The Pesticide Applicator

News for Vermont's Pesticide Applicators from the Vermont Agency of Agriculture, Food & Markets and UVM Extension





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Oak Wilt: A Threat to Oak Trees Everywhere Return to Menu

Emilie Inoue, Vermont Agency of Agriculture, Food & Markets

Understanding Oak Wilt

Oak wilt is a deadly disease caused by the fungus *Ceratocystis fagacearum*, which disrupts the water transport system within oak trees. This serious disease affects all species of oak trees, with red oaks being the most vulnerable. Infected red oaks can succumb to the disease within a few weeks to six months. While oak wilt has been identified in more than 20 states, it has not yet been detected in VT, with the nearest known outbreak in New York.

How Oak Wilt Spreads

The disease primarily spreads through the interconnected root systems of oak trees. When the roots of nearby oak trees fuse together, they can share nutrients as well as diseases like oak wilt. Sap beetles can transmit the fungus by carrying spores from infected trees to healthy ones. Once inside a tree, the



Oak wilt disease on an oak tree. Photo by Joseph O'Brien USDA Forest Service, Bugwood.org

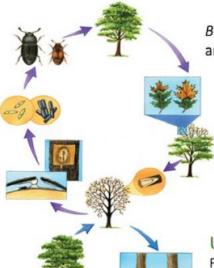
Oak wilt cycle

Overland spread

Insect vectors carry spores of the fungus



Oak wilt spore mats emit a strong, fruity smell that attracts insects.



B. Fagacearum infect oak trees and block the sapwood vessels.

Oak wilt symptoms on oak leaves

Underground spread

Fungus travels through the interconnected roots of infected and healthy trees.

Adapted from USDA Forest Service

fungus proliferates in the water-conducting vessels, obstructing water movement, causing the leaves to wilt and fall, and eventually killing the tree.

Identifying Oak Wilt

The initial signs of oak wilt include the wilting and death of single branches. The affected leaves change color, turning bronze, tan, or dull green, starting at the tips or outer edges. These leaves may also droop, curl, or fall prematurely.



Dark streaks in the sapwood of this red oak branch. Photo by Gail Ruhl



These branches and leaves show symptoms of oak wilt. Photo by Gail Ruhl

For trees in the red oak group, oak wilt can be fatal within a month. Oaks in the white oak group generally exhibit less severe symptoms and typically persist longer than a year.

Controlling Oak Wilt

Managing oak wilt often involves removing infected trees. Prior to removal, it is crucial to sever root grafts between the infected tree and nearby oaks to prevent the spread of the fungus. Destroy the wood from diseased trees by burning or burying it. If keeping the wood, remove the bark, stack it in one location, cover it with a heavy tarp, and secure the tarp edges with soil.

To minimize the risk of oak wilt, prune oak trees only during their dormant season when sap beetles are inactive. Regularly monitor oaks for signs of oak wilt and remove infected trees as quickly as possible to contain the spread of the disease.

Pesticide License Renewal Season: What to Expect Return to Menu

Bethany Creaser, Vermont Agency of Agriculture, Food & Markets

The end of the year is approaching and for the VT Agency of Agriculture's (VAAFM) pesticide certification and training section, it means that pesticide license renewal season is almost here! This year, VAAFM is hoping to help make renewals go smoother with some guidance that will help you through the process.

Credits

Prior to your renewal arriving, check if you have enough credits to recertify BEFORE your certification expires. For commercial and non-commercial (non-commercial includes government applicators), you need 16 credits every 5 years. For private applicators, you need 8 credits every 5 years.

You can lookup how many credits you need to recertify by visiting https://usaplants.vermont.gov/USA Plants/PesticideApplicator/ApplicatorExternalSearch.aspx and enter your license number (ie, if your license number is 123-4567 or P-4567, enter 4576) and last name.

You can also lookup which meetings you attended by visiting https://usaplants.vermont.gov/usaplants/SecurityLogin.aspx and login with your username and password info. If you have not registered before and would like to, please send an email to agr.pest@vermont.gov and ask for your login PIN and account number.

You can send your pesticide credit slips and newsletter quizzes any time.

We prefer to receive the credit slips and quizzes BEFORE you send in your renewal paperwork. The slips just need to be in a format you can attach to an email and that is readable. You are also welcome to mail your credit slips and quizzes. Credit slips and quizzes can be emailed to agr.pest@vermont.gov.

Vermont does offer credit reciprocity with all the New England states and New York state. If you attend an approved meeting or course in New England or New York for pesticide credits, send a copy (email or mail) to VAAFM so the credits can be applied to your account.

If you need more pesticide credits, VAAFM has a couple of ways to help you earn pesticide recertification credits. The first way is by filling out and sending in the quizzes found in the Pesticide Applicator newsletter.

You can find past pesticide newsletters on our webpage, and you can complete any past pesticide newsletter quizzes you have not done before to obtain credits. The link to the pesticide applicator newsletter is https://agriculture.vermont.gov/public-health-agricultural-resource-management-division/pesticide-programs/applicator-types-0.

You can find recertification credit courses by using our online recertification course locator. You can search for courses in person (onsite), online (on demand), and webinar (one-time online course), and by date. The link to the course search is https://usaplants.vermont.gov/USAPlants/PesticideApplicator/MeetingSearch.aspx.

Pesticide License Renewal Dates

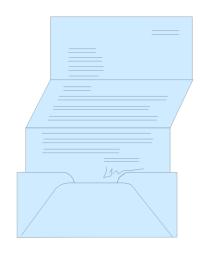
Pesticide license renewal season begins in November, when VAAFM will start by emailing license renewals. If you do not get a renewal via email, it is because they do not have your current email address, or the email was filtered to your junk folder. The email message will be from agr.noreply@vermont.gov with the subject line 'Vermont Online Pesticide Applicator Renewal'.

If you do not renew by the end of November, renewal paperwork will be mailed to your mailing address in early December. If you have moved recently, please be sure to send VAAFM your current mailing address by emailing agr.pest@vermont.gov.

Commercial, non-commercial (includes government), and dealer licenses that are not renewed within one year from the date of expiration are considered lapsed and you will need to retest. Private applicator renewals that are not renewed by April 1st of the year following the expiration of the certificate are considered lapsed and you will need to retest.

How to Renew

When it comes time to renew your license, you have two options to renew: renew via mail or renew online. Renewing online is quicker and the only way to pay with a credit card. VAAFM has created step-by-step instructions for renewing your pesticide licenses and highly encourage you to read the instructions in their entirety. You can find renewal instructions by visiting: https://agriculture.vermont.gov/public-health-agricultural-resource-management-division/pesticide-programs/applicator-types



To renew online, if you have not done so already, you will need to create an account to sign into VAAFM's database, USAPlants. Once you have created your account and logged in, you will follow several steps to go through the renewal process. VAAFM's online renewal process is not very difficult once you learn how to do it. The online renewal process is slightly different for each type of license, so please reference VAAFM's online renewal instructions.

Key things to know to renew online:

- Commercial applicators are renewed through the licensed pesticide company's account.
- The Annual Use Report for commercial applicators is input by the user and NOT by uploading a file. To make the process smoother and less cumbersome for commercial applicators, have your Annual Use Report filled out and ready before logging in to renew.
- Non-commercial applicators (includes government) renew individually and not through a company.
- Non-commercial applicators and class A dealers will upload their annual reports as a file. Have this file ready prior to renewing online.
- There is a maximum of \$1000 when paying with a credit card. If you owe more than \$1000 you will have to renew in batches or renew via mail. If you need assistance with this, please email agr.pest@vermont.gov or call 802-828-1732 (leave a message).
- Remember! Applicators with Vermont certifications via reciprocity must renew via mail.

To renew via mail, be sure to enclose the following in your renewal packet:

- Payment for correct total amount due. Checks can be made out to VAAFM.
- All renewal paperwork signed and initialed, for all applicators and licenses that you are renewing.
 Commercial pesticide companies can renew for their company license and all their applicators in one packet.
- Commercial and non-commercial applicators and class A dealers only your annual reports, filled
 out completely. This must be sent in EVEN IF THERE WAS NO USE OR SALES.
- For applicators renewing via **reciprocity**, please include a copy of your current pesticide applicators license.
- Renewal packets that are incomplete will not be processed and will be mailed back to you!

VAAFM's **Right-of-Way Permits** are due before March 1st and the **Terrestrial Invasive Plant Control Permits** are due before April 1st of each year. For more information about these permits, visit: https://agriculture.vermont.gov/public-health-agricultural-resource-management-division/pesticide-programs/pesticide-permits

REMINDER! Per section 3 of the Vermont Rule for the Control of Pesticides, commercial pesticide companies, licensed pesticide dealers, and certified applicators who leave employment or change companies MUST notify the Vermont Agency of Agriculture (VAAFM) within 30 days of leaving employment or changing companies. To notify VAAFM, please email agr.pest@vermont.gov or call 802-828-1732 (leave a message).

The Neonicotinoid Treated Seed Ban: What it is and How it Will Affect the Regulated Community Return to Menu

Zach Szczukowski, Vermont Agency of Agriculture, Food & Markets

Following on the heels of similar legislation in New York, H.706, An act relating to banning the use of neonicotinoid pesticides, was passed by the Vermont Legislature during the 2024 session as Act 182.

As enacted, Act 182 prohibits the sale, distribution, and use of neonicotinoid treated article seeds for soybeans and the cereal grain crops which includes corn, millet, oats, rice, rye, wheat, barley, among others and the outdoor application of neonicotinoid pesticides to these crops; any outdoor applications to a plant during bloom; outdoor applications to crops that are harvested after bloom that are leafy vegetables, brassica, bulb vegetables, herbs and spices, and stalk, stem, and leaf petiole vegetables, and any application to ornamental plants.

The result of these provisions is that, upon going into effect, corn and soybean seeds (along with other crops) treated with neonicotinoid insecticides cannot be planted in Vermont. Farmers growing these crops will have to obtain untreated seed or seed treated with an insecticide other than neonicotinoids. In addition, neonicotinoid insecticides cannot be used on ornamental plants or some vegetable crops harvested after bloom. The Agency will continue to register, as a state restricted use pesticide, any neonicotinoid pesticide labeled as approved for outdoor use that is distributed, sold, sold into, or offered for sale within Vermont, unless the use of the neonicotinoid pesticide is prohibited under Act 182 which includes neonicotinoid seed treatments, and pesticides used only on ornamental plants.

Act 182 does enable the Secretary, however, to suspend provisions related to both prohibitions when certain conditions are met. For example, the Secretary may issue exemption orders for the use of treated article seeds provided the applicant completes an IPM training accepted by the Agency, the applicant submits a pest risk assessment to VAAFM, and the authorized seeds are only planted on property or properties described in the pest risk assessment. The Secretary may also issue an exemption order the use of neonicotinoid pesticides upon



Neonicotinoid treated seed. Photo by Jessica Tessier

a determination that an environmental emergency or agricultural emergency exists. The Agency would have to determine that the pesticide would be effective in addressing the emergency, and no other, less harmful pesticide or pest management practice would be effective. Neither exemption order may exceed one year.

The prohibition related to the use of neonicotinoid pesticides becomes effective on July 1, 2025, and the prohibition related to neonicotinoid treated article seed on January 1, 2029. Of note, however, the effective dates are contingent on New York's similar law being in effect at those times. Further, Act 182 provides that in the event New York's law is repealed, so are the prohibitions provided in Act 182.

If you have questions about Act 182, please contact Steve Dwinell at 802-828-1732 or steve.dwinell@vermont.gov.

MARK YOUR CALENDAR!

Planning is underway for Spring 2025 certification meetings for current and prospective pesticide applicators sponsored by the UVM Extension Pesticide Safety Education Program and the Vermont Agency of Agriculture, Food & Markets. Visit www.uvm.edu/extension/psep for more information about the programs or contact Sarah Kingsley-Richards at (802) 656-0475 sarah.kingsley@uvm.edu.

AGRICULTURAL PESTICIDE APPLICATOR MEETING

Updates on pest management and pesticide safety practices in agriculture and outdoor sites for certified applicators.

This program will provide Vermont Private, 1A, 2, 3A, 3B, 10 (and more?) recertification credits.

March 2025: Virtual via Zoom

INITIAL PESTICIDE CERTIFICATION MEETING

Review of the Northeast CORE Manual for new applicators followed by the Vermont Pesticide Applicator CORE Commercial and Private Exams

April 2025: In-Person Interactive Training & Exam Sites TBA Statewide



sued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. University of Vermont Extension, Burlington, Vermont. Inhersity of Vermont Extension, and U.S. Department of Agriculture, cooperating, offer education and employment to everyone without regard to race, color, national origin, gender, religion, age, disability, of Department of Agriculture, and an advantage of a principle states. Agriculture, to competition products, trade names, or brand names in information only, and no endorsement or approval is intended.

Back to Basics CORE Essentials: Decoding Formulations Return to Menu

Sarah Kingsley-Richards, University of Vermont Extension Pesticide Safety Education Program

Take any bag or bottle of pesticide and the **active ingredients** are the chemicals doing the pesticide work. Also included in container are unlisted **inert ingred**ients that make the active ingredient usable by providing chemical stability, aiding in dilution, or improving delivery and application efficacy.

The combination of active ingredients and inert ingredients is the formulation. This is the "form" the product is sold in (not to be confused with pesticide type (e.g. herbicide, insecticide, etc.)). The product formulation can be a simple liquid, solid, gas, or gel or a combination such as a solid suspended in a liquid. An active ingredient can come in multiple formulations to meet different needs.

Sometimes the formulation will be stated clearly on the label (e.g. "Pellets"). Sometimes the formulation abbreviation is included in the product brand or trade name as a capital letter (e.g. Pramitol 25E). Do not confuse an active ingredient chemical name capital letters with the formula abbreviation (e.g. 2,4-D). There may also be unrelated abbreviations in a product name (e.g. "MAX").

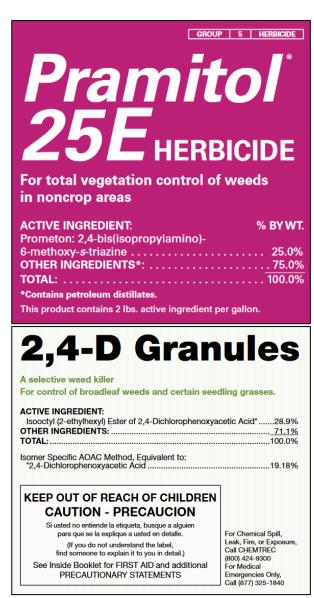
Type of packaging will be another clue to the type of formulation: bags and canisters for solids, jugs and spray cans for liquids, and squeeze tubes of gel are common.

If you encounter a product with an unfamiliar or unclear formulation, look online, ask the supplier, or call the manufacturer for information. Knowing the formulation will help you to properly handle the product and select equipment as needed.

Ready-to-use (RTU) formulations are typically very low concentration solid, liquid, or aerosol products packaged for the homeowner use. **Gel formulations** are also commonly ready-to-use.

Liquid formulations should be self-explanatory as ready-to-use solutions or concentrates requiring dilution.

Water soluble packets are a convenience packaging often considered a formulation that contains premeasured solid pesticide formulations in a wrapper that will dissolve in the mix tank.



Where trade names or commercial products are used for identification, no discrimination is intended and no endorsement is implied.

Solid formulations that are ready-to-use:

- **Dusts (D)** have a fine texture that is high risk for inhalation exposure and highly prone to drifting off target.
- **Granules (G)** and **Pellets (P)** have a larger particle size typically applied to soil or water. Many products require moisture following application to release the active ingredient and may require incorporation into the soil.

Solid formulations that are intended to be diluted (usually in water):

- **Soluble powders (SP or WSP)** are solids that dissolve into a solution. Few active ingredients are soluble so this formulation is not common.
- Wettable powders (WP) are small particles that look like dusts but *must be diluted before use*. They remain solid in dilution and require constant agitation to keep the product in suspension during application.
- Water-dispersible granules (WDG) and Dry-Flowables (DF) are larger particles that break down to small particles that remain solid in dilution and require constant agitation during application.
- Flowables (F or L) are solids already suspended in a liquid as part of the formulation. They still are intended to be diluted and require constant agitation during application.

Specialized formulations:

- Emulsifiable concentrates (EC) are very concentrated pesticides that contain petroleum-based solvents. They are a high risk for skin and eye exposure and flammable or corrosive.
- **Ultra low volume (ULV)** are very concentrated pesticides applied as is or diluted at very low rates. Specialized equipment is needed to apply, typically over large outdoor areas.
- Aerosols (A) are the classic fogger used to fill an enclosed space with a fine mist. This requires highly specialized equipment and presents a high risk for inhalation exposure.



Other formulations:

- Baits come ready-to-use as a solid, gel, or liquid or as a liquid that may require dilution. Specially designed bait stations may be used to reduce access by children, pets, or wildlife.
- Microencapsulated pesticides utilize a plastic coating that breaks down after application.
- **Fumigants** form highly toxic poisonous gases forced into enclosed spaces or soil applications.
- Animal systemics are absorbed through the skin to target blood-feeding insects.
- and many more!

	Abbreviations for Formulations in Product Names					
Α	= Aerosol	М	= Microencapsulated			
AF	= Aqueous flowable	MTF	= Multiple temperature formulation			
AS	= Aqueous solution or aqueous suspension	Р	= Pellets			
В	= Bait	PS	= Pellets			
C	= Concentrate	RTU	= Ready- to- use			
CM	= Concentrate mixture	S	= Solution			
CG	= Concentrate granules	SD	= Soluble dust			
D	= Dust	SG	= Soluble granule			
DF	= Dry flowables	SP	= Soluble powder or soluble packet			
DS	= Soluble dust	ULV	= Ultra- low- volume			
E	= Emulsifiable concentrate	ULW	= Ultra- low- weight/ultra- low- wettable			
EC	= Emulsifiable concentrate	W	= Wettable powder			
F	= Flowable (liquid)	WDG	= Water- dispersible granules			
G	= Granules	WP	= Wettable powder			
GL	= Gel	WS	= Water soluble			
L	= Liquid (flowable)	WSG	= Water- soluble granules			
LC	= Liquid concentrate or low concentrate	WSL	= Water- soluble liquid			
LV	= Low volatile	WSP	= Water- soluble powder or water- soluble packet			

Northeast CORE Manual 3rd edition

With all of these formulations, what is the best one for your site and pest? First, know what products are available and then take into consideration: where/when to best target the pest is in its lifecycle, what product formulations will be most effectively delivered to the pest, amount of active ingredient in the formulation and required application rates, and efficacy of the pesticide. Consider your individual concerns and limitations such as necessary equipment, protective gear, site conditions, storage facilities, etc. and always keep in mind non-target effects to plants, animals, the environment, and especially bees. You as the applicator should then choose the formulation that is best suited to meet the needs that have been considered.

Did You Know? Online Exam Study Courses

The UVM Extension Pesticide Safety Education Program offers on-demand, online video courses to help prospective pesticide applicators become certified. Courses are designed to be used in conjunction with the manuals and inserts to help study for the pesticide applicator exams. Once enrolled, students can view the videos as many times as needed for fourteen (14) days. Current study courses available are: CORE, 3B Turf (*new), 7A General Structural, 7C Food Processing (*new), 7F Disinfection & Antimicrobial, with 7B Mosquito, Tick, Biting Fly coming soon! https://www.uvm.edu/extension/pseponline

Vermont Pesticide Applicator Category Guidance Return to Menu

Vermont Agency of Agriculture, Food & Markets

The Vermont Agency of Agriculture often receives questions asking about which category or categories one should obtain. This article is meant to help guide you to make the choice that fits best for the type of work you do. Also available at: https://agriculture.vermont.gov/sites/agriculture/files/documents/Pesticide%20Category%20Descriptions%20FINAL.pdf

Each state's pesticide rules are different. These differences can include the applicator categories offered by a state. The Pesticide Certification and Training Program at the Vermont Agency of Agriculture, Food and Markets developed this guidance to help pesticide companies and prospective pesticide applicators understand the Vermont applicator categories and which may align with a company's work or an applicator's intended pesticide usage in Vermont. If you remain uncertain of which category you should obtain, please reach out to agr.pest@vermont.gov.

Private applicators:

- For farmers or their employees using pesticides on property/land owned or leased by the farm to produce an agricultural commodity.
- Needed when the farm wishes to use Class A (restricted use) pesticides or be able to train their own workers and handlers for the federal Worker Protection Standard (WPS).
- If you wish to use a restricted-use pesticide on your property and it is not for agricultural use, then you would be treated as a non-commercial applicator and need to become certified as such or hire a certified commercial applicator with a certification in the correct category.
- If you are a commercial certified applicator in Category 1 and you wish to use restricted use pesticides on your own farm, you must obtain a private applicators certification.

Private applicators who plan to:

- Apply pesticides aerially, including via UAS (aka drones)
- Fumigate, whether soil or non-soil

Need to add the related subcategory to their pesticide certification. Adding these subcategories requires passing the appropriate pesticide examination.

Commercial and Non-commercial/Government applicators

The following applies to applicators who use or supervise the use of a pesticide. For information about the difference between commercial and non-commercial applicator, please visit: https://agricultural-resource-management-division/pesticide-programs/applicator-types

Category 1A Agricultural Plant

 For the production of plant based agricultural commodities, including but not limited to grains, vegetables, small fruits, tree fruits, feed and forage crops including grasslands, and non-crop agricultural lands.

Category 1B Animal

- For use on animals or to places on or in which animals are confined including a Doctor of Veterinary Medicine engaged in the business of applying a pesticide for hire, and who publicly holds themselves out as pesticide applicators. This category does not include the use of pesticides in apiculture.
- This category also includes fish farming or insect farming (ie. Crickets) that is not apiary.

Category 1C Apiculture

- The use of pesticides in apiculture, including, but not limited to miticides.
- For farmers or employees of farms using pesticides on the farm's crops or animals, they may need a private applicators certification (see above).

Category 2 Forest Pest Control

- To control pests in forests, forest nurseries, forest settings, and forest seed production.
- This category is only for settings that are currently forested and not future forests.
- This category does include areas that were recently clear cut.
- Terrestrial introduced (invasive) plant control where no other categories fit where you will be doing the introduced plant control. For example, if you will be using pesticides to treat introduced plants for a town wide project, you would choose this category.
- Please note that some introduced plant control may require obtaining a permit from the Vermont Agency of Agriculture, Food, and Markets.

Category 3A Ornamental & Shade Trees

- For the control of landscape pests in the maintenance ornamental and landscape plants including flowers, shrubs and trees.
- Includes *landscape* settings such as private yards, parks, and flower beds, and *hardscape settings* such as walkways, patios, etc. or using repellents to repel vertebrate pests in the landscape.
- If you are using pesticides to control mosquitoes or ticks in a landscape setting, obtain Category 7B.

Category 3B Turf

- To control pests in the maintenance and production of turf, including golf courses.
- Includes *hardscape* settings such as walkways, patios, etc. or using repellents to repel vertebrate pests in the landscape.
- For lawns or other turf grass.
- This category includes the treatment of rodents that are pests of lawns/turf (i.e. moles, voles) and are not rodents who may become a pest of a structure.
- For the use of a pesticide to control mosquitoes, ticks and other biting arthropods in an outdoor setting, use category 7B.

Category 4 Seed Treatment

- The use of pesticide on seeds in seed treatment facilities.
- Choose this category if you will be using pesticides to treat seeds. This category is not necessary for using already treated seeds.

Category 5 Aquatic Pest Control

- The use of a pesticide as applied to, or adjacent to, standing or running waters and includes but is not limited to, waters of the State, drinking water reservoirs, industrial lagoons and sewage or wastewater treatment plant lagoons.
- For all pesticide use *in* or *near* surface water, including private ponds, stormwater ponds. or in areas when water is present most of the year.
- NOTE pesticide applications made to waters of the state require a permit from the Vermont Department of Environmental Conservation (DEC).

Category 6 Rights-of-way Pest Control

- The use of pesticides in the maintenance of Rights-of-Way associated with roadways, and utility powerlines, pipelines, railroads or similar areas.
- This category is for controlling pests to maintain the safety within a right-of-way. If you wish to treat pests harming the plants in the right-of-way (i.e. Emerald Ash Borer treatment of street trees), then obtain the appropriate category, likely 3A.
- For in place control of utility poles, obtain Category 7D.

Category 7 Industrial, Institutional, Structural, and Health Related Pest Control

Category 7A General Pest Control

- The use of a pesticide in, on or around food handling establishments (non-food areas); human dwellings; institutions, such as schools or hospitals; industrial establishments, including warehouses and grain elevators and any other structure and adjacent area, public or private, for the protection of stored, processed, or manufactured products.
- For pesticide use to control pests that could affect structures (houses, buildings, etc.), which can include wood destroying insects, treating carpenter ant mounds in a tree stump in the yard, baiting a rat burrow, etc.

Category 7B Vector Pest Control

- The use of a pesticide for the control of mosquitoes, ticks and other biting flies in an outdoor setting.
- If controlling for mosquitoes, ticks or biting flies in an outdoor setting, obtain this certification even if certified in another category that covers the site of application.
- Vehicle mounted, including aerial, vector pest control and mosquito larviciding may require a permit.

Category 7C Food Processing Pest Control

- The use of a pesticide to control pests in, on, or around food processing plants that may include, but are not limited to, bakeries, dairy product processing, canning and frozen food packing, confection manufacturing, and meat product processing plants.
- For pesticide use in food handling establishments in areas where food or food products are prepared, packaged, or held.
- This includes pesticide applications in restaurant kitchens, cafeteria kitchens, food hubs, or anywhere food products that are meant for public consumption are prepared, packaged, or held.
- For control in residential kitchens, obtain 7A.

Category 7D Wood and Fiber Product Pest Control

- The use of a pesticide for control of pests that degrade or prematurely destroy the service, life and usefulness of wood and fiber products.
- Includes wood treatments and those doing in place utility pole treatments.

Category 7E Cooling Towers and Biocides (non-potable water)

• The use of a pesticide to control pests in non-potable cooling waters and in water or slurries used in industrial processing, in, on or around human dwellings, commercial establishments, institutions, including, schools and hospitals, industrial establishments and any other structures and adjacent areas whether public or private.

Category 7F Disinfection and Antimicrobial Pest Control

- The use of a pesticide to treat mold or microbial growth in residential or commercial settings.
- Includes commercial disinfection services, mold remediation, disinfection/sanitation services

Category 8 Public Health Pest Control

- Applicators employed by the government for the use of a pesticide in public health programs for the management and control of pests for medical and public health importance.
- This category is for controlling pests, *other than* mosquitoes, ticks, or biting flies, as part of a public health program.

Category 9 Regulatory Pest Control

- The use of a pesticide by State, federal, and other governmental subdivisions for control of regulated pests.
- only for government employees.

Category 10 Demonstration and Research Pest Control

- This is a concurrent category and must be used in conjunction with valid certification in another category.
- The use of a pesticide for the purpose of demonstrating pest control to the public
- Supervising demonstrations
- Conducting field research with a pesticide.
- Included in this category are those individuals who demonstrate, or recommend a pesticide to applicators, dealers, or the public.
- Sales reps selling pesticides directly to the end user must obtain a pesticide dealer license.

Category 11 Aerial Pest Control

- This is a concurrent category and must be used in conjunction with valid certification in another category.
- An applicator who performs an aerial application for the control of pests.
- Includes Unmanned Aerial Vehicle (UAV (drone)) pesticide applications.

Category 12 Soil Fumigation

- This is a concurrent category and must be used in conjunction with valid certification in another category.
- The use of a pesticide to fumigate soil.

Category 13 Non-soil Fumigation

- This is a concurrent category and must be used in conjunction with valid certification in another category.
- The use of a pesticide to fumigate anything other than soil.

Category 14 Terrestrial Invasive Plants (Not yet available – see category 2)

- The use of pesticide in a wide variety of settings, including but not limited to forests, sensitive
 ecosystems, residential, fallow crop land, targeted at the control of terrestrial invasive plant
 species.
- Treatment of terrestrial invasive plants and ONLY terrestrial invasive plants in a wide variety of sites.

The Vermont Agency of Agriculture's Pesticide Certification and Training Section is happy to announce that they now offer **payment for NEW licenses and categories by credit card!**The online payment link will be emailed to new license holders and to those adding new categories from agr.pest@vermont.gov when a payment is due.

Introducing... Return to Menu

AGENCY OF AGRICULTURE, FOOD & MARKETS www.Agriculture.Vermont.gov

VAAFM's PHARM division would like to introduce:

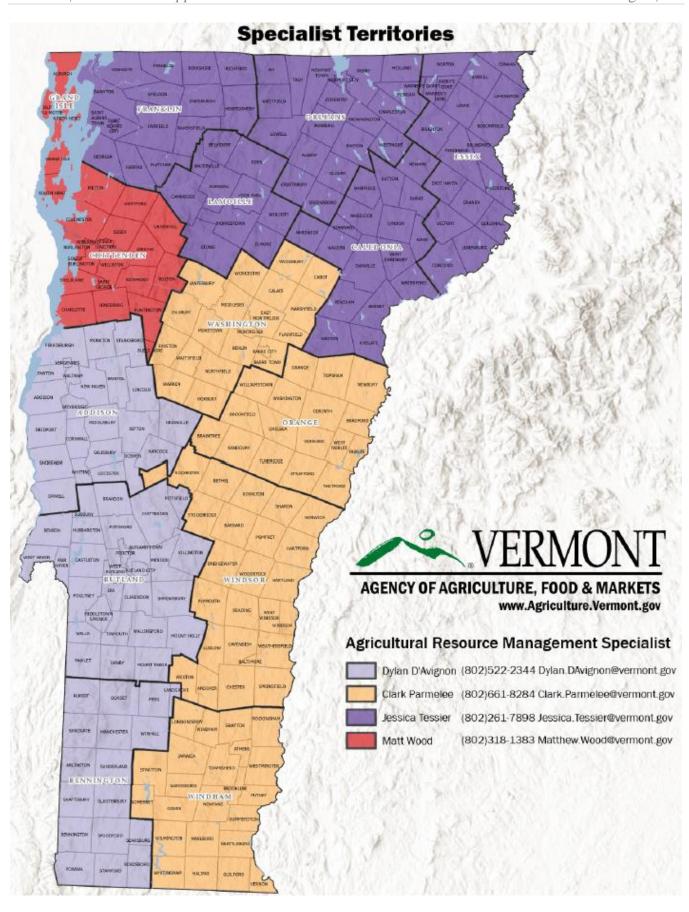
Pamela Bryer, Ph.D., to serve as an Agrichemical Toxicologist. She most recently worked for the State of Maine Department of Agriculture, Conservation, & Forestry as a pesticide toxicologist. At VAAFM, she will conduct risk assessment of pesticides and other agricultural chemicals, and of potential food or feed contaminants. She will contribute to the development of information and outreach materials to encourage safe and appropriate use of chemicals and materials commonly used in agriculture or against pests. Pam will also work with Water Quality and Food Safety and Consumer Protection divisions when there is a need for her expertise.

Dylan D'Avignon is our newest pesticide field agent, covering the southwest part of Vermont. Dylan was born and raised in Orwell, VT where he grew up hunting fishing and trapping. He went to Conservation camp for 3 years and learned all about Vermont and its ecosystem and ever since then he knew he wanted to do something involving Vermont and its environment. He was a Vector Technician for the VAAFM for 5 years doing mosquito and tick surveillance. Ducks and dogs are his favorite pets.

Helpful Contacts for Pesticide Applicators Return to Menu

Vermont Agency of Agriculture, Food & Markets

Certification & Training	(802) 828-1732	agr.pest@vermont.gov
Field Agent Southwest	(802) 522-2344	Dylan.Davignon@vermont.gov
Field Agent Southeast	(802) 661-8284	Clark.Parmelee@vermont.gov
Field Agent Northeast	(802) 261-7898	Jessica.Tessier@vermont.gov
Field Agent Northwest Golf Course Permit Coordinator	(802) 318-1383	Matthew.Wood@vermont.gov
Agrichemical Toxicologist	(802) 261-7952	Pam.Bryer@vermont.gov
Pollinator Health Specialist	(802) 272-6688	Brooke.Decker@vermont.gov
Entomologist	(802) 279-2212	Judy.Rosovsky@vermont.gov
Groundwater Monitoring Program	(802) 828-3473	Patti.Casey@vermont.gov
Agricultural Innovation Board	(802) 279-9395	Morgan.Griffith@vermont.gov
Deputy Director, Public Health and Agricultural Resource Management	(802) 661-8051	Stephanie.Smith@vermont.gov
Deputy Director, Public Health and Agricultural Resource Management	(802) 461-7160	David.Huber@vermont.gov
Director, Public Health and Agricultural Resource Management	(802) 522-6973	Steve.Dwinell@vermont.gov
University of Vermont Extension		
Pesticide Safety Education Program	(802) 656-0475	Sarah.Kingsley@uvm.edu
Plant Diagnostic Clinic Pesticide Safety Education Program	(802) 656-0493	Ann.Hazelrigg@uvm.edu
Agronomy	(802) 524-6501 x437	Heather.Darby@uvm.edu
Agronomy Outreach Specialist Pollinator Health	(802) 751-8307 x356	Laura.O.Johnson@uvm.edu
Vegetable & Berry	(802) 257-7967 x303	Vernon.Grubinger@uvm.edu
Tree Fruit & Viticulture Specialist	(802) 656-0972	Terence.Bradshaw@uvm.edu
Entomology	(802) 656-5440	Margaret.Skinner@uvm.edu



Home Study Quiz 1 – Oak Wilt, Neonicotinoids, Formulations Please keep answers brief; use additional paper as needed.

1.	What are the symptoms of Oak Wilt in foliage and sapwood?
2.	How does Oak Wilt spread between oak trees (two ways)?
3.	Which type of oak is the most vulnerable to Oak Wilt?
4.	What is a crucial step of Oak Wilt infected tree removal?
5.	What crops and plants does Act 182 prohibit all neonicotinoid use on?
6.	When does Act 182 prohibition on neonicotinoid treated article seed become effective?
7.	Active ingredient + Inert ingredient = (fill in the blank)
8.	How can you tell what kind of formulation you are working with?
9.	List three formulations that are diluted before use and what they look like before dilution.
10.	What risks should you protect against when applying dusts? emulsifiable concentrates? aerosols?

category.

(iii) Home Study Quiz 2 – License Renewal, Categories

Please keep answers brief; use additional paper as needed.

1.	How many recertification credits do you have? How many do you need to maintain your certification?
2.	When can you submit pesticide credit slips and newsletter quizzes?
3.	When does renewal season begin? How will you be notified that is time to renew?
4.	What documents should you have ready before starting the online renewal process for your certification type?
5.	Which type of applicators must be certified to apply pesticides aerially or apply fumigation?
6.	Which category is required to use a pesticide to control mosquitoes, ticks and other biting arthropods in an outdoor setting?
7.	Do you require Category 6 to treat pests harming plants in the right-of-way?
8.	What is required to make pesticide applications to waters of the state? Where do you get it?
9.	What food processing sites are not included in Category 7C? Which category do these sites require?

10. List the concurrent categories that must be used in conjunction with valid certification in another

Submit completed quizzes to receive one (1) recertification credit each.



The following information is REQUIRED for ALL submissions:

All boxes must be checked and fields completed for quiz to be accepted for credit

Name:				
Certificate #:		Check one: Commercial Private Non-commercial		
Street Address:				
City/State/Zip:				
Company/Farm:				
Email:				
By checking this box you agree that this information belongs to the person completing the quiz. quizzes may not be completed by a third party for credit				

Email Submission (Preferred Method) Directions:

- Enter quiz answers and required information in the pdf fillable fields.
- Save the completed pdf and email to agr.pest@vermont.gov
- Please include "QUIZ" in the email subject line
- It is not necessary to separate the quizzes from the rest of the newsletter

Postal Mail Submission Directions:

- Print out the quiz and submission page as needed.
- Enter quiz answers and required information.
- Mail completed quiz to: Vermont Agency of Agriculture, Food & Markets, attn: Bethany Creaser
 116 State Street, Montpelier, VT 05620-2901