

LONGLEAF ACADEMY

**PESTICIDE LICENSING AND  
LABELING**

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(PSEP)

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# LICENSING

## Types of Pesticide Licenses

- Private- apply to your own land (or land you lease)
- Commercial- apply pesticides for pay or work for a company (even if it's a general use pesticide such as RoundUp); requires proof of liability insurance
- Noncommercial- same requirements as commercial but for federal or state government employees

## How to Obtain a License (Private)

- Contact your local county extension office
- Attend an Initial Private Applicator Training (\$90)
- Pass the private applicator exam
- Pay the licensing fee (up to \$10)
- Virtual Initial Private Applicator Training and Exam

## How to Obtain a License (Commercial or Non-commercial)

- Order the Core Manual and other category manuals you will need (forest, aquatic, aerial, etc)
- Category 2: Forest Pest Control - This category includes applicators using or supervising the use of restricted use pesticides in forests, forest nurseries, and forest seed producing areas.
- Pay for and pass the Core and category online exams through Clemson Department of Pesticide Regulation (DPR)
  - at testing centers

## Any questions??

- Department of Pesticide Regulations:  
864-646-2120
- commercial:  
[dprca@clemson.edu](mailto:dprca@clemson.edu)
- noncommercial:  
[dprnca@clemson.edu](mailto:dprnca@clemson.edu)
- private:  
[dprpa@clemson.edu](mailto:dprpa@clemson.edu)

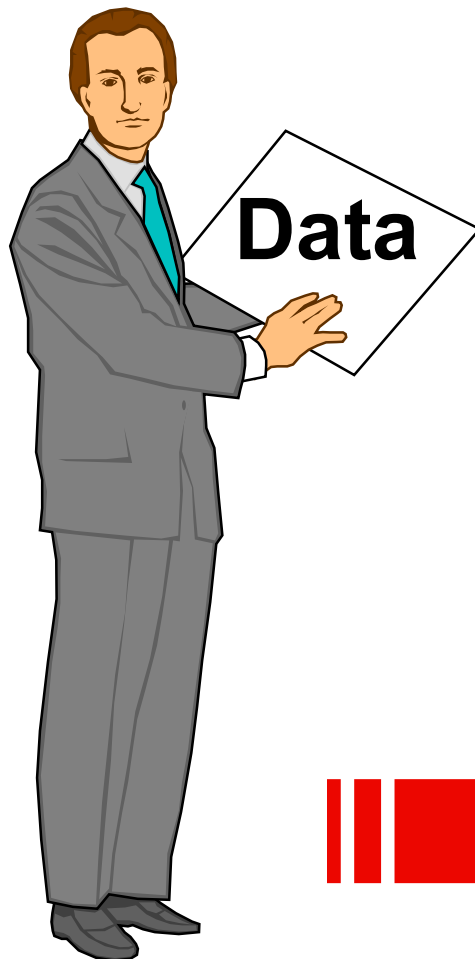


# PESTICIDE LABELING

## The Pesticide Label and Labeling

- The **label** is the information printed on or attached to the pesticide container
- **Labeling** includes the label plus other information, such as the website, brochures, etc.
- Pesticide labeling is the law! It must be read and followed!
- The EPA approves all labels and changes to labels.
  - Each Pesticide has an unique EPA registration number

# The Environmental Protection Agency



- EPA reviews every pesticide product
- EPA may require labeling changes
- EPA must approve labeling language



# What does it take to register a new pesticide??

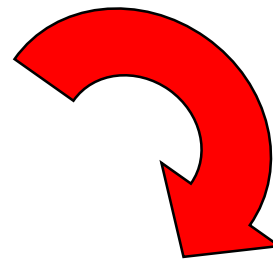
Laboratory Screening



Laboratory and Field Testing



Label Registration



millions

6+ years

**Pesticide Product**

# What happens before you see a pesticide label?

Manufacturers conduct scientific tests

- toxicity or toxicological tests

- efficacy or performance tests

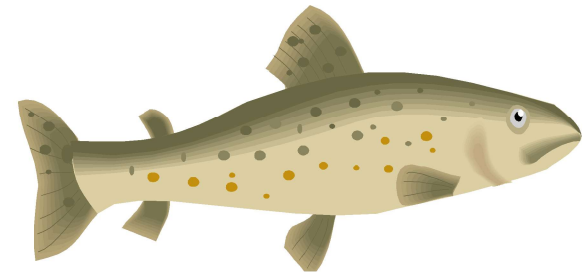
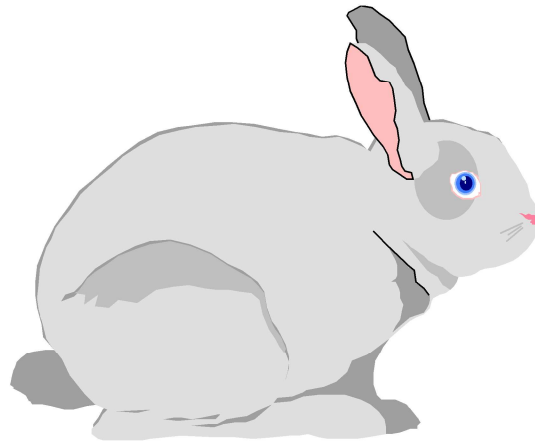
- degradation (breakdown), mobility & residue

- effects on non-target species and the environment

EPA reviews the data and the label

How poisonous or dangerous  
is a pesticide to humans, wildlife,  
and other non-target organisms?

## Toxicity or Toxicological Tests



# Efficacy Tests

- Does the pesticide manage the pest?
- Does the pesticide cause plant damage - phytotoxicity?



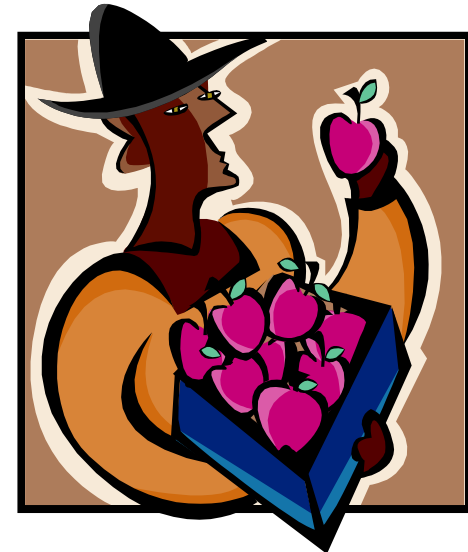
# Pesticide Testing

- Degradation, mobility, and residue tests
  - What happens to the pesticide after it is applied?
  - Does it move through soil to the groundwater?
  - Does it move into plants from the soil?



# Crops or Animals for Food

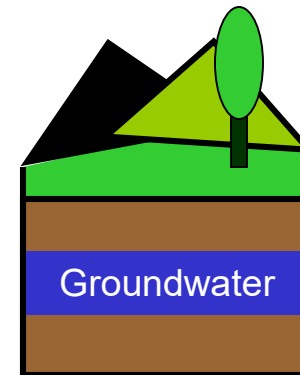
- ❖ **Residue tolerance:** the maximum amount of pesticide residue legally allowed on or in food or feed at harvest or slaughter
- ❖ **Preharvest interval (PHI):** minimum number of days allowed between the last application and harvest



Restrictions
Do not apply more than 16 fl oz per application and do not exceed 64 ounces of this product per season.
Allow at least 7 days to elapse between final application and harvest.

# Pesticide Testing

- Effects on the environment
  - Wildlife
  - Groundwater
  - Surface water



## Types of Registration

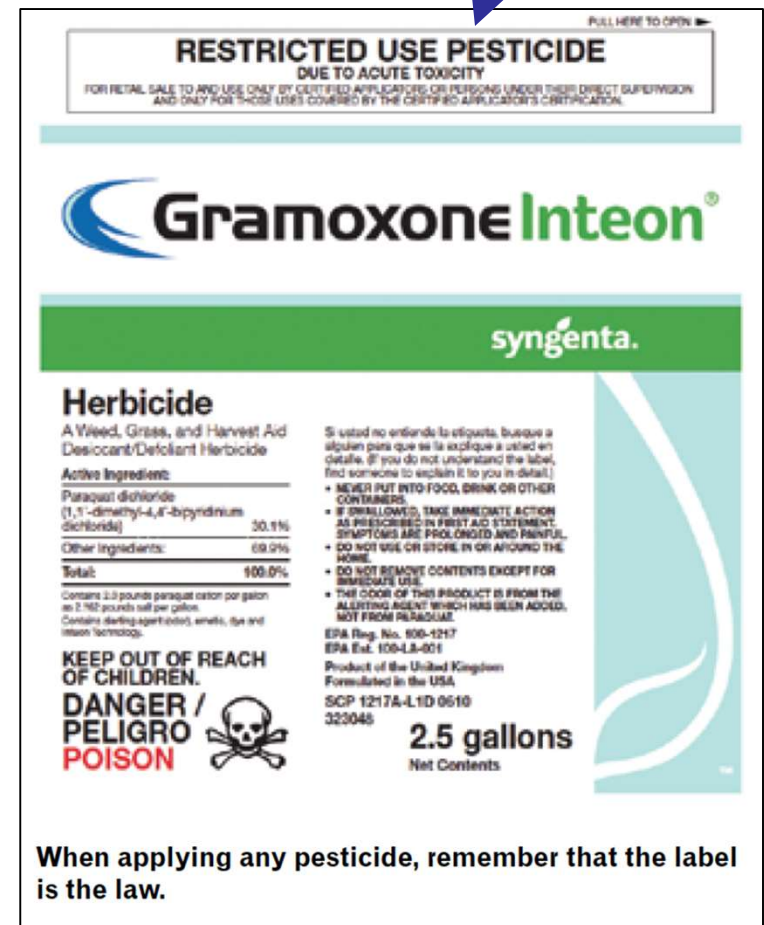
- **Federal Registration-** most common
- **Special Local Needs Registration or 24(c)-** this allows the state to further control how it will be used and can place further restrictions
- **Emergency Exemptions from Registration or Section 18 exemption-** used during an emergency situation, allows the product to be sold and used for a nonregistered purpose for a specific amount of time (allows for off-label use)

# Pesticide Classification

RUP

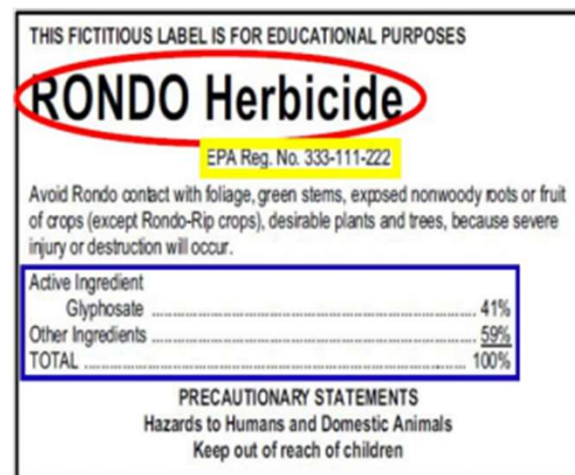


- Unclassified
  - Also called "general use"
  - No certification needed to purchase
- Restricted (RUP- Restricted Use Pesticide)
  - Classified as restricted if it could cause harm to humans or the environment
  - Only certified applicators may purchase and use or supervise the use of these pesticides



## Parts of the Label

- Brand, Trade, or Product Name
  - Different manufacturers may use different brand names for the same pesticide active ingredient
    - Example: RoundUp, Ranger Pro have same active ingredient, glyphosate
- Ingredient Statement
  - Active ingredients
  - Inert ingredients
- Common Name
  - Example: glyphosate
- Chemical Name
  - Example: *N*-(phosphonomethyl)glycine)



Credit: Pesticide Environmental Stewardship

1. Company name  
and address

2. EPA registration  
number

3. EPA establishment  
number

Produced for:

**ARYSTA LIFESCIENCE NORTH AMERICA, LLC**

15401 Weston Parkway, Suite 150

Cary, NC 27513

EPA Reg. No. 66330-367

EPA Est. No. 51036-GA-001

AD121008

102332

**NET WEIGHT: 40 LBS**

- EPA Registration Number
  - Example: EPA Reg. No. 3120-280-AA
- EPA Establishment Number
  - Example: EPA Est. 100-SC-101
  - Identifies the manufacturer and where it was made
- Name and Address of Manufacturer
- Net Contents
  - How much is in the container
    - Example: 1 quart
- Type of Pesticide
  - Examples: Insecticide, Herbicide, Algaecide, Fungicide
- Type of Formulation
  - Examples: WP (wetable powder), D (dust), EC (emulsifiable concentrate)
- Restricted-Use Designation
  - Will be at the top of the label if it is a RUP

- Precautionary Statements
  - Precautions that should be followed when using the product
  - A statement that **all** pesticide labels contain: “keep out of reach of children”
  - Another example: Do not contaminate food or feed
- Signal words: Indicates the risk of acute toxicity to humans from pesticide exposure
  - **Danger/Poison**
    - Danger/Poison- will have a skull and crossbones symbol and is used when the product may cause serious acute illness by oral exposure, can cause death in very low doses
  - **Danger**
    - Can cause severe eye damage and skin irritation
  - **Warning**
    - product is moderately toxic either orally, dermally, or inhalation or causes moderate eye and skin irritation
  - **Caution**
    - slightly toxic either orally, dermally, or through inhalation or causes slight eye and skin irritation



- **First Aid Statements-** lists first-aid treatments in case of poisoning or accidental exposure
- **Personal Protective Equipment (PPE)**
  - Tells you the minimum requirements for what you must wear
  - Can change for specific tasks (loading, applying)
- **Environmental Hazards**
  - Example: highly toxic to bees
- **Physical or Chemical Hazards**
  - Examples: fire hazard, corrosive
- **Directions for Use**
  - How to use the product, pests controlled, mixing instructions, where and when it should be applied, restrictions such as grazing, etc.
- **Storage and Disposal Instructions**
- **Agricultural Use Requirements**
  - Only on the label if needed for Worker Protection Standard
  - PPE for handlers and early-entry workers
  - Restricted Entry Interval (REI)
    - The amount of time after a pesticide has been applied that no one should enter a treated area

1. Restricted use pesticide statement (if applicable)

**RESTRICTED USE PESTICIDE**

**Due to (insert reason)**

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.

2. Product name, brand, or trademark

**PRODUCT NAME**

3. Ingredient statement (may appear on back panel if packaging does not provide adequate space on front panel)

ACTIVE INGREDIENT(S):.....90.00%  
OTHER INGREDIENT(S):.....10.00%  
TOTAL:.....100.00%  
This product contains \_\_\_\_lbs of [a.i.] per gallon.

4. Child hazard warning statement (if applicable)

**Product information: (what is product used for)**  
**KEEP OUT OF REACH OF CHILDREN**

5. Signal word (if applicable)

**SIGNAL WORD**

**(ENGLISH\SPANISH)**

"Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)"

6. First aid statement (may appear on back panel if there is a note indicating this on front panel)

**First Aid**

If Swallowed  
If Inhaled  
If on Skin  
If in Eyes  
Reminder to have label with you when calling emergency phone number or going for treatment. Emergency phone number.  
Note to Physician:

7. Skull and crossbones symbol and the word "Poison" (if applicable)

**SEE OTHER PANEL FOR PRECAUTIONARY STATEMENTS**

**Poison**



8. Net contents/net weight

**Net Contents** \_\_\_\_\_

1. Precautionary statements

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMAN AND DOMESTIC ANIMALS**

**Signal Word**

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Causes moderate eye irritation. Wear goggles. Harmful if swallowed. Harmful if absorbed through skin.

**ENVIRONMENTAL HAZARDS**

**PHYSICAL OR CHEMICAL HAZARDS**

**DIRECTIONS FOR USE**

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

**APPLICATION DIRECTIONS**

**INFORMATION (non-site-specific):**

**PRECAUTIONS AND RESTRICTIONS (non-site specific):**

**DIRECTIONS for USE (continued)**

Non-Crop Site/Pest:  
Non-Crop Site/Pest:  
Non-Crop Site/Pest:  
Crop/Pest:  
Crop/Pest:  
Crop/Pest:

**STORAGE AND DISPOSAL**

PESTICIDE STORAGE  
PESTICIDE DISPOSAL  
CONTAINER HANDLING

**WARRANTY STATEMENT**

2. Directions for use (continued)

3. Storage and disposal

4. Warranty statement (if the registrant chooses to include one)

2. Directions for use (if the product is a restricted use pesticide, then this header will be followed by "Restricted Use Pesticide" if the product is an RUP). "General" is not recommended.

## Why you should read the label:

- Know to correct application rate and how to use it safely
- Determine what notification you need to make to your workers
- Determine if there are any off-label instructions to follow
- Understand the restrictions that apply to the application you will make