NOFA-NY
NORTHEAST ORGANIC FARMING ASSOCIATION OF NEW YORK

Memorandum of Support: Birds and Bees Protection Act

May 2023

A7640 Glick/S1856A Hoylman-Sigal

The Northeast Organic Farming Association of New York (NOFA-NY)—the state's leading non-profit organization for sustainable, local organic food and farming— supports prohibiting wasteful or replaceable uses of neonicotinoid pesticides (neonics) that threaten the future of farming in New York. We support the Birds and Bees Protection Act (A7640 Glick/S1856A Hoylman-Sigal), a bill that would do just that.

New York is a national organic food leader. With more than 1,300 organic farms (the third-highest total in the country) the state produced nearly $300 million in organic products in 2019, marking 38% growth since just three years earlier (*Northeastern Region Organic Report*, 2020). A founding principle of organic agriculture—and a key reason for its rapidly increasing popularity among consumers—is that a healthy environment produces nutritious food. On our farms, we strive to improve the land through our growing practices to keep it rich, productive, and unpolluted so, it can support our livelihoods and those of future generations of New York farmers.

Pesticide pollution, however, undercuts these efforts. Due to the wasteful and widespread use of neonic pesticides, neonic contamination is now pervasive in the state's soil, water, and plant life, impairing the health of the land to the detriment of all New York farmers (Mineau, 2019).

Neonics destroy bees and pollinator populations, which are necessary for fruit and vegetable production. And research reveals that the yields of many U.S. crops (including apples, blueberries, and cherries) are limited by a lack of pollinators (Reilly et al., 2020). Yet, honeybees in New York continue to die at record rates. While many causes contribute to dwindling pollinator populations, widespread neonic use—driven primarily by neonic-treated corn and soybean seed use—is a lead culprit (Pisa et al., 2021). Neonics devastate not only the honeybees that are bred and replaced every year (at great expense to beekeepers) but also the hundreds of species of New York's native bees, which often are as or more important for crop pollination, but not similarly replenished (Reilly et al., 2020).

Neonics also kill natural predators of plant pests, such as beetles and wasps, that organic farmers often count on for pest control in lieu of pesticides. Recent research shows that neonic use in conventional agriculture has made it up to 48-times more toxic to insect life, affecting not only pests but beneficial insects too (DiBartolomeis et al., 2019). Insect predators may be especially at risk because they can also be harmed or killed when they eat insects contaminated with neonics (Frank & Tooker, 2020). It is this movement through food webs—as well as neonics' harmful impacts on other species like birds, fish, and deer—that have led some to compare the ecological damage caused by neonics to that done by the pesticide DDT.

Neonics damage soil health—the heart of organic farming. Organic farmers rely on soil organisms to provide a productive environment for their crops by storing carbon and recycling nutrients. Yet research is now showing that neonic contamination harms critical organisms, such as nematodes and earthworms, and can change the composition of soil microbial communities—impairing beneficial bacteria crucial for plant growth and health and soil fertility and quality, such as plant growth-promoting rhizobacteria, nitrogen-fixing bacteria, and other bacteria involved in the nitrogen cycle (Bradford et al., 2020; Wang et al., 2015;

Parizadeh et al., 2021; Zhang et al., 2018). These soil health concerns for conventional farmers become concerns for organic farmers where neonics migrate onto their fields.

While neonics are prohibited in organic agriculture, these problems often affect organic farmers because of neonics' persistence and their exceptional ability to move long distances carried by rain or irrigation water to contaminate new soil, water, and plants. Evidence of widespread contamination can be found in New York water itself, where neonics are frequently found at ecologically damaging levels (Mineau, 2019). Indeed, the ubiquity of neonics' spread is highlighted in monitoring by the Centers for Disease Control showing that half of Americans are regularly exposed to neonics, and other research finding that even 6% of organic produce tested contained the chemicals (Ospina et al., 2019; Craddock et al., 2019).

Furthermore, a 2020 report from Cornell University's College of Agriculture and Life Sciences (Cornell CALS) finds that the vast majority of neonic use can be eliminated without the need for a harmful replacement, or, in many cases, any replacement at all. In particular, the report finds that **neonic treated corn and soybean seeds—which make up an estimated 73% of the neonics used in New York agriculture—provide "no overall net income benefits to farmers"** (Grout et al., 2020; Mineau, 2019). Similarly, the report finds that most non-farm neonic uses (aside from invasive species treatments) are either not needed or replaceable by alternatives that are less harmful to pollinators.

These high-cost, low-benefit neonic uses that are responsible for the vast bulk of neonic contamination in New York should be eliminated. In this past year, we supported the Birds and Bees Protection Act (A3226/S1856), which would prohibit these wasteful and unnecessary neonic uses highlighted by the Cornell CALS report.

We believe that the future of farming in New York must be just, resilient, and sustainable. Widespread and wasteful neonic contamination hinders that future while threatening organic farmers' bottom lines today.

Founded in 1983, the Northeast Organic Farming Association of New York (NOFA-NY) is the premier statewide organization growing a strong regenerative organic agriculture movement in New York State and is part of a regional network of seven Northeast Organic Farming Associations. NOFA-NY provides education and assistance to local organic and regenerative farmers; connects consumers with organic and regenerative farmers; advocates policies that support a sustainable and fair food and farm system at both the state and federal levels; and is the largest USDA-accredited organic certifier in New York certifying over 1,000 organic operations in the state.

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