

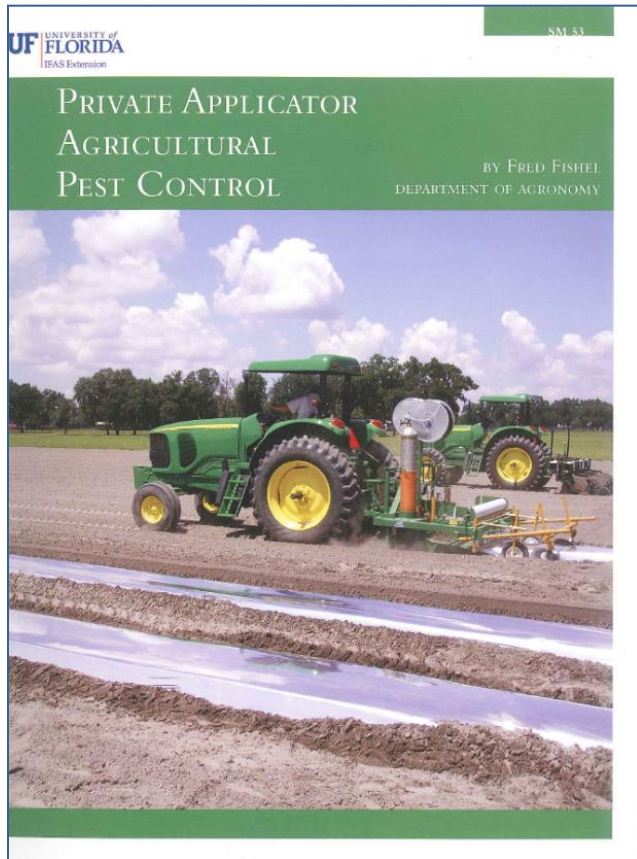
Pesticide Safety

Licensing of Private Applicators in Florida and Understanding the (Pesticide) Label



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Licensing of Private Applicators in Florida



- Private Applicator Agricultural Pest Control
- Licensing and Regulation
 - FL Pesticide Law (Chapter 487)
 - FL Dept. of Ag and Consumer Services
- Licenses Type
- Private Applicator
 - An individual who has reached the age of majority and
 - Licensed to use or supervise the use of restricted use pesticides (RUP) to produce an agricultural commodity on property they own or rent, or on property owned or rented by their employer

Category, Certification Standards, and License Cost



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

- 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;
- Others as listed in EDIS Pub. #PI-149, **Licensing of Private Pesticide Applicators in Florida.**

<http://edis.ifas.ufl.edu/pi186>

- Certified private applicators pay a fee of \$100 for a 4-year license.

Examinations, Study Materials, and Recertification



- Must successfully complete two exams before you can apply for a license.
 - General Standards/Core (SM 1)
 - Private Applicator Agriculture (SM 53)
- Manuals and study materials may be obtained from the UF/IFAS Extension Bookstore by
 - calling 1-800-226-1764 or
 - on-line at <http://ifasbooks.ifas.ufl.edu/>
- Recertify every 4 yrs
 - By re-taking the exams or
 - Attend training and obtain 4 continuing education units (CEUs) approved for the Private Applicator and 4 CEUs for the Core

Restricted Use Pesticides Applied in the Private Category

RUP statement example:

Restricted Use Pesticide

Due to high acute inhalation toxicity and carcinogenicity.
For retail sale to and use only by Certified Applicators or
persons under their direct supervision and only for those
uses covered by the Certified Applicator's certification.

RUP statement example:

RESTRICTED USE PESTICIDE

Due to Toxicity to Fish and Aquatic Organisms

For retail sale to and use only by Certified Applicators, or
persons under their direct supervision, and only for those
uses covered by the Certified Applicator's certification.

- RUP are for retail sale to, and use by, only certified applicators or persons under their direct supervision.
- When a pesticide is classified as restricted, the label will state “Restricted Use Pesticide” on the front panel of the label.
- Below the RUP heading may be a statement describing the reason for the restricted classification.

A complete listing of all restricted use pesticides in Florida and the reason for the restricted classification may be viewed at: <http://edis.ifas.ufl.edu/PI073>.

Understanding the Label

No pesticide may be sold in the U.S. until the EPA has received the manufacturer's application for registration and determined that the use of the product will not present an unreasonable risk to humans or the environment.

It is a very expensive process.

As part of the registration process, EPA has certain labeling information requirements and must approve all language that the manufacturer proposes to include in the product labeling.

- Read the Label. It's the Law.
- When used properly and according to their labels, pesticides can...
 - control, destroy, or repel pests such as weeds, insects, rodents, birds, fungi, bacteria
 - other organisms that cause loss or damage, or may be harmful to people's health.
- Pesticides handled in a careless manner can endanger the health of the applicator, other people, animals, plants, or the environment.

Understanding the Label

The pesticide label is legal information printed on or attached to the container.

Labeling is supplemental information accompanying the product that the label refers to and makes it legally binding.

The label should be read:

1. Before purchasing the pesticide
2. Before mixing the pesticide product
3. Before applying it to ensure proper use
4. Before storing the excess pesticide or disposing of empty containers.

- Information contained on most labels can be divided into 4 major categories:

- Safety
- Environmental
- Product
- Use



- We will review each of these categories...

Safety Information



Signal word	Category	Oral lethal dose ¹
DANGER, POISON (skull and crossbones)	I Highly toxic	A few drops to a teaspoonful
WARNING	II Moderately toxic	Over a teaspoonful to one ounce
CAUTION	III Slightly toxic	Over one ounce to one pint
CAUTION	IV Relatively non-toxic	Over one pint to one pound

¹Based on a 150-pound person.

- Child hazard warning on front panel of the label...
“KEEP OUT OF REACH OF CHILDREN”
 - Signal word also on front panel to indicate how acutely toxic the pesticide is to humans by ingestion.
 - Statement of practical treatment especially on all highly toxic pesticides with the signal word **DANGER**
- Hazards to humans and domestic animals includes precautionary statements indicating: specific hazards, routes of exposure and precautions to avoid human and animal injury.
 - Personal protective equipment contains instructions on type of clothing to be worn during the handling and mixing processes.

Environmental Information



- Environmental Hazards section of the label is found under the heading...
“Precautionary Statements”
- It will also have its own heading,
“Environmental Hazards”
 - It explain the nature of potential hazard
 - Precautionary needed to prevent injury or damage to nontraget organisms and the environment
 - Information on whether the product poses a threat to groundwater
 - Endangered species concerns
 - Warnings of potential toxicity

Product Information

A **general use pesticide** is one that will not harm the applicator or the environment to an unreasonable degree.

A **restricted use pesticide (RUP)** is a highly hazardous pesticide that can only be purchased, possessed or used by a person who is a certified applicator or under the supervision of a certified applicator.

Active ingredient (AI): The substance in a pesticide product that is intended to kill, repel, or otherwise control a target pest.

Inert ingredient: Any substance other than an active ingredient that is intentionally added to a pesticide product, such as solvents, stabilizers, spreaders or stickers, preservatives, surfactants, etc.

- Use classification of the pesticide for either general or restricted use.
- Brand (trade) name the registered or trade name given to a pesticide by its manufacturer or formulator.
- Ingredient statement is normally found on the front panel of the label and identifies the name and percentage by weight of each active ingredient (AI).

ACTIVE INGREDIENTS:	
2,4-Dichlorophenoxyacetic acid*	13.8%
2,4-Dichlorophenoxyacetic acid, butoxyethyl ester*	24.5%
OTHER INGREDIENTS:	61.7%
TOTAL:	100.0%
*Total 2,4-Dichlorophenoxyacetic acid equivalent 30.8% by weight or 2.8 lbs./gal. Isomer specific by AOAC method No. 978.05	

Product Information continued

Establishment number: A number assigned to registered pesticides by the EPA which indicates the location of the manufacturing or formulation facilities of that product.

Formulation: a mixture of AI combined during manufacture with inert ingredients



- Net Content or how much it contains
- EPA registration number EPA product ID
- EPA establishment number
- Name and address of manufacturer
- Formulation
- Physical or chemical hazards section tell of special fire, explosion, or chemical hazards that the product may pose.
- **“Do not use or store near heat or open flame”**
- Limited warranty and disclaimer

Product Information continued

The **direction for use** section provides instructions such as...

- Use of the product
- Pests treated
- Application sites (crops, areas to be treated)
- Application times
- Application equipment to be used
- Agricultural use requirements
- Restricted-entry intervals

- Direction for use is instructions indicating the proper use of the pesticide product, including mixing and application.
- Storage and Disposal section identifies precautions necessary for storing and disposing any unused pesticide and the pesticide container.
 - Do not contaminate water, food or feed by storage or disposal.
 - Triple rinse empty containers (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Thank-you



References and Credits

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- Fishel, F.M. 2005. Restricted use pesticides. UF/IFAS EDIS Fact Sheet PI-36, <http://edis.ifas.ufl.edu/PI073> (accessed February 1, 2011).
- Fishel, F. (Editor), 2008. Private Applicator Agricultural Pest Control, 2nd Edition, SM 53, Chapters I and VIII.
- Saavedra, M. et.al. (Editors and Reviewers), 2008. National Worker Safety Trainer Handbook: Pesticide Safety for Agricultural Workers, Chapter I, National Association of State Departments of Agriculture Foundation, 1156 15th Street, NW, Suite 1020, Washington, DC 20005, www.nasda.org

