

# IPM PMSP Guidelines

## 1. Source

## 2. Settings/Crops

Describe the crop/setting and related issues; include the schedule of rotation and soil types.

- a. Scientific Name
- b. Common Name
- c. Description

## 3. Executive Summary

Provide in a few sentences the information that key stakeholders such as EPA regulators, researchers, growers, and/or consumers need to know now about the IPM situation in this setting. Describe the workshop setting, participants, and goals and the top critical priorities.

## 4. Background

## 5. Priorities

- a. Rank
- b. Type (Research, Regulatory, Education)
- c. Priority

## 6. Worker Activities

Identify worker activities (e.g., hand weeding, pruning, thinning, spot-treating, mowing, hand harvesting, and hand pollination, etc); include re-entry intervals (REI).

## 7. Production Facts

How widespread is production (e.g., acres, farms, etc.)? How valuable is production? Is the crop important in the context of agricultural systems? Is the crop important to the states employment and economy? Trade impact.

- a. Citation
- b. Production Year
- c. State ranking in national production
- d. State contribution to total US production (%)
- e. Acres Planted
- f. Acres Harvested
- g. Cash Value
- h. Annual Production Costs
- i. Export Markets
- j. Number of Growers
- k. Unit (Acres, Tons, Bales, etc.)
- l. Comments
- m. Economics

## 8. Production Counties

Identify the counties and describe any production differences in the counties.

- a. Counties
- b. Description

## 9. Production Practices

Describe any regional differences, IPM strategies, and economics of pest management, and include the re-entry intervals (REI).

- a. Practice (e.g. plowing, tillage, crop rotation, irrigation methods, planting dates, seeding rates, fertilizer rates, planting depth, etc.)
- b. Description
- c. Identify Worker Activities (e.g., hand weeding, pruning, thinning, spot-treating, mowing, hand-harvesting, hand pollination, etc.)
- d. Re-Entry Intervals (REIs)

## 10. IPM Practices

## 11. Pollinator Protection

Effects of controls on pollinators. Major pest concerns at bloom.

## 12. Pests

- a. Category (Diseases, Insects, 1-Abiotics, Weeds, Wildlife, Nematodes)
- b. Scientific Name
- c. Common Name
- d. Group (Major or Minor)
- e. Order
- f. Description
- g. Frequency of Occurrence
- h. Damage Description
- i. Percentage of Acres Infested per Growing Season/Cycle
- j. Yield Losses Attributed to Each Pest
- k. Regional Differences
- l. Photo
- m. Critical Timing of Control Measures
- n. Effects on Beneficials and Pollinators

## 13. Beneficials

## 14. Biological Controls

Discuss any biological control programs that are relevant for the pest/commodity, include pheromone use if applicable.

## 15. Cultural Controls

Identify and discuss any cultural practices (e.g. planting dates, resistant varieties, row spacing) used to manage the pests.

## 16. Physical Controls

Discuss any physical control programs that are relevant for the pest/commodity.

## 17. Chemical Controls

For each pest discussed, identify the active ingredients that are used to manage that pest. List upcoming chemicals that you would like to see registered. Describe alternatives being used by growers.

- a. Pest
- b. Product name
- c. Formulations
- d. Percent Crop Treated
- e. Application Method (e.g. Aerial, ground, chemigation, banded, broadcast, in-furrow, etc.)
- f. Typical Application Rates
- g. Typical Number of Applications / Growing Season or Cycle
- h. Timing in Crop Stage
- i. Typical Pre-Harvest Intervals (PHI)
- j. Typical Restricted Entry Intervals (REIs)
- k. Efficacy Issues per Active Ingredient
- l. Expert Comments
- m. Identify use of chemical in IPM programs
- n. Identify use of chemical in resistance management programs.
- o. Pros/Cons
- p. Toxicity to Beneficials

## 18. Efficacy

Grower efficacy ratings.

- a. Pest
- b. Control
- c. Efficacy Code (E = excellent, G = good, F = fair, P = poor, N = no control, - = no information or not registered)
- d. Comments

## 19. Resistance Management

## 20. Toxicity

Toxicity to Beneficials

## 21. Timelines

- a. Type (Chemical Control, Crop Growth Stage, Non-Chemical Control Stage, Pest Occurrence, Worker Activity)
- b. Month/Week (J1, J2, J3, J4 ... D1, D2, D3, D4)
- c. Crop/Life Stage

## 22. References

## 23. Acknowledgments

Send to your regional IPM Center personnel. Your regional IPM Center contact will review to make sure all required components are included before sending the IPM document to be published on the website.

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