Introduced by Representatives Sheldon of Middlebury and Troiano of Stannard

Referred to Committee on

Date:

Subject: Agriculture; control of pesticides; pollinator protection; neonicotinoid pesticides; treated article seed

Statement of purpose of bill as introduced: This bill proposes to prohibit the use of the neonicotinoid pesticides until the Secretary of Agriculture, Food and Markets adopts rules for the sale, use, or application of neonicotinoid pesticides. If the Secretary fails to adopt the rules by July 1, 2024, the prohibition on the sale, use, or application of neonicotinoid pesticides would become permanent.

An act relating to the sale, use, or application of neonicotinoid pesticides

It is hereby enacted by the General Assembly of the State of Vermont:

*** Findings ***

Sec. 1. FINDINGS

The General Assembly finds that:
(1) Roughly one-third of the global food supply and 75 percent of all agricultural crops depend on pollination by bees, birds, and other wildlife, including many of the fruits, vegetables, nuts, and seeds we eat every day.

(2) In Vermont, native pollinators are vital to the State’s agricultural systems, and protecting the health of pollinators is necessary to ensure the viability of farming in Vermont.

(3) Neonicotinoid pesticides are a relatively new class of synthetic insecticides introduced in the 1990s that were rapidly adopted by the agricultural industry to the point that they are now the most widely applied class of pesticide in the world.

(4) In Vermont, neonicotinoid pesticides for farming are most commonly found as powdered coatings on seeds and are applied almost every time treated seed is planted.

(5) Seed coatings, however, violate science-based integrated pest management (IPM) principles, as IPM guidelines recommend applying pesticides not on the presumption of a pest problem but only when pests are present at damaging levels and other control methods have failed.

(6) Consequently, the use or overuse of neonicotinoid pesticides has been linked to pollinator decline worldwide.
(7) In 2012, a study demonstrated that a neonicotinoid pesticide called thiamethoxam can cause high mortality in honeybees by compromising their ability to navigate back to the hive.

(8) In 2014, a Harvard School of Public Health study confirmed that low doses of a neonicotinoid pesticide called imidacloprid contributed to colony collapse disorder in bees.

(9) In 2015, a study showed that the levels of neonicotinoid pesticides currently used in agriculture causes both impairment of bees’ brain cells and poor performance by the colony.

(10) In 2016, the Vermont General Assembly enacted 2016 Acts and Resolves No. 83 to establish the Pollinator Protection Committee to recommend measures the State can take to protect pollinator populations.

(11) In 2017, the Vermont Pollinator Protection Committee issued its recommendations to the General Assembly, including multiple recommended changes to the State’s pesticide rules to mitigate the effects of neonicotinoid pesticides on pollinator populations. To date, none of the recommended changes to the State pesticides rules have been adopted.

(12) Subsequent studies demonstrated that bees exposed to neonicotinoid pesticides from corn crops or nontarget pollen have decreased survival and immune responses in bees and that 75 percent of global honey supply samples contained detectable levels of neonicotinoid pesticides.
(13) In 2021, the U.S. Environmental Protection Agency (EPA) issued draft biological evaluations of three neonicotinoid pesticides: clothianidin, imidacloprid and thiamethoxam. The EPA biological evaluations determined that:

(A) clothianidin is highly toxic to bees on an acute exposure basis and that data suggested potential effects on honeybee and bumble bee populations;

(B) clothianidin is likely to adversely affect 67 percent of all threatened and endangered species of wildlife;

(C) imidacloprid is highly toxic to bees and birds on an acute exposure basis;

(D) imidacloprid is likely to adversely affect 79 percent of all threatened and endangered species of wildlife;

(E) thiamethoxam is highly toxic to bees on an acute exposure basis with additional potential effects to honeybees that manifest as impacts to numbers of adults and decreases in brood size; and

(F) thiamethoxam is likely to adversely affect 77 percent of threatened and endangered species of wildlife.

(14) Despite its findings in its own biological evaluations, EPA continues to allow clothianidin, imidacloprid, thiamethoxam, and other neonicotinoid pesticides to be used for agriculture and other uses, albeit subject
to potential management measures first proposed in 2020, but still not implemented.

(15) To protect the pollinators, birds, and threatened and endangered species of Vermont while also protecting the long-term viability of farming in the State, the General Assembly should ban the use of the neonicotinoid pesticides until the Vermont Agency of Agriculture, Food and Markets has revised the State pesticide rules to implement integrated pest management requirements for the use of neonicotinoid pesticides, including best management practices to prevent harm to pollinators, birds, and threatened species.

(16) If the Agency of Agriculture, Food and Markets does not amend the pesticide rules as required, the statutory prohibition on the use of neonicotinoid pesticides should become permanent.

* * * Ban on Neonicotinoid Pesticides; Reversion upon Rulemaking * * *

Sec. 2. 6 V.S.A. § 918(f) is amended to read:

(f) The Secretary shall register as a restricted use pesticide any neonicotinoid pesticide labeled as approved for outdoor use that is distributed, sold, sold into, or offered for sale within the State or delivered for transportation or transported in intrastate commerce or between points within this State through any point outside this State, provided that the Secretary shall
not register the following products as restricted use pesticides, unless classified under federal law as restricted use products:

(1) pet care products used for preventing, destroying, repelling, or mitigating fleas, mites, ticks, heartworms, or other insects or organisms;

(2) personal care products used for preventing, destroying, repelling, or mitigating lice or bedbugs;

(3) indoor pest control products used for preventing, destroying, repelling, or mitigating insects indoors; and

(4) treated article seed

No person shall sell, use, or apply neonicotinoid pesticides in the State except when authorized by the Secretary under subdivision (2) of this subsection.

(2) the Secretary may authorize the use or application of a neonicotinoid pesticide upon a determination that a threat to Vermont crops exists that requires the use of that pesticide and no other pesticide or class of pesticides would be effective in addressing the threat.

Sec. 3. 6 V.S.A. § 918(f) is amended to read:

(f)(1) No person shall sell, use, or apply neonicotinoid pesticides in the State except when authorized by the Secretary under subdivision (2) of this subsection:

(2) the Secretary may authorize the use or application of a neonicotinoid pesticide upon a determination that a threat to Vermont crops exists that
requires the use of that pesticide and no other pesticide or class of pesticides
would be effective in addressing the threat. The Secretary shall register as a
restricted use pesticide any neonicotinoid pesticide authorized under the rules
required by this chapter and labeled as approved for outdoor use that is
distributed, sold, sold into, or offered for sale within the State or delivered for
transportation or transported in intrastate commerce or between points within
this State through any point outside this State, provided that the Secretary shall
not register the following products as restricted use pesticides, unless required
to be registered as restricted use under the rules required by this chapter or
unless classified under federal law as restricted use products:

(1) pet care products used for preventing, destroying, repelling, or
mitigating fleas, mites, ticks, heartworms, or other insects or organisms;

(2) personal care products used for preventing, destroying, repelling, or
mitigating lice or bedbugs;

(3) indoor pest control products used for preventing, destroying,
repelling, or mitigating insects indoors; and

(4) treated article seed that is not coated with a neonicotinoid pesticide.

Sec. 4. IMPLEMENTATION; EFFECTIVE DATE; REPEAL

(a) Sec. 2 (ban on use of neonicotinoid pesticides) of this act shall take
effect on July 1, 2022.
(b) Sec. 3 (reversion to regulation of neonicotinoids as restricted use) of this act shall take effect on the effective date of the rules required under 6 V.S.A. § 918a for the application of neonicotinoid pesticides in the State.

(c) If the Secretary of Agriculture, Food and Markets fails to adopt the rules required under 6 V.S.A. § 918a on or before July 1, 2024, Sec. 3 of this act (reversion to regulation of neonicotinoids as restricted use) and 6 V.S.A. § 918a (neonicotinoid pesticide rulemaking) shall be repealed on July 1, 2024 and the prohibition on the sale, use, or application of neonicotinoid pesticides under 6 V.S.A. § 918(f) as enacted by Sec. 2 of this act shall control the sale, use, or application of neonicotinoid pesticides in the State.

* * * Rules for Application of Neonicotinoid Pesticides * * *

Sec. 5. 6 V.S.A. § 918a is added to read:

§ 918a. RULES FOR SALE, USE, OR APPLICATION OF NEONICOTONOID PESTICIDES

The Secretary shall adopt by rule requirements for the sale, use, or application of neonicotinoid pesticides in the State. The rules shall include:

(1) required integrated pest management practices to be implemented prior to use of neonicotinoid pesticides or treated article seed coated with neonicotinoid pesticides;

(2) best management practices, restrictions, or prohibitions on the use or application of neonicotinoid pesticides that are highly toxic to bees, birds, and
wildlife, including provisions addressing seasonal application, application in proximity to flowering trees or plants, and time of day application;

(3) requirements for buffers of at least 50 feet from pollinator foraging sites, in which neonicotinoid pesticides shall not be used or applied;

(4) restrictions on the application of neonicotinoid pesticides when environmental conditions, such as wind, increase the potential for drift of the pesticide away from the land where it is used or applied;

(5) a statewide prohibition on application of neonicotinoid pesticides to ornamental plants accessible to pollinators when the pesticide is applied by soil drench, trunk injection, foliar, and basal bark sprays;

(6) requirements for reporting the use of neonicotinoid pesticides and treated article seed coated with neonicotinoid pesticides, including reporting the location of use and the amount of pesticide or treated article seed used; and

(7) requirements for equipment or planters used to apply neonicotinoid pesticides or treated article seed coated with neonicotinoid pesticides.

*** Practicable Alternatives ***

Sec. 6. SECRETARY OF AGRICULTURE, FOOD AND MARKETS;

PRACTICABLE ALTERNATIVES

The Secretary of Agriculture, Food and Markets, in consultation with the Secretary of Natural Resources, shall identify practicable and feasible alternatives to the use of neonicotinoid pesticides containing the active
ingredients clothianidin, imidacloprid, thiamethoxam, dinotefuran, or acetamiprid. On or before January 15, 2023, the Secretary of Agriculture, Food and Markets shall submit the identified practicable and feasible alternatives to the House Committees on Natural Resources, Fish, and Wildlife and on Agriculture and Forestry and the Senate Committees on Natural Resources and Energy and on Agriculture.

*** Effective Date ***

Sec. 7. EFFECTIVE DATE

This act shall take effect on July 1, 2022.