ABSTRACT

UC IPM Pest Management Guidelines: Dry Beans, the University of California’s official guidelines for managing pests in dry beans, is being revised.

The version to be revised includes a year-round IPM program, 11 general information sections, 20 diseases, 1 nematode section, 17 insect and mites, 2 arthropods, 5 abiotic disorders, and 5 weed sections.

INTRODUCTION

The Pest Management Guidelines are the University of California’s official guidelines for managing agricultural pests in California. The UC IPM Pest Management Guidelines: Dry Beans includes information to manage pest arthropods, nematodes, weeds, and plant diseases. The publication series includes practical recommendations for pest control, including nonchemical methods and pesticides, and how to use these tactics in an effective, integrated program. With the year-round IPM program for dry beans, the guidelines describe a multidisciplinary, monitoring-based IPM program. Additionally, the guidelines include crop-specific tables such as a comparison of relative toxicities of pesticides used in dry bean production to natural enemies and honey bees.

The Pest Management Guidelines are the UC’s primary extension publication for growers. University of California scientists conduct research and develop IPM methods for managing pests in California crops. Since the mid-1980s, this information has been incorporated into the peer-reviewed UC IPM Pest Management Guidelines.

The Pest Management Guidelines are a well-established tool to extend the most current pest management science. More people have computers and access information online. The Pest Management Guidelines are published on the Web to be easily available to growers, pest control advisors, and others in the dry beans industry. The Pest Management Guidelines series receives about 2 million Web accesses a year. The Pest Management Guidelines for dry beans receives an average of 4,255 hits per month with a total of 51,057 hits in the last year.

Our proposal requested funding to maintain and improve the guidelines through partial support of a full-time coordinator whose responsibility is to support the Pest Management Guidelines. This is the most effective way of soliciting, incorporating, editing, peer reviewing, and
publishing the guidelines on a regular schedule to make sure current management information is readily available to the dry beans industry. UC IPM was without a coordinator for two years in 2009–2011. That loss of funding and staff instigated the current request for support since UC IPM was not able to update the guidelines sufficiently with a part-time coordinator.

PROCEDURES

Crop Team and Authors
Romy Basler coordinates the process and edits material for clarity, completeness, and to conform to format and style. The Crop Team helps to manage the overall direction of the Pest Management Guidelines and, with the authors, provides scientific content.

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The Dry Beans Pest Management Guidelines are in the process of being revised. Different from an update where only certain sections may be changed, during a revision the authors review and revise the entire guidelines and it is sent out for peer review. The Crop Team had its planning meeting January 17, 2013 to begin the revision process.

1. The Crop Team will submit changes and the Coordinator works with the members and other authors to incorporate. The Coordinator writes and/or edits informative text and tables based on information supplied by authors, reading of trade journals and other scientific literature, participation in UC scientific workgroups, or knowledge of pesticide label changes.
2. The Coordinator will make these changes, reconciling them to one another and going back to the authors for clarification, editing the manuscript for flow and style.
3. The resulting manuscript will be returned to authors for review. Authors review the updated manuscript and either approve or make additional changes. If additional changes are needed, they are incorporated by the Coordinator and reviewed by the authors; this process continues until the authors approve.
4. The Coordinator works with UC ANRs Associate Editors to determine peer reviewers. After the manuscript is peer reviewed, the Coordinator makes these changes, going back to the authors for clarification if needed. The authors review and make changes if necessary. The cycle of incorporating changes and returning to the authors continues until the authors approve the manuscript.
5. The Coordinator submits the manuscript to the UC ANR Office of Pesticide Information and Coordination to ensure the pesticide information is accurate.
6. The Coordinator works with the UC IPM Production Team to get the manuscript prepared as a PDF and posted to the UC IPM Web site.
RESULTS

Revisions to be made as discussed during the Crop Team planning meeting include:

- **Arthropods**
  - Add new insecticides and miticides
  - Make changes to insecticide and miticide efficacy rankings
  - Revise relative toxicities of pesticides to natural enemies and honey be established
  - Link to Charlie Summer’s aphid key
  - Lygus bug section revised

- **Diseases and Abiotic Disorders**
  - Revise Ascochyta blight (garbanzo beans)
  - Add to Fusarium wilt the relationship between Fusarium wilt damage and root knot nematode feeding
  - Possibly add new disorder, chocolate blotch, that can be confused with leafminer damage

- **Nematodes**
  - Add information about root knot nematode management being important for Fusarium wilt management
  - Revise nematode resistant varieties
  - Revise cover crop and green manure use
  - Add new nematicides and remove unregistered ones

- **Weeds**
  - Add garbanzo-specific weed management information
  - Add organic weed management and/or link to production guidelines
  - Add new herbicides and remove unregistered ones
  - Clarify when glyphosate is best used

- **Link to published (common dry beans) and soon-to-be published production guidelines (lima and garbanzo) for easier reference to irrigation and nutrient management information for the different bean varieties**

- **Link to annual reports from the ‘More Information’ section of the Dry Beans Pest Management Guidelines**