

The Georgia Pest Management Handbook Specific Pest Control Recommendations “The Heart of the Matter”

Introduction

The majority of the GA Pest Mgmt Handbook is concerned with specific recommendations for the control of pests on specific crops.

Many hours of work are expended by University Research and Extension personnel on developing these ratings.

Many products are tested for the control of all economically important pests on most of the State’s economically important crops.

The definition of “crops” includes not only field crops, but horticultural crops, forests, and animals, as well as human health, and the protection of the structural integrity of buildings.

The Extension Service employs Specialists who review economic importance of each crop and pest, and data generated and then write recommendations to be included in this Handbook.

Their recommendations include not only chemical controls that work, but that are considered economically viable for the use:

A chemical control may work, but may be so expensive that the grower could not afford to use it on a low-value crop. This chemical would probably not be recommended.

A word about labeling

Labeling refers to the legal documents attached to or associated with a pest control chemical [more about this later]. It implies the chemical is safe to use on the crop and has at least some efficacy on the pest, BUT since effectiveness data is NOT required for labeling, the efficacy of a particular chemical in a particular situation may be marginal.

Thus, a chemical control may be labeled for use to control a specific pest in a specific crop, but if

its effectiveness is only marginal, it will probably not be recommended.

A chemical control may have good effectiveness, but may not be recommended because there are one or several competitors, with some characteristics that make them more desirable

These may include better efficacy, lower toxicity to man and animals, lower toxicity to beneficial organisms, lower potential for environmental effects, lower cost per acre, easier application, etc.

A recommendation in this Handbook ensures that the control is legal and applicable for the use intended.

A recommendation does not replace the need to read and follow label recommendations!

A chemical control may be legal (labeled) and effective but may not be recommended for other reasons [see above]

Specific Recommendations

The specific recommendations are organized by crop (or situation)

[Turn to the Table of Contents, and note how the crops are listed]

Crops are divided into

Agronomic crops

Horticultural crops

Turf

Trees

Grass Roadside Vegetation Management

Animals

Household and Stored Products

Humans

Aquatic Environments

Vertebrate Pest Control

Example of Finding Recommended Pest Control Products

Turn to Weed Control on Corn

Note that the sections on Weed control (for corn and other crops) is divided into two sections: Weed Control (starting on page 29 [2008 version]), and Weed Response to Herbicides Used in Corn. (starting on page 40).

Turn to Weed Response to Herbicides Used in Corn

Note how table is organized:

Across the top are application timings

These refer to when the herbicide is sprayed:

PPI = Pre-plant Incorporated etc. [*where would you look for definitions of these abbreviations?*]

*Along the left side is a column listing the various weeds the Extension specialist [*what is his/her name?*] considers to be economically important in corn.*

In the body of the table are ratings indicating the effectiveness of the chemical applied on that application timing against the specific weed.

[Where do you find the definitions of the letters used? What do they mean?]

Find a specific chemical

Assume that you are going to grow corn under conventional tillage and want to use a herbicide pre plant incorporated (PPI).

You need to know the type of culture you are going to use, as well as the equipment available:

Do you have a tiller or harrow for PPI app'ns?

Do you plan to spray pre-emergence?

If so, do you have irrigation available to activate the herbicide? If not, choose a herbicide that does not require activation. (These requirements are usually included in "Remarks and Precautions")

Historically the worst problem weed in the field is yellow nutsedge.

What chemical would you choose?

If there are more than one, you need to choose only one.

What would influence your decision?

Price, potential carryover, compatibility with other chemicals in a spray tank-mix, etc, etc.

You now know the chemical, but what is the rate, and are there any other comments?

Turn to

Turn to Weed Control (starting on page 29)

This table is also organized by application timing

Using the example from above, find PPI, and the chemical(s) you chose above.

What other information is in the table?

What is the rate recommended?

[What is the difference between rate AI and Rate of Formulation?]

**Turn to Temporary Summer Grazing Weed Control
(Page 134)**

**Find 'FORAGE SORGHUM and SORGHUM -
SUDAN'**

Note that there are three chemicals listed, but that they all have the same rate of same active ingredient (atrazine)

Note that the same active ingredient is often available in different formulations

Knowing the rate of the active ingredient is useful if the formulation listed in the book is not available.

Turn to Soybean Insect Control (Page 175)

Note that the table is organized by pest

[Why is there no distinction as to app'n timing?]

Find controls for Corn Earworm

Find the Note under Foliage Feeders

What are the recommendations for Application?

[How would you determine defoliation?]

Choose a chemical

[Why choose Sevin over methyl parathion?]

**Also investigate the
Online Version of GA Pest Management Handbook at
<http://www.ent.uga.edu/pmh/>
Note its organization and how it differs from the print
version.**