

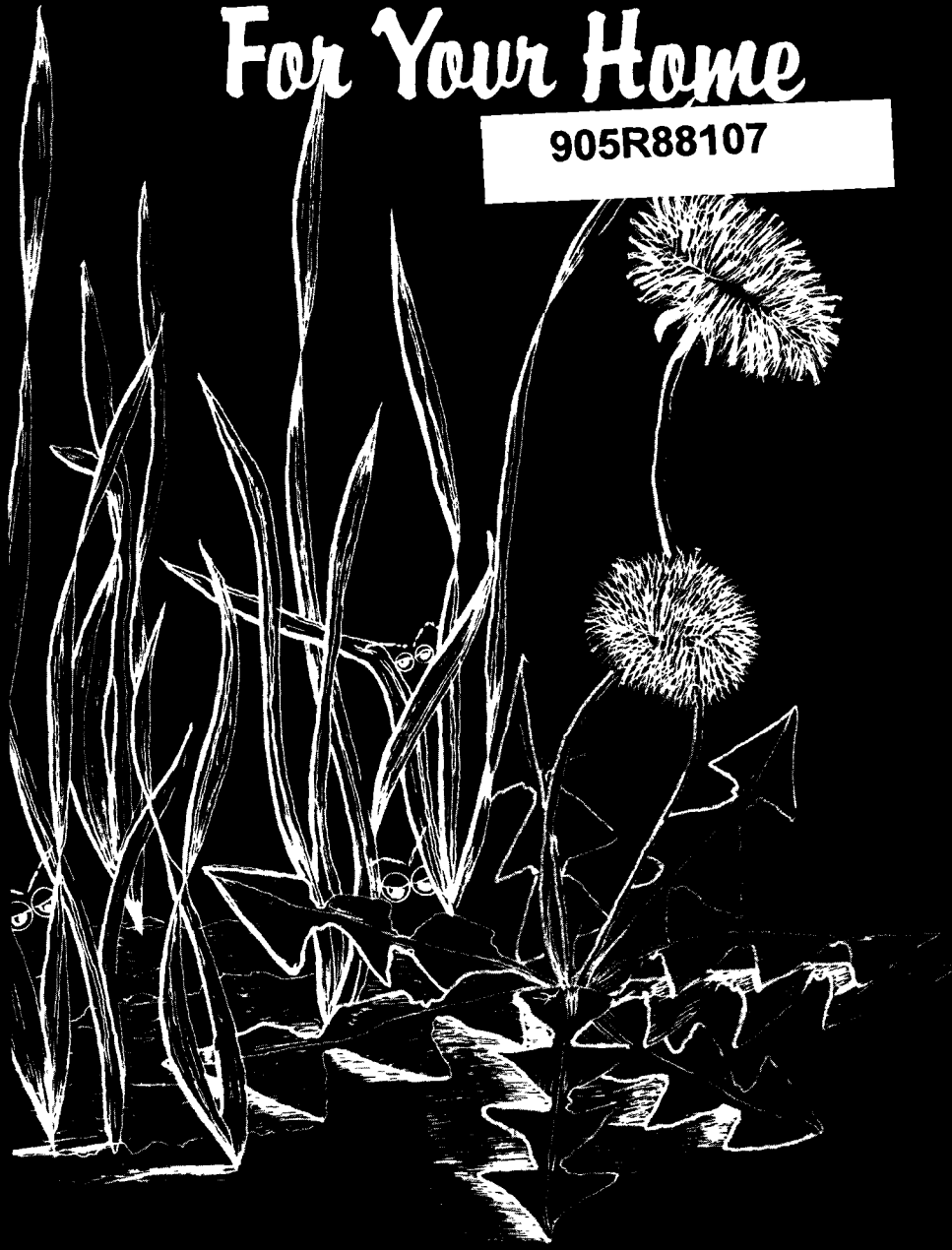
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# Lawn Care For Your Home

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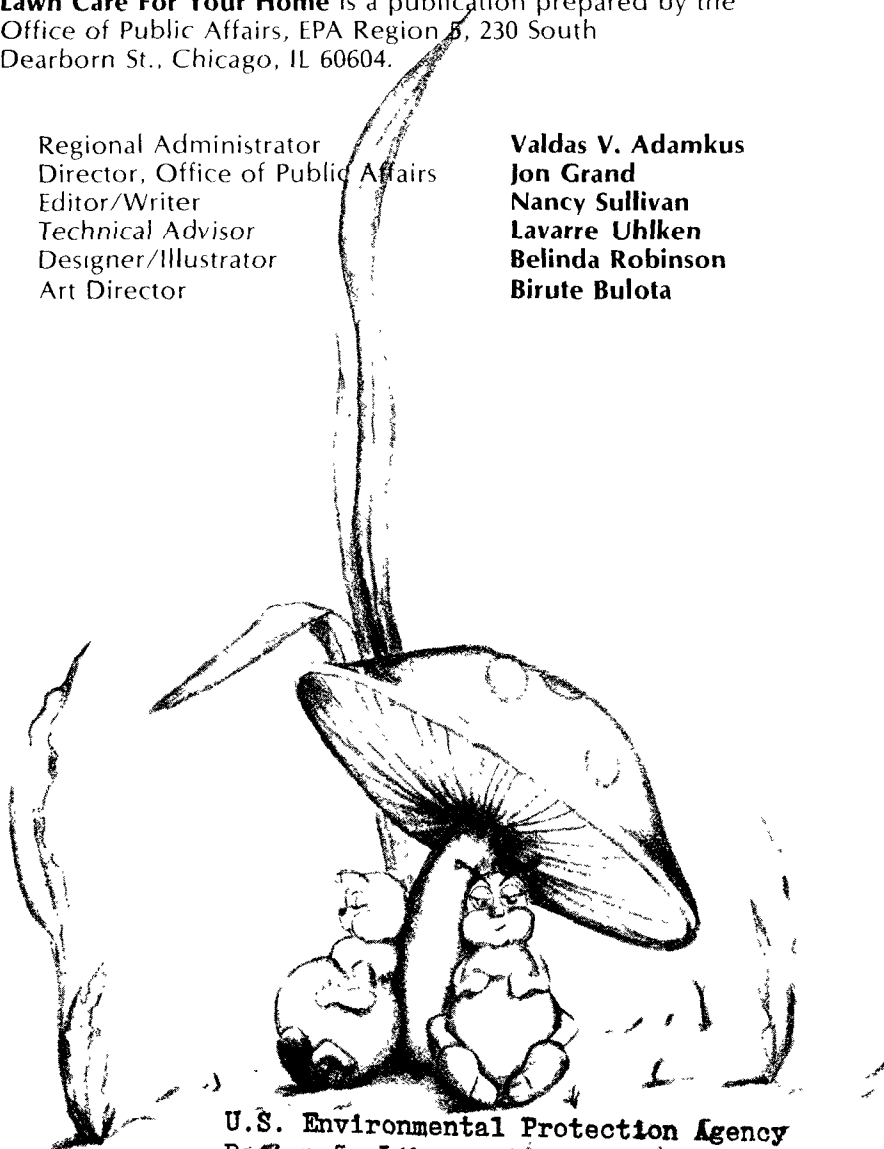
# Lawn Care For Your Home

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**Lawn Care For Your Home** is a publication prepared by the Office of Public Affairs, EPA Region 5, 230 South Dearborn St., Chicago, IL 60604.

Regional Administrator  
Director, Office of Public Affairs  
Editor/Writer  
Technical Advisor  
Designer/Illustrator  
Art Director

**Valdas V. Adamkus**  
**Jon Grand**  
**Nancy Sullivan**  
**Lavarre Uhlken**  
**Belinda Robinson**  
**Birute Bulota**



U.S. Environmental Protection Agency  
Region 5, Library (5PL-16)  
230 S. Dearborn Street, Room 1670  
Chicago, IL 60604

## **INTRODUCTION**

All of us want a beautiful lawn free of weeds and pests to provide an attractive setting for our home. In addition to its eye appeal, a lawn provides a cleaner and healthier environment for you and your family.

Today, people are becoming increasingly concerned about the harmful side effects on public health and the environment from the chemicals used in lawn maintenance. Whether you apply the chemicals yourself, or hire a professional service, you should be aware of products approved by the U.S. Environmental Protection Agency (EPA) for nonagricultural use and of the potential harm that can come from their improper use and application.

## **WEED/INSECT/DISEASE/CONTROL**

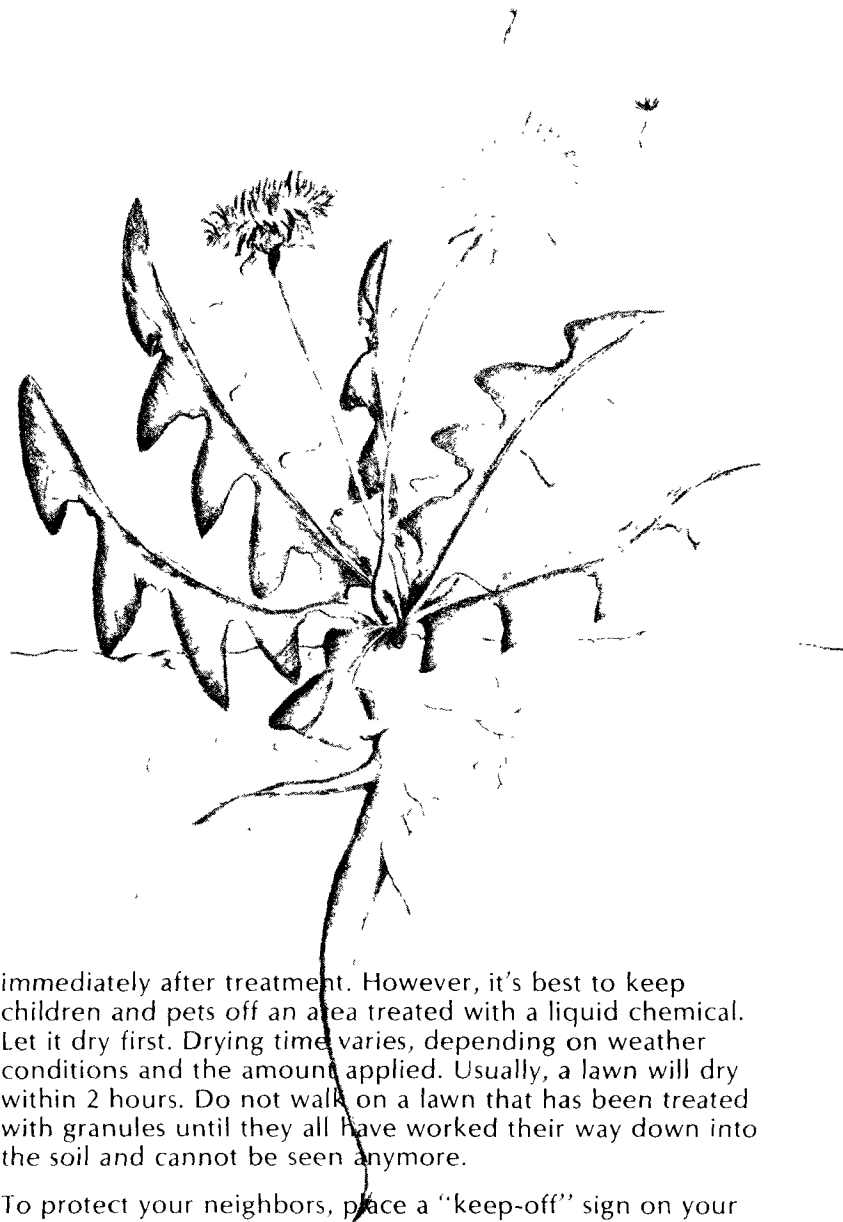
Weeds, destructive insects, and lawn diseases are the common problems you may encounter in establishing and maintaining a good lawn. You can eliminate and control them by using pesticides — a diverse group of chemical agents subdivided into:

herbicides — to control and eliminate weeds;  
insecticides — to destroy or repel insects; and  
fungicides — to control diseases.

## **HEALTH CONCERNS**

No chemical is completely safe. All chemicals are potentially harmful. Some can be inherently toxic to humans and pets, but if exposure to the chemical is minimal, little hazard exists. Conversely, a chemical with very low toxicity can be a hazard if it is not handled properly and people and pets are highly exposed.

When applied according to label instructions, only a small amount of most weed control products remains on the lawn



immediately after treatment. However, it's best to keep children and pets off an area treated with a liquid chemical. Let it dry first. Drying time varies, depending on weather conditions and the amount applied. Usually, a lawn will dry within 2 hours. Do not walk on a lawn that has been treated with granules until they all have worked their way down into the soil and cannot be seen anymore.

To protect your neighbors, place a "keep-off" sign on your lawn with a warning that the area has just been chemically treated.

### **APPLYING CHEMICALS YOURSELF**

Look for the EPA registration number when buying a chemical product. This is your assurance that the product has been reviewed by EPA and is safe and effective when used as directed. Contact your University Cooperative Extension Service for information if you are uncertain about what chemical to use and when to use it. It can recommend a treatment that is appropriate for your climate and your specific problem.

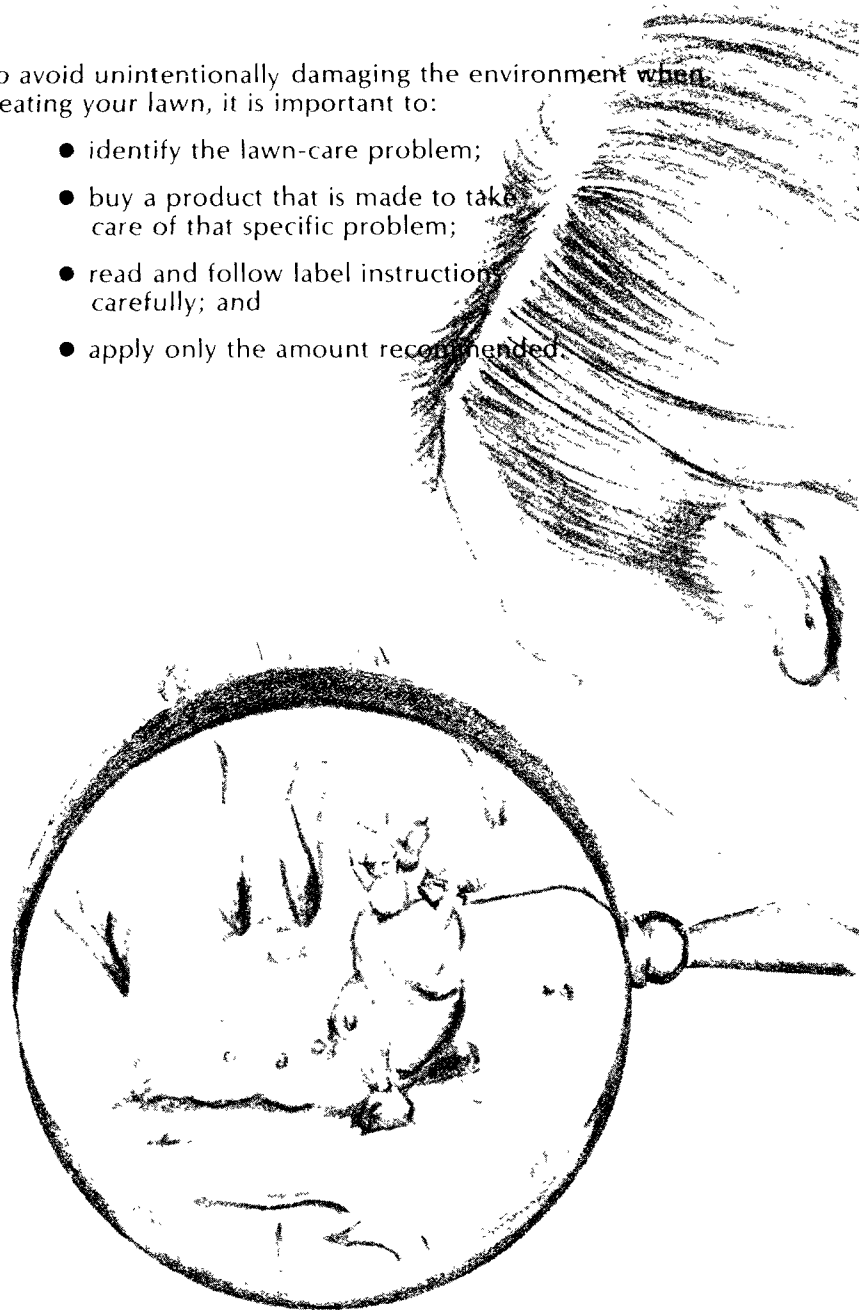


## Lawn Care

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To avoid unintentionally damaging the environment when treating your lawn, it is important to:

- identify the lawn-care problem;
- buy a product that is made to take care of that specific problem;
- read and follow label instructions carefully; and
- apply only the amount recommended.



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Avoid the most toxic chemicals. They always carry a "Danger" label. Moderately toxic chemicals are labeled with a "Warning," and those that are only slightly toxic and generally safe for consumer use are labeled "Caution." Almost all lawn-care products are very low in toxicity, and will have a "Caution" label.

There are several different types of products available in your local hardware or garden center. Most products are sold as soluble powders, wettable powders, or emulsifiable concen-





trates that are simply mixed with water, stirred, and sprayed. Others are granular formulations mixed with lawn fertilizer.

Apply granules to grass that has been recently cut and is moist from morning dew or rain. Don't mow or disturb your lawn for at least 24 hours. Water, or wait for rain, as directed on the product label.

### SAFETY PRECAUTIONS

Because chemicals must be toxic to eliminate and control pests in your lawn, take these safety precautions when you use, dispose of, or store chemicals.

#### MIXING

- Measure and mix your spray formula carefully. All mixing should be done outdoors.
- Buy a measuring cup and spoon to be used for chemicals only. Don't use these utensils in the kitchen after measuring or mixing a chemical
- Mix only the amount you need, so you don't have to dispose of any leftovers.

#### APPLYING CHEMICALS

- Close your windows and remove outdoor furniture before you begin spraying.
- Never spray on a windy day to avoid injuring flowers and desirable plants with drifting spray particles. To be safe, spray only when it's calm. Usually, the best time is early morning or in the evening.
- Don't apply chemicals before a rain-fall. Rain will wash some chemicals away before they can do their job.
- Be careful not to spray children's play equipment, such as swing sets. Wash

the equipment immediately if this occurs accidentally.

- Avoid inhaling the chemicals. Stay upwind of the spray.

**STORAGE**

- Store the chemicals in a safe dry place. Keep them in their original containers, away from children and pets.

**DISPOSAL**

- Dispose of empty containers as recommended on the label. Never puncture or burn a pressurized container.

Chemicals enter your body when you swallow or inhale them, or when you get them on your skin or in your eyes. To protect yourself, take these special precautions when working with chemicals.

**PERSONAL SAFETY MEASURES**

- Avoid spilling chemicals on your skin. Read the label to determine an adequate way to clean yourself if this happens accidentally.
- Never smoke when using a pesticide because you could pass the chemical from your hands to the cigarette and then to your mouth.
- Wash exposed skin thoroughly with soap and water after applying a chemical. Wash your clothing separately from the family wash.

**PROTECTIVE CLOTHING**

- Pay special attention to label instructions regarding the need for protective clothing, such as a wide-brimmed hat, long-sleeve shirt, long pants, vinyl or rubber gloves, and boots.
- Wear safety goggles to protect your eyes when spraying or mixing a chemical.

**ACCIDENT**

- Call a poison control center immediately if you accidentally swallow or inhale a chemical, or if you contaminate your skin. Describe the chemical from the information on the label. Take the label with you if you must go to a doctor or a hospital.
- If you spray or splash a chemical in your eyes, rinse them immediately with clean water for 15 minutes. Call your doctor or a poison control center.

**SELECTING A LAWN CARE SERVICE**

Lawn-care services should use only chemicals that have been registered by EPA and, in some States, by the appropriate State agency. The products regularly used by these companies are registered as “general use products.” This means the products consist of the same ingredients that can be purchased by the general public at local garden and lawn care centers and can be used with no additional restrictions other than those specifically given on the product label.

In addition to product registration, professional applicators must meet special competency requirements established by individual State pesticide regulatory agencies. Applicators must demonstrate knowledge in product handling and application and have an understanding of the information provided on pesticide labels. In all of the EPA Region 5 States — Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin — lawn care service applicators must acquire and maintain these skills.

Make certain that you are dealing with a reputable company before signing a contract. If you are not familiar with a

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company, you can call your State agricultural agency (listed on last page) to check the company's credentials.

Use this checklist when considering a lawn-care service company.

- Is the company licensed?
- Does the company have a good reputation? Have there been any complaints against it?
- Have you discussed your specific problem with the company and agreed upon a maintenance program?
- Do you know what chemicals will be used and in what amount?
- If a family member has allergies, have you consulted a doctor about a possible adverse reaction from exposure to the chemicals?

If you are still uncertain about a product, check with EPA or your State agricultural agency on the toxicity of the chemical.

Usually, weed control preparations require only small amounts of a chemical and are considered to have low toxicity. Typically, more than 99 percent of a mixture is fertilizer and water.

### **EPA REGULATIONS**

When used according to label instructions, herbicides, insecticides, and fungicides control and eliminate unwanted weeds, insects, and lawn diseases with a minimum of risk. Federal regulations require that pesticide labels contain a statement warning users of potential hazards and provide directions on how to correctly apply the chemicals.

Under the Federal Insecticide, Fungicide, and Rodenticide Act, manufacturers must register their products with EPA before they can be sold or used in the United States. To obtain a registration number, manufacturers must provide EPA with information on the health and environmental effects of the pesticide. EPA reviews the data to ensure that the pesticide is effective and, when used properly, it does not harm people or the environment.

### LAWN CARE PRODUCTS

Below are some typical products used by the lawn-care industry. Be aware that there may be several different brand (trade) names for a specific chemical. Both trade and common (simplified chemical) names will be listed on the product label.

TRADE NAME	COMMON NAME
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These herbicides are used in the spring to control annual grassy weeds, such as crabgrass. These chemicals require only one application.

Dacthal	DCPA
Betasan	Bensulide
Balan	Benefin
Pre-M	Pendimethalin

These herbicides are used in the spring and fall when broad-leaf weeds, such as dandelions, are actively growing. They may also be used in the summer on a limited basis.

Trimec	2,4-D
	MCP
	Dicamba
Phenaban	2,4-D
	Dicamba
Weedone	2,4-D
	2,4-DP

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These insecticides are used to keep insects from damaging the lawn. Select a pesticide based on the type of insect, usually chinch bugs, sod webworms, and white grubs.

Dursban	Chlorpyrifos
Diazinon	Diazinon

These fungicides can be used if a disease invades your lawn. Select a fungicide that will attack your particular problem.

Tersan 1991	Benomyl
Tersan LSR	Maneb
Daconil	Chlorothalonil

### **LAWN DISEASES**

If your lawn is diseased, it most likely has been attacked by a fungus. Watch for signs of disease in hot, humid weather when fungus grows faster. Lawn diseases can be spread by wind, water, and grass clippings.

There are many different types of lawn diseases. Some of the most common are:

- fairy ring -- large dry spot; toadstools may appear in ring;
- powdery mildew -- grass appears as if it were sprinkled with flour;
- leaf spot -- tiny spots or lesions on grass blades;
- rust -- grass has reddish brown, reddish yellow or orange-yellow appearance;
- snow mold -- spots of white, pink, reddish-white, or gray in lawn along fences or shady areas.

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Below are the Region 5 State agencies who regulate pesticides in their States.

### **Illinois**

Illinois Dept. of Agriculture  
Bureau of Plant & Consumer  
Services  
P.O. Box 19281  
State Fairgrounds  
Springfield, IL 62794-9281  
Phone: (217) 785-2427

### **Minnesota**

Minnesota Dept. of Agriculture  
Agronomy Services Division  
90 West Plato Blvd.  
St Paul, MN 55107  
Phone: (612) 296-1161

### **Indiana**

Office of the Indiana State  
Chemist  
Dept. of Biochemistry  
Purdue University  
West Lafayette, IN 47907  
Phone: (317) 494-1587

### **Ohio**

Ohio Dept. of Agriculture  
Pesticides Regulation  
Reynoldsburg OH 43068  
Phone: (614) 886-6361

### **Michigan**

Michigan Dept. of Agriculture  
Plant Industry Division  
P.O. Box 30017  
Lansing, MI 48909  
Phone: (517) 373-1087

### **Wisconsin**

Wisconsin Dept. of Agriculture,  
Trade, and Consumer Protection  
Plant Industry Division  
P.O. Box 8911  
Madison, WI 53708  
Phone: (608) 266-7135

If you need additional information, write to: U.S. Environmental Protection Agency, Pesticides Section, 230 South Dearborn St., Chicago, IL 60604. Or call (312) 353-2192.

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