

1 H.706

2 An act relating to banning the use of neonicotinoid pesticides

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

4 Sec. 1. FINDINGS

5 The General Assembly finds that:

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

10 (2) Vermont is home to thousands of pollinators, including more than
11 300 native bee species. Many pollinator species are in decline or have
12 disappeared from Vermont, including three bee species that the State lists as
13 endangered. The Vermont Center for Ecostudies and DFW's State of Bees
14 2022 Report concludes that at least 55 of Vermont's native bee species need
15 significant conservation action.

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

1 (4) Among other uses, neonicotinoids are commonly applied to crop
2 seeds as a prophylactic treatment. More than 90 percent of neonicotinoids
3 applied to treated seeds move into soil, water, and nontarget plants. According
4 to the Agency of Agriculture, Food and Markets, at least 1197.66 tons of seeds
5 sold in Vermont in 2022 were treated with a neonicotinoid product.

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

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

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

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

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

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

14 (11) The New York General Assembly passed legislation that prohibits
15 the sale or use of corn, soybean, and wheat seed treated with imidacloprid,
16 clothianidin, thiamethoxam, dinotefuran, or acetamiprid. The same legislation
17 prohibits the nonagricultural application of imidacloprid, clothianidin,
18 thiamethoxam, dinotefuran, or acetamiprid to outdoor ornamental plants and
19 turf.

1 Sec. 2. 6 V.S.A. § 1101 is amended to read:

2 § 1101. DEFINITIONS

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

4 (1) “Secretary” ~~shall have~~ has the same meaning stated in subdivision
5 911(4) of this title.

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

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

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

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

18 (6) “Pesticide” for the purposes of this chapter ~~shall be~~ is used
19 interchangeably with “economic poison.”

1 (7) “Treated article” means a pesticide or class of pesticides exempt
2 under 40 C.F.R. § 152.25(a) from regulation under the Federal Insecticide,
3 Fungicide, and Rodenticide Act, 7 U.S.C. § 136-136y.

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

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

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

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

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

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

18 (14) “Environmental emergency” means an occurrence of any pest that
19 presents a significant risk of harm or injury to the environment, or significant
20 harm, injury, or loss to agricultural crops or turf, including any exotic or
21 foreign pest that may need preventative quarantine measures to avert or

1 prevent that risk, as determined by the Secretary of Agriculture, Food and
2 Markets.

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

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

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

10 § 1105b. USE AND SALE OF NEONICOTINOID TREATED ARTICLE

11 SEEDS

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

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

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

1 (1) specify the types of neonicotinoid treated article seeds to which the
2 exemption order applies, the date on which the exemption order takes effect;
3 the exemption order’s duration; and the exemption order’s geographic scope,
4 which may include specific farms, fields, or properties;

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

11 (3) provide a detailed evaluation of the exemption order’s anticipated
12 effect on pollinator populations, bird populations, ecosystem health, and public
13 health, including whether the exemption order will cause undue harm to
14 pollinator populations, bird populations, ecosystem health, and public health.

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

17 (1) establish restrictions related to the use of neonicotinoid treated
18 article seeds to which the exemption order applies to minimize harm to
19 pollinator populations, bird populations, ecosystem health, and public health;
20 or

1 (2) establish other restrictions related to the use of neonicotinoid treated
2 article seeds to which the exemption order applies that the Secretary of
3 Agriculture, Food and Markets considers necessary.

4 (e) Upon issuing a written exemption order under subsection (b) of this
5 section, the Secretary of Agriculture, Food and Markets shall submit a copy of
6 the exemption order to the Senate Committees on Natural Resources and
7 Energy and on Agriculture; the House Committees on Environment and
8 Energy and on Agriculture, Food Resiliency, and Forestry; and the
9 Agricultural Innovation Board. The General Assembly shall manage a written
10 exemption order submitted under this section in the same manner as a report to
11 the General Assembly and shall post the written exemption order to the
12 website of the General Assembly.

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

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

20 § 1105c. NEONICOTINOID PESTICIDES; PROHIBITED USES

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

1 (1) the outdoor application of neonicotinoid pesticides to any crop
2 during bloom;

3 (2) the outdoor application of neonicotinoid pesticides to soybeans or
4 any crop in the cereal grains crop group (crop groups 15, 15-22, 16, and 16-
5 22);

6 (3) the outdoor application of neonicotinoid pesticides to crops in the
7 leafy vegetables, brassica, bulb vegetables, herbs and spices, and stalk, stem,
8 and leaf petiole vegetables crop groups (crop groups 3, 3-07, 4, 4-16, 5, 5-16,
9 19, 22, 25, and 26) harvested after bloom;

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

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

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

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

18 (1) specify the neonicotinoid pesticides, uses, and crops, plants, or turf
19 to which the exemption order applies; the date on which the exemption order
20 takes effect; the exemption order's duration; and the exemption order's
21 geographic scope, which may include specific farms, fields, or properties;

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

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

9 (4) provide a detailed evaluation of the exemption order's anticipated
10 effects on pollinator populations, bird populations, ecosystem health, and
11 public health, including whether the exemption order will cause undue harm to
12 pollinator population, bird populations, ecosystem health, and public health.

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

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

18 (2) establish other restrictions related to the use of neonicotinoid
19 pesticides to which the exemption order applies that the Secretary of
20 Agriculture, Food and Markets considers necessary.

1 (e) Upon issuing a written exemption order under subsection (b) of this
2 section, the Secretary of Agriculture, Food and Markets shall submit a copy of
3 the exemption order to the Senate Committees on Natural Resources and
4 Energy and on Agriculture; the House Committees on Environment and
5 Energy and on Agriculture, Food Resiliency, and Forestry; and the
6 Agricultural Innovation Board. The General Assembly shall manage a written
7 exemption order submitted under this section in the same manner as a report to
8 the General Assembly and shall post the written exemption order to the
9 website of the General Assembly.

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

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

15 § 918. REGISTRATION

16 (a) Every economic poison that is distributed, sold, or offered for sale
17 within this State or delivered for transportation or transported in intrastate
18 commerce or between points within this State through any point outside this
19 State shall be registered in the Office of the Secretary, and such registration
20 shall be renewed annually, provided that products that have the same formula
21 are manufactured by the same person, the labeling of which contains the same

1 claims, and the labels of which bear a designation identifying the product as
2 the same economic poison may be registered as a single economic poison, and
3 additional names and labels shall be added by supplemental statements during
4 the current period of registration. It is further provided that any economic
5 poison imported into this State, which is subject to the provisions of any
6 federal act providing for the registration of economic poisons and that has been
7 duly registered under the provisions of this chapter, may, in the discretion of
8 the Secretary, be exempted from registration under this chapter when sold or
9 distributed in the unbroken immediate container in which it was originally
10 shipped. The registrant shall file with the Secretary a statement including:

11 * * *

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

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

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

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

5 ~~(4) treated article seed.~~

6 Sec. 6. 6 V.S.A. § 1105a(c) is amended to read:

7 (c)(1) Under subsection (a) of this section, the Secretary of Agriculture,
8 Food and Markets, after consultation with the Agricultural Innovation Board,
9 shall adopt by rule BMPs for the use in the State of:

10 (A) neonicotinoid treated article seeds when used prior to January 1,
11 2029;

12 (B) neonicotinoid treated article seeds when the Secretary issues a
13 written exemption order pursuant to section 1105b of this chapter authorizing
14 the use of neonicotinoid treated article seeds;

15 (C) neonicotinoid pesticides when the Secretary issues a written
16 exemption order pursuant to section 1105c of this chapter authorizing the use
17 of neonicotinoid pesticides; and

18 (D) the agricultural use after July 1, 2025 of neonicotinoid pesticides
19 the use of which is not otherwise prohibited under law.

20 (2) In developing the rules with the Agricultural Innovation Board, the
21 Secretary shall address:

1 (A) establishment of threshold levels of pest pressure required prior
2 to use of neonicotinoid treated article seeds or neonicotinoid pesticides;

3 (B) availability of nontreated article seeds that are not neonicotinoid
4 treated article seeds;

5 (C) economic impact from crop loss as compared to crop yield when
6 neonicotinoid treated article seeds or neonicotinoid pesticides are used;

7 (D) relative toxicities of different neonicotinoid treated article seeds
8 or neonicotinoid pesticides and the effects of neonicotinoid treated article
9 seeds or neonicotinoid pesticides on human health and the environment;

10 (E) surveillance and monitoring techniques for in-field pest pressure;

11 (F) ways to reduce pest harborage from conservation tillage
12 practices; and

13 (G) criteria for a system of approval of neonicotinoid treated article
14 seeds or neonicotinoid pesticides.

15 ~~(2)~~(3) In implementing the rules required under this subsection, the
16 Secretary of Agriculture, Food and Markets shall work with farmers, seed
17 companies, and other relevant parties to ensure that farmers have access to
18 appropriate varieties and amounts of untreated seed or treated seed that are not
19 neonicotinoid treated article seeds.

1 Sec. 7. 2022 Acts and Resolves No. 145, Sec. 4 is amended to read:

2 Sec. 4. IMPLEMENTATION; REPORT; RULEMAKING

3 (a) On or before March 1, 2024, the Secretary of Agriculture, Food, and
4 Markets shall submit to the Senate Committee on Agriculture and the House
5 Committee on Agriculture, Food Resiliency, and Forestry a copy of the
6 proposed rules required to be adopted under 6 V.S.A. § 1105a(c)(1)(A).

7 (b) The Secretary of Agriculture shall not file the final proposal of the rules
8 required by 6 V.S.A. § 1105a(c)(1)(A) under 3 V.S.A. § 841 until at least 90
9 days from submission of the proposed rules to the General Assembly under
10 subsection (a) of this section or July 1, 2024, ~~whichever~~ whichever shall occur
11 first.

12 Sec. 8. EFFECTIVE DATES

13 (a) This section and Secs. 1 (findings), 2 (definitions), 5 (registration),
14 6 (BMP rules), and 7 (implementation) shall take effect on passage.

15 (b) Sec. 4 (prohibited use; neonicotinoid pesticides) shall take effect on
16 July 1, 2025.

17 (c) Sec. 3 (treated article seed) shall take effect on January 1, 2029.