



Friends of Family Farmers ♦ PO Box 751 ♦ Junction City, OR 97448

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Dear Chair Lively, Vice Chairs Gamba and Levy, and members of the committee:

My name is Alice Morrison and I am the Co-Executive Director of Friends of Family Farmers. Friends of Family Farmers is a statewide nonprofit organization serving more than 1,600 small and midsize, highly diversified and local market farmers. I am writing to express strong support for HB 2679 and limits on neonicotinoid pesticides on behalf of my farm and the FoFF community. Neonicotinoid (NNI) pesticides are well documented to have harms to human health, pollinator populations and pose problems for our organic producers in the state. HB 2679 is a reasonable request that puts these dangerous substances out of reach of everyday retain customers and requires proper training and licensing to handle in a commercial setting.

Human Health

These are dangerous chemicals that should be handled with care. Prolonged exposure to NNIs in humans is linked to impaired immune function, reproductive problems like birth defects and infertility, and cardiovascular and respiratory problems. In the 2022 study Nimako, et al (2022) "[Assessment of ameliorative effects of organic dietary interventions on neonicotinoid exposure rates in a Japanese population](#)" the authors conduct a literature review of dozens of studies showing adverse health impacts from neonicotinoid exposure over time. These include "exposures to environmentally relevant doses of NNIs may (i) cause fatty liver (Nimako et al., 2021a), (ii) promote high-fat-induced adiposity and insulin resistance (Sun et al., 2016), and (iii) induce neurodevelopmental toxicity and reproductive cytotoxic effects (Sano et al., 2016)"

The 2022 Nimako study also concludes that "Neonicotinoid insecticides are now ubiquitous in many compartments of the environment. Environmental exposures to NNI compounds and their metabolites are being continuously reported in various human populations across the globe." This means that continued application will increase these risks and continue to harm the health of our farmers, farmworkers, landscapers, and everyday people in Oregon. Without the proper training in how to store and apply these pesticides, we put residential customers at an unnecessary risk, including the many children who may have access to these chemicals in a residential setting. With the risk this high, it makes sense to require proper licensing for these products.

Pollinator Impact

Neonicotinoids also have a well documented negative impact on pollinator populations that are crucial to agriculture, as explored in Zhang, et al (2023) "[A critical review on the accumulation of neonicotinoid insecticides in pollen and nectar: Influencing factors and implications for pollinator exposure](#)". Some key takeaways here are that neonics are documented to impact nontarget species including pollinators because they are taken up and translocated by the plant from their roots or leaves to flowers and then they are ingested by the pollinators leading to negative impacts on their populations. This is something that impacts not only the fields where the

pesticide is sprayed, but also fields around them within the pollinators' range. This is also a continued risk because when ingested by the pollinator through infected pollen or nectar, they carry this back to the colony. Zhang, et al (2023) explores the impact of this exposure in additional literature: "The occurrence of neonicotinoids in pollen and nectar presents a significant risk to non-target organisms, including pollinators (Elmqvist et al., 2023; Krupke and Long, 2015; Zioga et al., 2023). Several studies have established a direct correlation between neonicotinoid residues and a decline in the pollinator population (e.g., butterflies and honeybees) and the decay of bee colonies (Gilburn et al., 2015; Hallmann et al., 2014; Krupke et al., 2012; Sanchez-Bayo, 2014; Wu et al., 2019), possible disruption of brood incubation processes and the flight of worker bumblebees (Potts et al., 2018; Whitehorn et al., 2012)."

Pollinator populations have been declining in recent years and they are a crucial part of the agricultural ecosystem. Without their help, agriculture as we know it would cease to exist. We cannot hasten their demise for the convenience of dangerous chemicals.

Proper licensing and handling training is not an overburden:

There are over a thousand federally restricted pesticides and plenty of agricultural and landscape maintenance companies already accept the licensing requirements to continue their usage. This type of chemical should be no different. Licensing is a standard part of risk management for farms and is not an insurmountable barrier.

It should also be said that there are many safer alternatives to these chemicals, and the thousands of producers in Oregon who are certified organic or using organic practices have been going without these chemicals with no complaints. Organic farming is one of the only sectors of agriculture experiencing growth right now. The [2022 National Young Farmers Association survey](#) of more than 10,000 farmers under 40 showed that 21% of those surveyed were certified organic, which is far and away more than the 2% of farms in the state with current certification according to the 2022 census of ag. We also see in the 2022 census of Ag data that organic farmers tend to be younger than the average in Oregon, and that while farm numbers overall fell between 2017 and 2022, the number of organic farms rose. We need to think about how Oregon will attract more farmers in the future, and creating a space friendly to organic practices is a good bet. But recent studies like Humann-Guillemot, et al (2019) "[A nation-wide survey of neonicotinoid insecticides in agricultural land with implications for agri-environment schemes](#)" show the lasting impact that NNIs can have on farmland, including drift from application and soil contamination that takes a very long time to ameliorate. The use of these chemicals pose a risk to the organic industry and make less of our farmland available for organic production. We should encourage farmers to use these chemicals sparingly and safely and pursue alternatives where possible.

We would also not be alone in our concern. In the 2023 study referenced above from [Zhang, et al](#) they acknowledge that "Recognizing the high risks that neonicotinoids pose to bees, the European Food Safety Authority (EFSA) has deemed their use unacceptable (EFSA, 2013), leading to the European Union's subsequent ban on outdoor neonicotinoid applications (Stokstad, 2018). Moreover, the U.S. Environmental Protection Agency (EPA) has recently

cautioned about the potential harm caused by imidacloprid, clothianidin, and thiamethoxam to some threatened and protected species (U.S. Environmental Protection Agency, 2021a, U.S. Environmental Protection Agency, 2021b, U.S. Environmental Protection Agency, 2021c).”

Pesticide application licensing is a normal requirement that many farms already undertake, there are alternatives available, and these chemicals have documented impacts on human and pollinator health. Restricting them is the right thing to do. Please support HB 2679.

Thank you,

A handwritten signature in cursive script that reads "Alice Morrison".

Alice Morrison
Co-Executive Director, Friends of Family Farmers