
Referred to Committee on

Date:

Subject: Agriculture; pesticides; neonicotinoid pesticides; prohibition

Statement of purpose of bill as introduced: This bill proposes to prohibit the sale, offer for sale or use, distribution, or use of any neonicotinoid treated
article seed for soybeans or for any crop in the cereal grains crop group. The bill would also prohibit the application or treatment with a neonicotinoid pesticide for multiple other uses.

An act relating to banning the use of neonicotinoid pesticides

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

Sec. 1. FINDINGS

The General Assembly finds that:

(1) Wild and managed pollinators are essential to the health and vitality of Vermont’s agricultural economy, environment, and ecosystems. According to the Department of Fish and Wildlife (DFW), between 60 and 80 percent of the State’s wild plants depend on pollinators to reproduce.

(2) Vermont is home to thousands of pollinators, including more than 300 native bee species. Many pollinator species are in decline or have disappeared from Vermont, including three bee species that the State lists as endangered. The Vermont Center for Ecostudies and DFW’s State of Bees 2022 Report concludes that at least 55 of Vermont’s native bee species need significant conservation action.

(3) Neonicotinoids are a class of neurotoxic, systemic insecticides that are extremely toxic to bees and other pollinators. Neonicotinoids are the most widely used class of insecticides in the world and include imidacloprid.
clothianidin, thiamethoxam, acetamiprid, dinotefuran, thiacloprid, and
nithiazine.

(4) Among other uses, neonicotinoids are commonly applied to crop
seeds as a prophylactic treatment. More than 90 percent of neonicotinoids
applied to treated seeds move into soil, water, and nontarget plants. According
to the Agency of Agriculture, Food and Markets, at least 1,197.66 tons of seeds
sold in Vermont in 2022 were treated with a neonicotinoid product.

(5) Integrated pest management is a pest management technique that
protects public health, the environment, and agricultural productivity by
prioritizing nonchemical pest management techniques. Under integrated pest
management, pesticides are a measure of last resort. According to the
European Academies Science Advisory Council, neonicotinoid seed treatments
are incompatible with integrated pest management.

(6) A 2020 Cornell University report that analyzed more than 1,100
peer-reviewed studies found that neonicotinoid corn and soybean seed
treatments pose substantial risks to bees and other pollinators but provide no
overall net income benefits to farms. DFW similarly recognizes that
neonicotinoid use contributes to declining pollinator populations.

(7) A 2014 peer-reviewed study conducted by the Harvard School of
Public Health and published in the journal Bulletin of Insectology concluded
that sublethal exposure to neonicotinoids is likely to be the main culprit for the occurrence of colony collapse disorder in honey bees.

(8) A 2020 peer-reviewed study published in the journal Nature Sustainability found that increased neonicotinoid use in the United States between 2008 and 2014 led to statistically significant reductions in bird biodiversity, particularly among insectivorous and grassland birds.

(9) A 2022 peer-reviewed study published in the journal Environmental Science and Technology found neonicotinoids in 95 percent of the 171 pregnant women who participated in the study. Similarly, a 2019 peer-reviewed study published in the journal Environmental Research found that 49.1 percent of the U.S. general population had recently been exposed to neonicotinoids.

(10) The European Commission and the provinces of Quebec and Ontario have implemented significant prohibitions on the use of neonicotinoids.

(11) The New York General Assembly passed legislation that prohibits the sale or use of corn, soybean, and wheat seed treated with imidacloprid, clothianidin, thiamethoxam, dinotefuran, or acetamiprid. The same legislation prohibits the nonagricultural application of imidacloprid, clothianidin, thiamethoxam, dinotefuran, or acetamiprid to outdoor ornamental plants and turf.
Sec. 2. 6 V.S.A. § 1101 is amended to read:

§ 1101. DEFINITIONS

As used in this chapter unless the context clearly requires otherwise:

(1) “Secretary” shall have the same meaning stated in subdivision 911(4) of this title.

(2) “Cumulative” when used in reference to a substance means that the substance so designated has been demonstrated to increase twofold or more in concentration if ingested or absorbed by successive life forms.

(3) “Dealer or pesticide dealer” means any person who regularly sells pesticides in the course of business, but not including a casual sale.

(4) “Economic poison” shall have the same meaning stated in subdivision 911(5) of this title.

(5) “Pest” means any insect, rodent, nematode, fungus, weed, or any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other microorganisms that the Secretary declares as being injurious to health or environment. “Pest” does not mean any viruses, bacteria, or other microorganisms on or in living humans or other living animals.

(6) “Pesticide” for the purposes of this chapter shall be used interchangeably with “economic poison.”
(7) “Treated article” means a pesticide or class of pesticides exempt under 40 C.F.R. § 152.25(a) from regulation under the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. § 136-136y.

(8) “Neonicotinoid pesticide” means any economic poison containing a chemical belonging to the neonicotinoid class of chemicals.

(9) “Neonicotinoid treated article seeds” are treated article seeds that are treated or coated with a neonicotinoid pesticide.

(10) “Agricultural commodity” means any food in its raw or natural state, including all fruits or vegetables that are washed, colored, or otherwise treated in their unpeeled natural form prior to marketing.

(11) “Agricultural emergency” means an occurrence of any pest that presents an imminent risk of significant harm, injury, or loss to agricultural crops.

(12) “Bloom” means the period from the onset of flowering or inflorescence until petal fall is complete.

(13) “Crop group” means the groupings of agricultural commodities specified in 40 C.F.R. § 180.41(c) (2023).

(14) “Environmental emergency” means an occurrence of any pest that presents a significant risk of harm or injury to the environment, or significant harm, injury, or loss to agricultural crops, including any exotic or foreign pest that may need preventative quarantine measures to avert or prevent that risk, as
determined by the Secretary in consultation with the Secretary of Natural Resources.

(15) “Ornamental plants” mean perennials, annuals, and groundcover purposefully planted for aesthetic reasons.

(16) “Turf” means land planted in closely mowed, managed grasses, including residential and commercial property and publicly owned land, parks, and recreation areas. “Turf” does not include pasture, cropland, land used to grow sod, or any other land used for agricultural production.

Sec. 3. 6 V.S.A. § 1105b is added to read:

§ 1105b. USE AND SALE OF NEONICOTINOID TREATED ARTICLE SEEDS

(a) No person shall sell, offer for sale or use, distribute, or use any neonicotinoid treated article seed for soybeans or for any crop in the cereal grains crop group (crop groups 15, 15-22, 16, and 16-22).

(b) The Secretary of Natural Resources, in consultation with the Secretary of Agriculture, Food and Markets, may issue a written exemption order to suspend the provisions of subsection (a) of this section. Such written exemption order shall not be valid for more than one year.

(c) A written exemption order issued under subsection (b) of this section shall:
(1) specify the types of neonicotinoid treated article seeds to which the exemption order applies, the date on which the exemption order takes effect, the exemption order’s duration, and the exemption order’s geographic scope;

(2) provide a detailed evaluation of the agricultural seed market, including a determination either that the purchase of seeds that comply with subsection (a) of this section would cause agricultural producers undue financial hardship or that there is an insufficient amount of commercially available seed not treated with neonicotinoid pesticides to supply agricultural producers; and

(3) provide a detailed evaluation of the exemption order’s anticipated effect on pollinator populations, bird populations, ecosystem health, and public health, including a determination that the exemption order will not cause undue harm to pollinator populations, bird populations, ecosystem health, and public health.

(d) A written exemption order issued under subsection (b) of this section may:

(1) establish restrictions related to the use of neonicotinoid treated article seeds to which the exemption order applies to minimize harm to pollinator populations, bird populations, ecosystem health, and public health; or
(2) establish other restrictions related to the use of neonicotinoid treated article seeds to which the exemption order applies that the Secretary of Natural Resources considers necessary.

(e) Upon issuing a written exemption order under subsection (b) of this section, the Secretary of Natural Resources shall submit a copy of the exemption order to the Senate Committees on Natural Resources and Energy and on Agriculture; the House Committees on Environment and Energy and on Agriculture, Food Resiliency, and Forestry; and the Agricultural Innovation Board.

(f) The Secretary of Natural Resources, in consultation with the Secretary of Agriculture, Food and Markets, may rescind a written exemption order issued under subsection (b) of this section at any time. Such rescission shall come into effect not sooner than 30 days after its issuance and shall not apply to neonicotinoid treated article seeds planted or sown before such rescission comes into effect.

Sec. 4. 6 V.S.A. § 1105c is added to read:

§ 1105c. NEONICOTINOID PESTICIDES; PROHIBITED USES

(a) The following uses of neonicotinoid pesticides are prohibited:

(1) the outdoor application of neonicotinoid pesticides to any crop during bloom:
(2) the outdoor application of neonicotinoid pesticides to any crop between heading or tassel emergence and harvest;

(3) the outdoor application of neonicotinoid pesticides to crops in the leafy vegetables, brassica, bulb vegetables, herbs and spices, and stalk, stem, and leaf petiole vegetables crop groups (crop groups 3, 3-07, 4, 4-16, 5, 5-16, 19, 22, 25, and 26) harvested after bloom;

(4) the application of neonicotinoid pesticides to ornamental plants; and

(5) the application of neonicotinoid pesticides to turf grass.

(b) The Secretary of Natural Resources, in consultation with the Secretary of Agriculture, Food and Markets, may issue a written exemption order to suspend the provisions of subsection (a) of this section. Such written exemption order shall not be valid for more than one year.

(c) A written exemption order issued under subsection (b) of this section shall:

(1) specify the neonicotinoid pesticides, uses, and crops to which the exemption order applies; the date on which the exemption order takes effect; the exemption order’s duration; and the exemption order’s geographic scope;

(2) provide a detailed evaluation determining that an agricultural emergency or an environmental emergency exists;

(3) provide a detailed evaluation of reasonable responses available to address the agricultural emergency or the environmental emergency, including
a determination that the use of the neonicotinoid pesticides to which the
exemption order applies would be effective in addressing the emergency and a
determination that there is no other less harmful pesticide or pest management
practice that would be effective in addressing the emergency; and

(4) provide a detailed evaluation of the exemption order’s anticipated
effects on pollinator populations, bird populations, ecosystem health, and
public health, including a determination that the exemption order will not
cause undue harm to pollinator population, bird populations, ecosystem health,
and public health.

(d) A written exemption order issued under subsection (b) of this section
may:

(1) establish restrictions related to the use of neonicotinoid pesticides to
which the exemption order applies to minimize harm to pollinator populations,
bird populations, ecosystem health, and public health; or

(2) establish other restrictions related to the use of neonicotinoid
pesticides to which the exemption order applies that the Secretary of Natural
Resources considers necessary.

(e) Upon issuing a written exemption order under subsection (b) of this
section, the Secretary of Natural Resources shall submit a copy of the
exemption order to the Senate Committees on Natural Resources and Energy
and on Agriculture, the House Committees on Environment and Energy and on
Agriculture, Food Resiliency, and Forestry; and the Agricultural Innovation Board.

(f) The Secretary of Natural Resources, in consultation with the Secretary of Agriculture, Food and Markets, may rescind any written exemption order issued under subsection (b) of this section at any time. Such rescission shall come into effect not sooner than 15 days after its issuance.

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

§ 918. REGISTRATION

(a) Every economic poison that is distributed, sold, or offered for sale within this State or delivered for transportation or transported in intrastate commerce or between points within this State through any point outside this State shall be registered in the Office of the Secretary, and such registration shall be renewed annually, provided that products that have the same formula are manufactured by the same person, the labeling of which contains the same claims, and the labels of which bear a designation identifying the product as the same economic poison may be registered as a single economic poison, and additional names and labels shall be added by supplemental statements during the current period of registration. It is further provided that any economic poison imported into this State, which is subject to the provisions of any federal act providing for the registration of economic poisons and that has been duly registered under the provisions of this chapter, may, in the discretion of
the Secretary, be exempted from registration under this chapter when sold or
distributed in the unbroken immediate container in which it was originally
shipped. The registrant shall file with the Secretary a statement including:

* * *

(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; and

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

(4) treated article seed.
Sec. 6. 6 V.S.A. § 912 is amended to read:

§ 912. ADMINISTRATION

Jurisdiction  Unless otherwise provided by statute, jurisdiction in all matters pertaining to the distribution, sale, and transportation of economic poisons is by this chapter vested exclusively in the Secretary.

Sec. 7. 6 V.S.A. § 1103(a) is amended to read:

(a) General authority. The Unless otherwise provided in statute, the Secretary shall have responsibility for regulating and controlling the sale, use, storage, treatment, and disposal of pesticides and pesticide wastes in order to promote the public health, safety, and welfare and protect agricultural and natural resources. In the performance of such duties, the Secretary shall act upon the advice of the Agricultural Innovation Board and subject to the approval of the Governor.

Sec. 8. REPEAL; BEST MANAGEMENT PRACTICES; NEONICOTINOID TREATED ARTICLE SEEDS

6 V.S.A. § 1105a(c) and any rules adopted under that subsection regarding the best management practices for use of neonicotinoid treated article seeds shall be repealed on January 1, 2027.

Sec. 9. EFFECTIVE DATES

(a) This section and Secs. 1 (findings), 2 (definitions), 5 (registration), and 8 (prospective repeal of BMP rules) shall take effect on passage.
(b) Sec. 4 (prohibited use; neonicotinoid pesticides) and Secs. 6 and 7 (authority of the Secretary of Agriculture, Food and Markets) shall take effect on July 1, 2025.

(c) Sec. 3 (treated article seed) shall take effect on January 1, 2027.