

# ORNAMENTAL AND TURF PEST CONTROL

Introduction .....	3
Management Program for Pests.....	3
Identification of Pests.....	3
Insects of Ornamentals.....	4
Weeds of Ornamentals.....	5
General Ornamental Diseases .....	6
Specific Ornamental Diseases .....	8
Turf Insects .....	11
Weeds of Turfgrasses.....	12
Turf Diseases.....	13
Potential Phytotoxicity.....	15
Minimize Pesticide Hazards to the Environment.....	16
Safety Tips .....	16
Color Plates of Ornamental and Turf Pests .....	17

## INTRODUCTION

This Ornamental and Turf Pest Control manual was prepared by the Louisiana Cooperative Extension Service, Louisiana State University Agricultural Center, to be used in conjunction with the core manual for educating commercial applicators in the wise use of pesticides for controlling ornamental and turf pests.

The Ornamental and Turf Pest Control manual gives information on the identification of specific ornamental and turf pests. It also includes general information regarding the safe and effective use of pesticides in ornamental and turf areas. This manual does not give information or recommendations for the use of specific pesticides for specific pest problems. This information can be found in the Louisiana Insect Pest Management Guide, Louisiana Plant Disease Management Guide or Louisiana Suggested Chemical Weed Management Guide. These guides are revised annually.

This manual and the core manual will provide information necessary for applicators to pass the core examination and the ornamental and turf category examination to be certified to use restricted use pesticides in the ornamental and turf area in Louisiana.

## MANAGEMENT PROGRAM FOR PESTS

Diseases, insects and related pests often reach damaging levels on shrubs, flowers, turf and trees in Louisiana. During any season of the year, pest outbreaks can occur; and control measures must be applied to prevent serious injury or loss.

Growing high-quality, pest-free plants requires a management program that includes pest prevention, early detection, correct pest identification, proper selection of control measures and correct application methods. All steps in an effective management program are interrelated, and none can be omitted without jeopardizing management efforts.

### Pest Prevention

The first logical step in managing pests is prevention. Disease control materials are used to prevent infection. Insecticides, however, are used to correct an already existing problem. Insect pests and disease-causing organisms that become established on ornamental plants can reproduce rapidly. Measures such as sanitation help to prevent pest establishment. Roughing (removal

of infected/infested plant or plant parts) reduces the potential for widespread insect infestations or disease infections.

Commercial greenhouse operators should use screens on doors and vents to avoid highly mobile insect pests such as adult leafminers and moths. Weed control around and within areas where ornamentals are grown reduces the chances of pest population outbreaks. Initial infestations of mites, flea beetles, aphids and thrips commonly come from weeds and pastures. Inspect new plant purchases closely for insect pests.

### Early Pest Detection

Since the numbers and kinds of pests vary considerably, inspect plants frequently for pest damage. During spring and summer, some pest insects reproduce so rapidly that close inspection of plants should be made every other day. This may involve only a general inspection of the plants for loss of color, stunting or holes in leaves. Some of the more inconspicuous insect pests can be detected early by looking at the undersides of leaves.

## IDENTIFICATION OF PESTS

Unless a pest is correctly identified, you cannot be certain that the one you found is the destructive pest. In addition, you cannot correctly select an appropriate control measure. Identification is extremely important and deserves serious attention. Photographs and descriptions of insect pests, weeds and diseases are included in this manual to help to identify pest problems. There are numerous pests and many species that closely resemble each other. Growers should consult the parish LSU AgCenter Extension personnel for help in identifying new or unusual pests or if there is any doubt as to pest identity. After a pest is correctly identified, only then can you determine if, when and how to control it.

### Proper Selection of Controls

Control materials for insects, mites, diseases and weeds are listed in separate publications available from the parish extension offices. No single pesticide is capable of controlling all the major pests without damaging sensitive plants. As new products and research data become available, revisions of control recommendations are made. Visit your parish LSU AgCenter extension office frequently to be sure you have the most current recommendations.

When several pesticides are recommended to control pests, several factors determine which one to use. Cost is one such factor. You should not, however, sacrifice good control or safety to plants and risk the hazard of encouraging pest resistance by using one inexpensive material repeatedly. Where several materials are