

**RUTGERS COOPERATIVE
RESEARCH AND EXTENSION**
Technical Review Form for Crop Profiles

PURPOSE OF FORM: This form serves as evidence that technical content review of the specified component or components of this crop profile document has been completed by a scientific peer reviewer who is independent of the writing of the document reviewed.

DOCUMENT TITLE: _____

AUTHOR(S): _____ **DATE:** _____

REVIEWER COMMENTS:

REVIEWER SIGNATURE: _____

DATE: _____

Guidelines for Reviewing Crop Profile Documents*

Background: FQPA instructs USDA and EPA to obtain pesticide use and usage data on major and minor crops. Of particular importance at this time are use and usage data for the organophosphates, carbamates, and possible carcinogens (B1's and B2's). These classes of pesticides have been identified as top priority at EPA for the tolerance reassessment and registration process. These same pesticides are also vital to the production of many of our crops. Because some of these uses may be canceled, it is important to accurately characterize current pest management practices and predict future pest management needs and research. The purpose of a crop profile, therefore, is to identify areas of critical need (i.e., those crops or situations where few if any alternative control measures are available to growers). It is the intent that "profiles" provide the complete production story for a commodity, including current pest management practices, and look at current research activities directed at finding replacement strategies for the pesticides of concern.

Components: Crop profiles should include **typical** pesticide use information (not simply what appears on pesticide labels). Crop profiles should contain the following information:

1) Commodity Production Facts

- New Jersey's ranking in national production of the commodity.
- New Jersey's contribution to total US production of that commodity (percent).
- Yearly production numbers (total acres grown; total acres harvested; cash value).
- Production costs on a yearly basis.
- Identify percent of crop destined for: fresh market, processing, feed, 'pick your own' etc.

2) Production and Cultural Practices

- Define the production regions for the commodity within New Jersey.
- Describe the cultural practices used for producing the commodity within New Jersey (e.g., soil types, irrigation practices, land preparation, planting times, and thinning practices).
- Highlight intrastate or regional differences if they exist.
- Identify worker activities that occur during the growing season. Include such items as hand weeding, pruning, thinning, spot-treating, mowing, hand harvesting, hand pollination, etc. This information is important as EPA and registrants look at 'restricted entry intervals' as a possible risk mitigation tool.

3) Pests (Insect, Disease, Weed, & Nematode) of the Commodity in New Jersey

- **Pest Identification:** Identify and discuss pest problems affecting the commodity. Include: frequency of occurrence (yearly, sporadic, weather related), the damage they do, percentage of acres infested with the pest (for each growing season or crop cycle), critical timing of control measures, yield losses attributed to each pest, etc. Note any regional differences that may occur within New Jersey.
- **Chemical Controls:** For each pest, identify the active ingredients that are used to manage that pest. Include chemical name, formulations, percent crop treated, type of application (aerial, ground, chemigation, banded, broadcast, in-furrow, etc.), typical application rates, timing (pre-plant, foliar, 5-leaf stage, etc.), typical number of applications per growing season or crop cycle, typical pre-harvest interval, and typical re-entry intervals. Identify any use of cited chemicals in IPM programs. Identify any use of the cited chemicals in resistance management programs. Discuss efficacy issues for each active ingredient.
- **Alternatives:** Discuss availability and efficacy issues associated with the alternatives for the pest/pesticide combinations discussed above.
- **Cultural Control Practices:** Identify and discuss any cultural practices (e.g., planting dates, resistant varieties, row spacing) used to manage the pests.
- **Biological Controls:** Discuss any biological control programs that are relevant for the pest/commodity, including pheromone use if applicable.
- **Harvest Control Practices:** Discuss pre-harvest and post-harvest management practices that are relevant for the pest/commodity. Include a discussion of products that could have problems if pre-harvest interval and or restricted entry interval were modified in the reregistration process.
- **Other issues:** Discuss any export or food processing restrictions that may limit the use of a given active ingredient or management practice. Describe on-going research activities that address a possible replacement strategy for the chemical under discussion. If possible, discuss time frame for implementation. Discuss any other relevant issues involving pest management practices used on this commodity.

4) Key Contacts: Identify commodity experts within New Jersey. Include phone and/or email address.

5) References

**(modified after W. Burr 10/23/01; URL: http://nepmc.org/rese_profinstr.cfm)*