of use.

2. Court-ordered buffers are outside the scope of rulemaking and are not based on science or Oregon use patterns. The stated purpose of the workgroup is to find reasonable measures to protect farmworkers and their families. Expansion to the evaluation of water quality related measures properly would require different staff, stakeholders, and agencies than those presently seated on the workgroup. Oregon has a strong program in place for this purpose through the pesticide stewardship partnership and the state’s Agriculture Water Quality Management Program.

OAN comments on mitigation measures and potential impacts on production

A few global observations

The OAN membership does not widely use this chemistry and for those who do apply it through their production schedule – uses it according to the label and as part of an Integrated Pest Management (IPM) program. It is an effective tool that does not require multiple applications during the growing cycle. The efficacy of the pesticide is very good to prevent pest and disease outbreaks. The health and welfare of the grower community and the agricultural workforce is paramount regardless of the pesticide applied to green goods. The OAN believes that chlorpyrifos should remain a “restricted use” and that only properly trained applicators be responsible for its use on the agricultural operation.

No simple answer

There are no simple answers regarding the chlorpyrifos chemistry class. We are committed to a safe working environment with a robust and effective Integrated Pest Management (IPM). These tools are critical to the agricultural community and in addition many of Oregon’s specialty crops have state approved Special Local Need
registrations of chlorpyrifos. Pesticide options can be daunting, and our association supports research to bring a bevy of alternative products to battle certain pests.

**Trade markets and the national discussion over chlorpyrifos**

At the national level there are ongoing discussions about the role of chlorpyrifos as a tool within an Integrated Pest Management plan. It is worth noting that chlorpyrifos is part of the National Japanese Beetle Harmonization Plan, adopted and approved by the National Plant Board (NPB). The application method for the nursery industry includes chlorpyrifos as a dip and drench treatment chemical. The NPB is concerned about viable alternatives for chlorpyrifos as treatment options for nursery stock material coming from infested states back east.

In tandem with any new regulations on the use of chlorpyrifos, OAN urges the ODA to develop alternatives that are effective – both in cost and outcome. Any further restriction on the use of chlorpyrifos without an effective alternative will saddle growers with substantial cost burdens and jeopardize domestic and international markets.

OAN wishes to echo and emphasize comments from Oregonians for Food & Shelter and the Oregon Farm Bureau Federation, submitted March 16, 2020. Our feedback is in response to the “Examples of Mitigation Options” document from March 2, 2020, and are numbered according to that document:

2. OAN opposes any regulatory process on the use of a pesticide outside of the ODA or EPA regulatory process – that includes the proposed court-ordered buffers for salmonids, which would be outside of the scope of rulemaking and not based on science or use patterns. The implementation of any such buffer resulting from federal court decisions should occur only through federal channels.

3. Worker protection is a high priority for OAN’s member growers. However, the proposed longer Restricted Entry Interval (REI) is a one-size-fits-all approach in an industry where nothing is one size. While a longer REI may be indicated in certain instances, it is not necessary in all cases. For example, soil applications, seed treatment, and granular applications – the most common forms of chlorpyrifos application in the nursery industry – pose minimal risk (if any) to farmworkers or bystanders. An expanded REI in those instances will not result in any added safety benefit to workers and serves only to slow down production. The REI should be tailored to the use pattern so that worker protection is effective. Our members in the pesticide arena indicate 24-48 hours is enough for protection.

4. Pre-harvest intervals are set based on food tolerances – and not all crops are food. Additionally, the chlorpyrifos label already accounts for PHIs. For example, Christmas tree growers apply chlorpyrifos in the spring and summer months to treat needle midge. Some pyrethroids are applied just prior to shipping (Mexico requires application 3-6 days prior to shipping), chlorpyrifos is applied months in advance with the crop is facing the specific pest pressure. If a Christmas tree grower applied chlorpyrifos just prior to shipping, it would likely be an off-label application.
5. We generally agree with the designation of chlorpyrifos as a restricted use pesticide (RUP).

6. We generally agree that it is good to require applicators to go through accessible specialized training – and most do already. Also, it is important to understand what the training would encompass and where it would take places. We suggest the training follow the model for paraquat in allowing for an online course to be taken every three years. Additionally, depending on how expansive their requirements is, accommodations ought to be made for handlers who are covered by the Worker Protection Standard.

7. If all chlorpyrifos products are RUPs, then the records retention requirements of three years will apply. This is consistent with existing requirements for RUPs.

8. We agree with the feedback from Oregonians for Food & Shelter

**Industry spotlight: The Christmas Tree Industry**
The Christmas tree industry ships over one thousand truck loads to Mexico every year. In 2017, exports to Mexico accounted for 16 percent of Oregon's Christmas tree sales, with a value of $19.2 million. Oregon’s access to Mexico is important and accounts for 54,000 jobs directly connected to trade with our neighbor from the south.

Mexico has a zero tolerance for the presence of pests. As a result, Oregon shippers to Mexico often find themselves running the gauntlet with border inspectors holding up loads based on the finding of insect pests, including insects that are often difficult to control. One of the provisions and regulation standards required by Mexico directs Oregon Christmas tree producers to spray fields 3-6 weeks prior to harvesting; It is critical that an exporter has access to every available tool; and Chlorpyrifos is one such tool due to its status as one of the few effective chemistries that is effective against Christmas tree pests.

**OAN specific questions by ODA**
We asked a few of our greenhouse growers and subject matter experts about using chlorpyrifos in the fields and greenhouses, and here’s what they said:

**EPA considers chlorpyrifos a semi-volatile chemical**
Our growers say they’ve tried several alternatives and non-have the efficacy of chlorpyrifos. For pacific northwest ornamental growers, one (out of two, 2nd being 2-spot spider mite) of the pests of high economic importance is black vine root weevil. Chlorpyrifos is one of 2-3 products that has any efficacy on this pest, and really the only product that provides any control of the pest when it’s in its grub stage of development.

While chlorpyrifos use not widespread in the industry, it remains an effective tool and prevents severe economic damage to crops. For those who do use the chemistry, it’s used on the whole crop each year at least once. Eliminating it from the IPM rotation will have impacts such as many additional sprays as opposed to site specific drenching (again limiting the exposure).

When properly used, chlorpyrifos is an effective tool due to the qualities below:
• Broad-spectrum control
• Fast knockdown
• Unique mode of action to help fight resistance
• Reliable rotational partner
• Minimal impact to beneficial insects
• Flexibility of use
• Tank-mix compatibility

What critical labeled use of chlorpyrifos would someone use in an Oregon greenhouse (Enclosed Space Production)?

Chlorpyrifos can control economically important and difficult-to-control insect pests and is often the first product used to attempt control of a new or unknown insect pest. Chlorpyrifos is active on foliar-feeding and soil-dwelling insect pests, primarily by contact. It has demonstrated short residual activity on plant foliage, making it safer on crops while also providing farmers more application and timing flexibility.

Duraguard is used nearly every year on indoor azaleas to eradicate root weevils. All the dormant azaleas ship without a pot and you can’t ship plants with weevil trails and larvae circling the root ball. Some of woody shrubs that are included on the product label are also grown in ‘enclosed greenhouse structures’ are also impacted by root weevil & thrips and need to be treated. Several nurseries have tried several alternative pesticides, and none have had the efficacy of chlorpyriphos. It’s simply a great tool that we need to have to be able to continue operating.

Labels are aged due to lawsuits, but how much are they used in greenhouses?

Chlorpyrifos is being used in greenhouses - very sparingly, but it remains an important part of pest management. It is used as an emergency spray for the control of thrips in ornamental bedding plants.

Other guiding principles”

Only those who have the classification can apply the chemical (restricted use) and must follow the label – Yes this is accurate. Having an ODA pesticide applicator license ensures annual training on how to handle and correctly apply pesticides. All chlorpyrifos labels are RUP.

This chemistry class should be part of an IPM. Correct. Any IPM program needs to be thorough, complete in order to be effective; it must contain all the tools. Chlorpyrifos is what would be used when nothing else works. We can utilize beneficial insects, bio-pesticides, and other chemistry classes many of which are less effective. When all other avenues have been exhausted, chlorpyrifos is the only remaining choice.
The efficacy of it is high and reduces the pesticide applications in a field. Indeed, this is straight forward. When used correctly (meaning applied correctly and kept on the target), the product is highly efficacious thus eliminating the pest. Other materials require multiple applications, thereby increasing exposure. Spray coverage is another issue that chlorpyrifos gives an advantage to for hard to reach pests.

Elimination of tools to target pests has a big economic consequence: Some of the national voices on this topic say it best: Every year, insect pests cause billions of dollars in damage. Because insects have a remarkable ability to adapt to changing farming practices and develop selective resistance to control measures, farmers require access to a variety of tools to manage insect pests. Chlorpyrifos contributes significantly to the control of insect pests in a wide range of crops, including cereals, oils, forage, fruit, nut and vegetable crops (see table below). Not only is chlorpyrifos important for controlling target pests, but it is less harmful to beneficial insects than other commonly used insecticides.

Thank you for your attention to our comments. We will continue to participate as a good faith stakeholder to achieve a balance between good policy and worker safety.