



# Licensing of Soil and Greenhouse Fumigation Applicators in Florida<sup>1</sup>

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Frederick M. Fishel<sup>2</sup>

*This document explains the law that governs those who make restricted use soil and greenhouse fumigation applications to agricultural crops/soils in Florida.*

## Background

The licensing and regulation of persons who apply restricted use pesticides to agricultural crops in Florida is controlled by a law administered by the Florida Department of Agriculture and Consumer Services. The law is the Florida Pesticide Law (Chapter 487).

## Soil and Greenhouse Fumigation Pest Control (Chapter 487)

All persons who apply or supervise the application of restricted use soil and greenhouse fumigants must have a pesticide applicator license issued by the Bureau of Compliance Monitoring/Pesticide Certification Section. The Soil and Greenhouse Fumigation Pest Control category is regulated by the Florida Pesticide Law. This category

is applicable to individuals using or supervising the use of any restricted use fumigant pesticide injected or applied to field soils; to the soils of seed or transplant beds or containerized plants; to potting soil; to lawns, turf, and ornamentals not associated with structures; or within enclosed agricultural structures such as greenhouses where agricultural production is in progress. This category is valid for licensure of public and commercial applicators.

## Category Certification Standards

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

- soil-inhabiting pests and pests of agricultural crops grown inside structures such as greenhouses;
- the fumigant pesticides that may be used to control such pests;
- the equipment or methodologies required to safely implement fumigation measures to control such pests;

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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.**

- the basics of fumigant pesticide toxicology;
- application methodologies for applying soil and greenhouse fumigants;
- techniques and procedures for monitoring the concentration of a fumigant pesticide in soil, 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 classification

Certified soil and greenhouse fumigation applicators may be licensed as either public applicators or commercial applicators. These are the major differences:

- **A public applicator** is a licensed applicator employed by a public or governmental agency. The license is only valid when performing work for the public or governmental agency. The public applicator fee for a four-year license is \$60.
- **A commercial applicator** is a licensed applicator who is licensed to apply restricted-use pesticides on any property provided they are certified in the category for which the applications are made. A commercial applicator is usually a contract applicator. The commercial applicator fee for a four-year license is \$160.

### Examinations

Persons must successfully complete two examinations before they can apply to the Department for a license. These examinations are a Core examination and a Soil and Greenhouse Fumigation category examination. The Core examination may be taken at any University of Florida IFAS County Extension Office. The Soil and Greenhouse Fumigation 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 Soil and Greenhouse Fumigation 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://www.ifasbooks.ufl.edu/merchant2/>. The content of the Core exam is based upon the manual, *Applying Pesticides Correctly* (Figure 1). The content of the Soil and Greenhouse Fumigation exam is based upon the manual, *Soil Fumigation* (Figure 2). Sample labels may be obtained from suppliers of pesticide products.

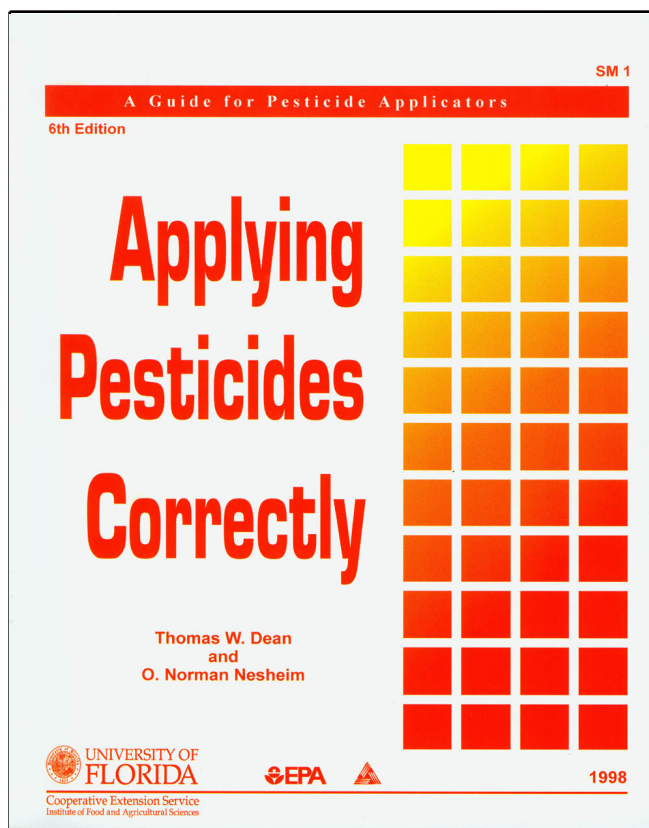
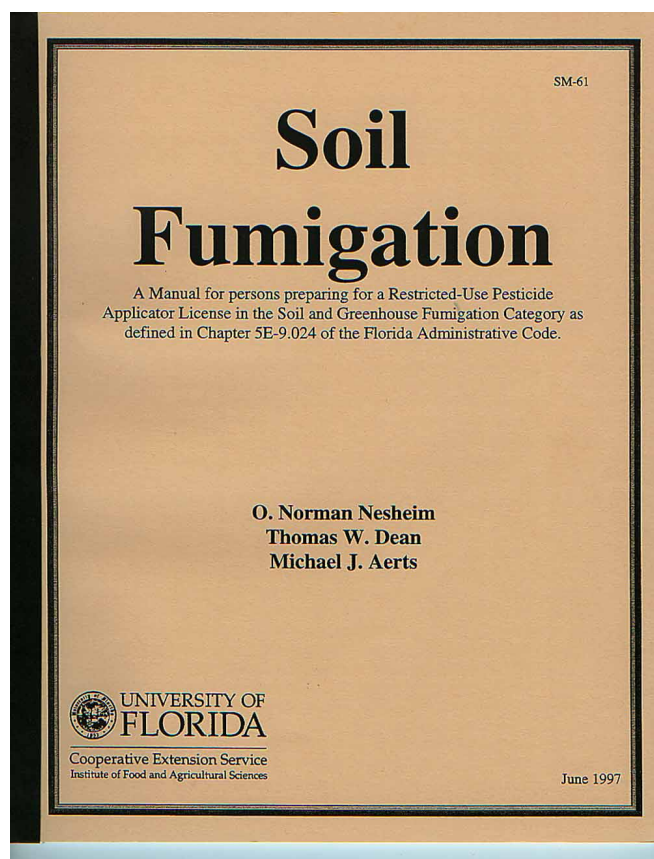


Figure 1. SM-1: Applying Pesticides Correctly.

### 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 Soil and Greenhouse Fumigation category and 4 CEUs approved for the Core category. Core CEUs can't be used to meet the



**Figure 2.** SM-61: Soil Fumigation.

required Soil and Greenhouse Fumigation CEUs. No substitutions of other types of CEUs are allowed. Opportunities to earn CEUs may be found at <http://www.flaes.org/>.

### **Restricted use pesticides applied in the Soil and Greenhouse Fumigation category**

Table 1 lists Florida's restricted use pesticides that are applied in the Soil and Greenhouse Fumigation 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>.

#### **Additional information**

Fishel, F.M. 2005. Restricted use pesticides. UF/IFAS EDIS Fact Sheet PI-36. <http://edis.ifas.ufl.edu/PI081>.

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 September 14, 2006).

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 September 14, 2006).

**Table 1.** Restricted-use fumigants in Florida.

<b>Pesticide common name</b>	<b>Criteria for RUP</b>
Chloropicrin	Acute inhalation toxicity, hazard to non-target organisms
Dichloropropene	Probable human carcinogen, oncogenic, acutely toxic by oral and inhalation routes
Metam-sodium	Acute toxicity
Methyl bromide	Acute toxicity and accident history