On a national level, pesticide-applicator certification programs have been developed to protect public health and prevent adverse effects to the environment from improper pesticide use. These federal and state rules regulate labeling, sale and distribution, storage, transportation, use, application and disposal of pesticides. The U.S. Congress enacted the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in 1947. This law has been subsequently amended several times. The enabling legislation is administered on the national level by the U.S. Environmental Protection Agency (EPA).

Under FIFRA, EPA is responsible for registering or authorizing pesticide products for sale and use within the United States. This registration process is based upon detailed assessments of the potential effects that a proposed product may have on human health and the environment, even when used according to label directions. These label directions are enforceable under both state and federal laws. Using a pesticide in any way not recommended on the label may subject the user to civil and/or criminal penalties.

A pesticide is classified as restricted-use if it might result in unreasonable adverse effects on human health and/or the environment, unless applied by trained persons in accordance with label directions. In a few cases, the active ingredient (AI) may be restricted-use if the pesticide contains a high-percent AI, whereas the same chemical with a lower percent AI may be classified as general-use as it poses a lower potential risk as compared to the pesticide with the higher AI.

PESTICIDE CLASSIFICATIONS

Under FIFRA, all pesticides are classified according to their potential hazards based upon the way they are used in agricultural situations. Pesticides are designated as “unclassified” or “restricted use.” Unclassified pesticides are also called “general-use” pesticides. General-use pesticides have lower toxicity than restricted-use pesticides, thus posing less potential harm to humans and/or the environment. General-use pesticides can be purchased and used by agricultural operations and the general public without special permits or restrictions.

A pesticide is classified as restricted-use if it might result in unreasonable adverse effects on human health and/or the environment, unless applied by trained persons in accordance with label directions. In a few cases, the active ingredient (AI) may be restricted-use if the pesticide contains a high-percent AI, whereas the same chemical with a lower percent AI may be classified as general-use as it poses a lower potential risk as compared to the pesticide with the higher AI.
use or supervise the use of RUPs for the purpose of producing an agricultural commodity (plants or animals which are sold rather than for personal use) on his or her own property or property that he/she rents or leases. Private applicators may also be employees of an operation that owns, rents or leases land for the purpose of producing an agricultural commodity.

A commercial applicator is an individual who uses or supervises the use of any RUP for any purpose on any property, except for those provided under the private certification definition. Therefore, most contract spraying companies or for-hire contractors would be required to have their pesticide supervisor licensed as a commercial applicator in each category or categories for the crops in which they will be applying RUPs.

Under governmental regulations, federal law requires individuals who apply RUPs to be certified themselves or work under the direct supervision of a certified applicator. This federal law contains specific standards to ensure competency related to the safe use and application of pesticides for all states. In Florida, licenses issued by FDACS meet this federal regulation. State regulations may impose additional certification and license requirements for various pesticide applications and license fees, and specify the procedures required to obtain a license as well as those for recertification or renewal.

In Florida, UF/IFAS coordinates the pesticide-applicator certification and training programs related to the pesticide license process.

Chapter 487 of the Florida Statutes is also referred to as the Florida Pesticide Law. This law regulates both general and restricted-use pesticides. The law establishes three classes of individuals who apply RUPs. The law requires licenses only for those individuals who apply or supervise the use of RUPs. The three classes are: private, public and commercial applicators. All three applicator classifications apply pesticide by ground for the production of agricultural commodities and are prohibited from making aerial applications unless properly certified and licensed.

A private applicator, as stated above, is someone who applies RUPs on property that is owned or rented by the applicator or the applicator’s employer. In the case where ornamental and turf plants are produced in an agricultural setting, the private license is sufficient. On the other hand, a private license is not appropriate for individuals who maintain ornamentals or turf at golf courses, residential properties or in commercial landscape situations. Examples of private applicators of RUPs include farmers, ranchers and nursery growers.

A public applicator is someone employed by a federal, state, county, or city government or other local agency or governmental entity, such as a state university, who uses RUPs as part of his/her job duties. When an applicator holds a public RUP license, the license is valid only for work performed for the governmental agency during the applicator’s public employment tasks.

A commercial applicator is someone who applies RUPs on any agricultural area for purposes...
other than provided under the two license types discussed previously. Commercial applicators apply RUPs for someone else and are not the owners or operators of the agricultural operations where RUPs are being applied. Examples of commercial applicators of RUPs include for-hire contractors of pesticide applications such as citrus caretakers. Note: Under Chapter 487, there are categories such as aquatics, right-of-way, ornamental & turf, and natural areas weed management, which are not directly related to the production of agricultural commodities. They are included under this state statute because applications are not around buildings where people live and work.

An applicator can only make applications of RUPs in the categories for which he/she has been licensed or is under the direct supervision of a person that holds a license in the appropriate categories for the application. For example, a commercial agricultural tree crop license holder may not apply RUPs in row crop or turf operations, since neither are tree crops.

A section under Chapter 487 limits how, when and where specific pesticides can be used in Florida. Specific regulations governing pesticides include limitations on bromacil (herbicide), methyl bromide (soil fumigant), organotin antifouling paints and organo-auxin herbicides. Additional rules also detail how RUPs are stored, the disposal of certain kinds of waste pesticide materials, examinations to obtain a license, licensing fees, license renewal, direct supervision of unlicensed workers and record keeping.

TRAINING MATERIALS AND TESTING

Training materials for all agricultural categories are available from the University of Florida either online at www.ifasbooks.com or by calling 800-226-1764.

RUP license testing is available at all county Extension Service offices in Florida for general standards (core) and private applicator agricultural pest control. Selected county offices will also offer training for public and commercial applicators in categories appropriate to their clientele. For training and testing opportunities in Florida, check with your local Extension Service office.

Under Chapter 487, applicants for licenses must demonstrate knowledge and competency in the use of pesticides. All applicants must be at least 18 years of age and must pass at least two examinations for initial certification before obtaining a license. All examinations are given in English and cannot be translated into other languages orally or in writing in any form. All exams are multiple choice and given closed book without notes. Math formulas are provided for many of the commercial categories. Applicants must answer at least 70 percent of the questions correctly to receive a license. Fees are $100 for private and public licenses, and $250 for commercial licenses. All licenses are valid for four years.

To obtain a private license, applicants must pass both the general standards (core) and the private applicator agricultural pest control exam. Public and commercial applicants are required to pass the general standards/core exam and an examination for each category of intended use. Public and commercial applicants may be licensed in as many categories as they wish. A total of 15 category exams include but are not limited to pest control in agricultural animal, row crop, tree crop, aquatic, demonstration & research, forest, natural areas weed

<table>
<thead>
<tr>
<th>Commercial and Public Categories</th>
<th>Recertification Requirements</th>
<th>Total CEUs Required to Renew a Restricted-Use Pesticide License</th>
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<tbody>
<tr>
<td></td>
<td>Category CEUs</td>
<td>Core CEUs</td>
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<tr>
<td>Aerial Application</td>
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<tr>
<td>Agricultural Animal</td>
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<tr>
<td>Agricultural Row Crop</td>
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<td>Agricultural Tree Crop</td>
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<td>Aquatic Pest Control</td>
<td>16</td>
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<td>Chlorine Gas Infusion</td>
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<td>Demonstration &amp; Research</td>
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<td>Forest Pest Control</td>
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<td>Natural Areas Weed Management</td>
<td>16</td>
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<td>Organotin Antifouling Paint</td>
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<td>Ornamental &amp; Turf</td>
<td>12</td>
<td>4</td>
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<td>Raw Agricultural Commodity Fumigation</td>
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<tr>
<td>Regulatory Inspection &amp; Sampling</td>
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<td>4</td>
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<tr>
<td>Regulatory Pest Control</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Right-of-Way Pest Control</td>
<td>8</td>
<td>4</td>
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<tr>
<td>Seed Treatment</td>
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<tr>
<td>Sewer Root Control</td>
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</tr>
<tr>
<td>Soil &amp; Greenhouse Fumigation</td>
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<td>4</td>
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<tr>
<td>Wood Treatment</td>
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management and private applicator.
Once the license has been obtained, the applicant must recertify every four years to maintain his or her license. Recertification is to ensure demonstrated continued competency in the proper use of pesticides. Individuals can recertify by retaking the certification exams or accumulating the specified number of continuing education units (CEUs) during the licensing period to renew their license.

When renewing a private applicator RUP license, at least eight CEUs must be earned over the 4-year license period, of which at least four CEUs must be in general standards (core) and at least four CEUs in the private category. Commercial applicators must earn at least four CEUs in general standards and between four and 16 additional CEUs in each category for which they are licensed. For example, a commercial license holder certified in agricultural tree crop must earn at least eight CEUs in the ag tree crop category in addition to the four CEUs in the general standards area. Table 1 (page 44) lists the specific CEU requirements for each type of commercial RUP license.

When applying any pesticide, it is important to read and follow the pesticide label because the label is the law.

Sources of information for this document included: Pesticide Applicator Certification and Licensing in Florida (Florida Department of Agriculture and Consumer Services) and Applying Pesticide Correctly, SM1 (UF/IFAS Extension).

Stephen H. Futch is an Extension agent at the Citrus Research and Education Center in Lake Alfred.

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**‘Pesticide law and license renewal’ test**

To receive one core continuing education unit (CEU), read “Pesticide law and license renewal” in this issue of Citrus Industry magazine. Answer the 20 questions on the magazine’s website (www.citrusindustry.net) or mail the answers and application information to the address at the bottom of the page. The article and test set are valid for up to one year from the publication date. After one year, this test will no longer grant a CEU.

1. The Food, Insecticide, Fungicide, and Rodenticide Act (FIFRA) is legislation authorized by the U.S. Congress. T F
2. The U.S. Department of Agriculture administers FIFRA on a national level in the United States. T F
3. Using a pesticide in any way not recommended on the label may subject the user to civil and/or criminal penalties. T F
4. States may have pesticide labels that are more liberal in use recommendation than those of FIFRA. T F
5. The Florida Department of Agriculture and Consumer Services is the designated agency to enforce FIFRA in Florida. T F
6. Under FIFRA, all pesticides are classified according to their potential hazards based upon the way they are used in agricultural situations. T F
7. The terms “unclassified” and “general-use” pesticide are commonly used to refer to the same classification of pesticides. T F
8. Restricted-use pesticides (RUPs) have lower toxicity than general-use pesticides. T F
9. Both general-use and restricted-use pesticides can be purchased and used by agricultural operations without special permits or restrictions. T F
10. RUPs can be used by unlicensed applicators as long as they are under the direct supervision of a properly licensed applicator. T F
11. State regulations may impose additional certification and license requirements for various pesticide applications above what is required under federal regulations. T F
12. Chapter 487 is also referred to as the Florida Pesticide Law. T F
13. Florida law establishes two applicator classes of individuals that apply RUPs, private and commercial. T F
14. A commercial applicator is a licensed applicator who applies RUPs on any agricultural area on property owned or rented by the license holder. T F
15. A private applicator may legally apply RUPs to ornamentals and turf plants in all situations, including farms and golf courses. T F
16. By holding a private applicator license, citrus caretakers can legally apply RUPs to property they manage. T F
17. Under Florida law, all applicants must be at least 21 years of age prior to obtaining an RUP license. T F
18. To obtain a private license, applicants must pass the general standards and the private applicator agricultural pest control exam. T F
19. Once a license is obtained, the applicant can renew his or her license by retaking the exams or by obtaining the proper number of continuing education units as required by the license category. T F
20. When applying any pesticide, it is important to read and follow the pesticide label. T F

**Please circle the number below to rate this article and test:**

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<th>9</th>
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<th>Very useful</th>
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**Pesticide Applicator CEU Form**

First Name: ____________________________  Last Name: ____________________________
E-mail: ________________________________
Pesticide License Number: ________________________________
Address: ____________________________________________
City: ____________________________  Street: ____________  Zip: ____________
Phone: ________________________________

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Please mail the answer sheet or a copy of the form to:

Steve Futch
Citrus Research and Education Center
700 Experiment Station Road
Lake Alfred, FL 33850

If you have questions regarding this form, test or CEUs, e-mail Steve Futch at shf@ufl.edu or call 863-956-8644. Please allow two weeks to process your CEU request.