

Licensing of Private Pesticide Applicators in Florida¹

Frederick M. Fishel²

This document explains the licensing and regulation of private persons who apply restricted use pesticides to agricultural commodities in Florida, as regulated by the Florida Pesticide Law (Chapter 487), and administered by the Florida Department of Consumer Services.

Private Applicator Agricultural Pest Control

All private persons who apply or supervise the application of restricted use pesticides to agricultural commodities must have a pesticide applicator license issued by the Bureau of Compliance Monitoring/Pesticide Certification Section. The Private Applicator category is regulated by the Florida Pesticide Law (Florida Statutes, Chapter 487).

Category Certification Standards

Applicators seeking a license in this category must demonstrate practical knowledge of:

- agricultural plant and animal production and associated pests;

- the chemical control measures that pertain to the prevention or control of such pests;
- the equipment or methodologies used to safely and effectively implement such measures;
- the potential for pesticide residues on such crops;
- preharvest application intervals;
- post-application re-entry interval restrictions;
- phytotoxicity;
- pesticide-related soil or water problems;
- potential for pesticide-induced environmental contamination;
- non-target injury and community problems that may result from the improper use of pesticides in agricultural production;
- animal injury associated with pesticide formulations, application techniques, animal age or stress, or extent of treatment;

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2. Frederick M. Fishel, associate professor, Agronomy Department, and Director, Pesticide Information Office; Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.

The use of trade names in this publication is solely for the purpose of providing specific information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication does not signify our approval to the exclusion of other products of suitable composition. Use pesticides safely. Read and follow directions on the manufacturer's label.

- equipment calibration;
- proper design, use, and maintenance of anti-siphon devices and check valves to prevent contamination of water supplies;
- proper interpretation of pesticide label or labeling requirements for products registered for chemigation and appropriate use of personal protective equipment associated with this type of application;
- soil-inhabiting pests and pests of stored raw agricultural commodities and the fumigant pesticides that may be used to control such pests;
- the basics of fumigant pesticide toxicology;
- application methodologies for applying soil and commodity fumigants;
- techniques and procedures for monitoring the concentration of a fumigant pesticide in soil, storage facilities, air, or water;
- use and maintenance of personal protective equipment and clothing; and
- specific safety procedures for handling pressurized chemicals and for avoiding non-target exposure to a fumigant pesticide.

License Cost

Certified private applicators pay a fee of \$100 for a four-year license.

Examinations

Persons must successfully complete two examinations before they can apply to the Department for a license. These examinations are a Core examination and the Private Applicator Agriculture category examination. The Core examination may be taken at any University of Florida IFAS County Extension Office. The Private Applicator Agriculture category examination may be taken at a University of Florida IFAS County Extension Office that offers category examinations. No special qualifications must be met to take the

examination. There is no fee to take the examinations.

Study Materials

Manuals and study materials for Core and Private Applicator Agriculture applicators who will be taking exams may be obtained from the UF/IFAS Extension Bookstore by calling 1-800-226-1764 or on-line at <http://ifasbooks.ifas.ufl.edu/>. The content of the Core exam is based upon the manual, *Applying Pesticides Correctly* (Figure 1). The content of the Private Applicator Agriculture exam is based upon the manual, *Private Applicator Agricultural Pest Control* (Figure 2). Sample labels may be obtained from suppliers of pesticide products or on-line at Crop Data Management Systems by going to <http://www.cdms.net/manuf/manuf.asp>.

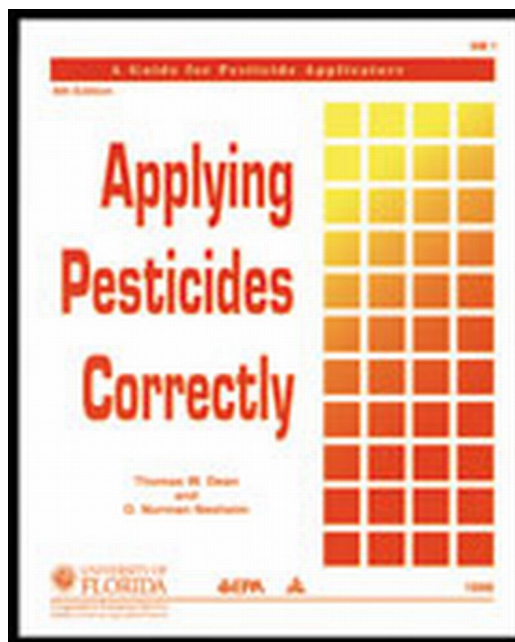


Figure 1. SM1: Applying Pesticides Correctly

Recertification

Applicators must recertify every four years. To recertify, applicators may take the examinations again or attend training and obtain 4 continuing education units (CEUs) approved for the Private Applicator Agriculture category and 4 CEUs approved for the Core category. Core CEUs can't be used to meet the required Private Applicator Agriculture CEUs. No substitutions of other types of CEUs are allowed.

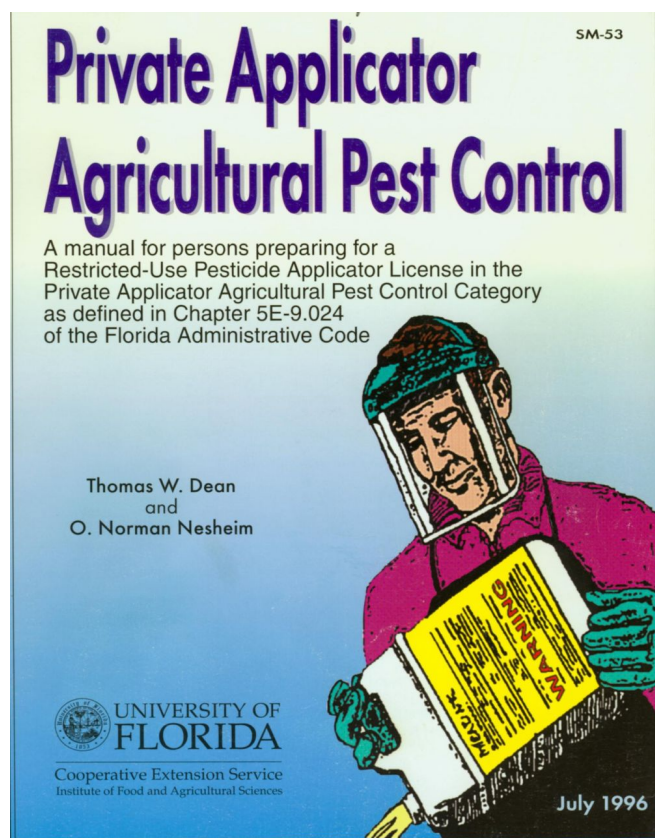


Figure 2. SM 53: Private Applicator Agricultural Pest Control (CORE).

Opportunities to earn CEUs may be found at <http://www.flaes.org/>.

Restricted Use Pesticides Applied in the Private Category

Table 1 lists Florida's restricted use pesticides that are applied in the Private Applicator Agriculture category and the reason for the restricted classification. A complete listing of all restricted use pesticides in Florida may be viewed at: <http://edis.ifas.ufl.edu/PI073>.

Table 1. Restricted use pesticides.

Pesticide common name	Specific formulations	Specific uses	Criteria for RUP
Acrolein	As sole active ingredient	All uses	Human inhalation hazard, adverse effects on avian and aquatic organisms
Aldicarb	As sole active ingredient and in combination with other actives; all granular formulations	All uses	Accident history

Additional Information

Fishel, F.M. 2005. Restricted use pesticides. UF/IFAS EDIS Fact Sheet PI-36, <http://edis.ifas.ufl.edu/PI073>.

Florida Department of Agriculture and Consumer Services Bureau of Compliance Monitoring, Pesticide Licensing Section, 3125 Conner Drive, Bldg. 8, L-29, Tallahassee, FL 32399-1650, Phone: 850-488-3314, <http://www.flaes.org/complimonitoring/index.html> (accessed July 22, 2010).

University of Florida/IFAS Pesticide Information Office, P.O. Box 110710, Bldg. 164, Gainesville, FL 32611-0710, Phone: 352-392-4721, <http://pested.ifas.ufl.edu/>. (accessed July 22, 2010).

Table 1. Restricted use pesticides.

Pesticide common name	Specific formulations	Specific uses	Criteria for RUP
Aluminum phosphide	As sole active ingredient	All uses	Human inhalation hazard
Amitraz	All formulations	Pears	Possible oncogenicity
Arsenic acid	All formulations except brush-on	All desiccant uses	Oncogenicity, mutagenicity and repro/fetotoxicity
Atrazine	All manufacturing and end use	Agricultural and industrial uses	Ground water contamination potential; worker exposure concerns
Avermectin	Emulsifiable concentrate	Cotton and citrus	Toxic to fish, mammals and aquatic organisms
Azinphos-methyl	All liquids with greater than 13.5% concentration; others on a case-by-case basis	All uses	Human inhalation hazard, acute toxicity, hazard to avian, aquatic and mammalian species
Bifenthrin	Emulsifiable concentrate	Cotton	Toxic to fish and aquatic organisms
Carbofuran	All formulations except pellets and tablets	All uses	Acute inhalation toxicity; avian toxicity (granular)
Chlorophacinone	Tracking powder, dust and ready to use 0.2% (EPA Reg. Nos. 7173-113 and 7173-172)	Inside buildings	Human hazard, potential for food contamination, possible inhalation hazard
Chloropicrin	All formulations greater than 2% and all formulations (rodent control)	All uses (greater than 2% including rodent control)	Acute inhalation toxicity, hazard to non-target organisms
Chlorpyrifos	Emulsifiable concentrate	Agricultural uses	Avian and aquatic toxicity
Clofentezine	All formulations	All uses	Additional data required to remove the restriction
Coumaphos	Flowable concentrate	Livestock uses	Acute oral toxicity hazards
Cube resins other than rotenone	Emulsifiable concentrate	Small fruits, currants, certain berries	Chronic eye and inhalation effects
Cyfluthrin	25% Emulsifiable concentrate	Agricultural	Acute toxicity to applicators, fish and other aquatic organisms
Cyhalothrin	Emulsifiable concentrate	Cotton	Environmental data requirements
Cypermethrin	All formulations	All agricultural crops	Oncogenicity, hazard to non-target organisms
Deltamethrin	Emulsifiable concentrate	Cotton	High toxicity to aquatic organisms
Diazinon	Granular, emulsifiable concentrate and wettable powders	Small fruits and certain berries	Avian and aquatic toxicity
Dichlobenil	2,6-dichlorobenzonitrile	Terrestrial	Conditional
Dichloropropene	All formulations (94% liquid concentrate is the only formulation)	All uses	Probable human carcinogen, oncogenic, acutely toxic by oral and inhalation routes

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Pesticide common name	Specific formulations	Specific uses	Criteria for RUP
Diclofop methyl	All formulations	All uses	Oncogenicity
Dicrotophos	All liquid formulations 8% and greater	All uses	Acute dermal toxicity, residue effects on avian species
Diflubenzuron	Wettable powders	All uses	Hazard to wildlife
Disulfoton	All ECs 65% and greater, all ECs and concentrate solutions 21% and greater with fensulfothion 43% and greater, all ECs 32% and greater in combination with 32% fensulfothion and greater	All uses, commercial seed treatment (non-aqueous solution 95% and greater).	Acute dermal toxicity, inhalation hazard
Emamectin benzoate	4-epimethylamino-4-deoxykavermectin BLA and B1b benzoates	Insecticide, miticide	Toxicity to fish
Esfenvalerate	66% emulsible concentrate	Insecticide	Toxicity to fish and aquatic organisms
Ethoprop	Emulsifiable concentrates 40% and greater (aquatic uses); all uses (granular and fertilizer formulations)	Aquatic uses (ECs 40% or greater); all uses (granular and fertilizer formulations)	Acute dermal toxicity
Fenamiphos	Emulsifiable concentrates 35% and greater	All uses	Acute dermal toxicity, avian acute oral toxicity, acute inhalation toxicity
Fenbutatin-oxide	Wettable powder	Grapes	Very high toxicity to aquatic organisms
Fenpropathrin	2.4 emulsifiable concentrate spray	Agricultural uses	Environmental concerns: toxic to fish and aquatic organisms
Fipronil	All formulations	Insecticide/miticide	Conditional amended
Lambda-cyhalothrin	All formulations	All uses	Toxicity to fish and aquatic invertebrates
Magnesium phosphide	All formulations	All uses	Inhalation hazard
Methamidophos	Liquid formulations 40% and greater, dust formulations 2.5% and greater	All uses	Acute dermal toxicity, residue effects on avian species
Methidathion	All formulations	All uses except nursery stock, safflower and sunflower	Residue effects on avian species
Methiocarb	All formulations	Outdoor commercial and agricultural uses	Possible hazard to avian, fish and other aquatic organisms

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Pesticide common name	Specific formulations	Specific uses	Criteria for RUP
Methomyl	As sole active ingredient in 1 to 2.5% baits (except 1% fly bait), all concentrate solution formulations and 90% wettable powder formulations (not in water soluble bags)	Nondomestic outdoor and all other registered uses (agricultural crops, ornamentals and turf)	Residue effects on mammalian species, other hazards - accident history
Methyl bromide	All formulations	All uses	Acute toxicity and accident history
Methyl parathion	All formulations	All uses	Residue effects on mammalian and avian species, hazard to bees, acute dermal toxicity
Niclosamide	All wettable powders 70% and greater	All uses	Acute inhalation toxicity, effects on aquatic organisms
Nicotine	Liquid and dry formulations 14% and greater (greenhouse); all formulations (cranberries)	Greenhouse applications, all applications to cranberries	Acute inhalation toxicity, effects on aquatic organisms
Oxamyl	Liquid formulations, granular on a case-by-case basis	All uses	Acute oral toxicity, acute inhalation toxicity, avian oral toxicity
Oxydemeton methyl	All products	All uses	Reproductive effects
Paraquat	All formulations and concentrations except certain mixtures - see label	All uses	Human toxicological data, other hazards - use and accident history
Permethrin	All formulations	Agricultural crop uses	Highly toxic to aquatic organisms, oncogenicity
Phorate	Liquid formulations 65% and greater (all uses); all granular formulations (rice)	All uses (65% and greater); granular formulations (rice)	Acute oral and dermal toxicity for granulars, residue effects on avian and mammalian species (foliar application of liquid formulation only), effects on aquatic organisms
Piperonyl butoxide	Emulsifiable concentrate	Small fruits, certain berries, currants	Not specified
Profenofos	Emulsifiable concentrate 59.4%, EPA Reg. Nos. 100-599 and 100-669	Cotton	Corrosive to eyes
Pronamide	All 50% wettable powders	All uses	Oncogenicity
Propanoic acid	Emulsifiable concentrate	Wheat, rice, edible chrysanthemum, cotton, clover, alfalfa, wheat-grass, sideoats grama, little bluestem	Not specified
Pyrethrins	Emulsifiable concentrate	No uses listed	Chronic eye effects

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Pesticide common name	Specific formulations	Specific uses	Criteria for RUP
Rotenone	2.5/5.0 EC, 5.0% +20.0% wettable powder	Fish toxicant	Chronic eye and inhalation effects
Simazine	Emulsifiable concentrate	Grapes and certain berries	Not specified
Strychnine	Dry baits, pellets and powder formulations - see specific labels	Formulations greater than 0.5%: all uses. All formulations: all uses calling for burrow builders. Formulations less than 0.5%: all uses except below-ground hand application.	Acute oral toxicity hazard to non-target avian species; use and accident history
Sulfuric acid	Solution - ready to use	Potato vine desiccant	Extremely corrosive - acute toxicity to humans
Tefluthrin	Granular formulations	Corn grown for seed	Environmental concerns Toxicity to fish and aquatic organisms
Terbufos	Granular formulations 15% and greater	All uses	Residue effects on avian species; acute oral and dermal toxicity and risks to aquatic organisms and other wildlife from runoff
Tralomethrin	All formulations	All agricultural crop uses	Toxicity to aquatic organisms
Triisopropranolamine	Emulsifiable concentrate	All uses	Hazard to non-target organisms, specifically plants both crop and noncrop
Triphenyltin hydroxide	All formulations	All uses	Possible mutagenic effects
Zinc phosphide	All dry formulations 60% and greater; all bait formulations; all dry formulations 10% and greater		Hazard to non-target organisms, acute oral toxicity, acute inhalation toxicity