

**Agronomic IPM Team
Needs Assessment Development Meeting
Maricopa County Cooperative Extension Office
July 16, 2009 -- Meeting Notes**

Team Members: Rick Gibson, Sam Wang, Erin Taylor, Al Fournier, Kurt Nolte, Linda Masters, Randy Norton, Peter Ellsworth

Purpose: As part of our 2009-2010 Extension IPM grant, we have committed to conducting an IPM needs assessment of Arizona agronomic crops stakeholders to identify and prioritize pest management research and education needs. Our objective today is to define the parameters for the survey, identify resources, develop information items, and to identify opportunities and suitable format(s) to run the survey.

I. Review of Agronomic IPM Goals from Grant

II. Develop Survey Parameters

Stakeholders / Target Audience

The primary target audience for the survey is PCAs, growers, and ag industry representatives. We talked about implementing the survey (or a version of it) separately among Extension personnel and researchers to collect input from this group as well.

Focus / What we hope to learn

The survey focus will be limited to agronomic crops with the possible addition of dry beans and peppers. The emphasis will be on pest management practices, and research and education needs for these crops. However some non-pest management production practices / concerns may also be included if these are determined to be priorities by the team.

Demographic Factors

The following were identified as demographic factors to potentially be included on the survey:

- User category (Grower, PCA, industry)
- Location (County or Counties)
- What crops are you involved with / would you consider?
- Size of production

Agronomic Crop List:

Alfalfa, seed alfalfa, Durum wheat, other wheat, sorghum (grain and silage) corn (grain, silage, seed), barley, peppers, canola, dry beans, other small grains, Sudan grass, safflower, bermudagrass (hay)

Key Pests:

We will develop and finalize our list of key pests based in part on 1080 data summaries of common pests treated in each of these crops. We will supplement this information using conversations with Extension personnel and PCAs and APMC Summit data. Rick and the team will put together a draft list for team review. Peter and agents will help refine the list.

What do we know now?

- Al put together some 1080 data on the most common target pests of agronomic pests. Those pests (insects, weeds, diseases, nematodes) that have received a high number of reported pesticide treatments in recent years will form the basis for our pest list.
- Al got some additional input talking to a few PCAs from Yuma, Blythe and Buckeye. We will want to run our draft pest list by a few more PCAs before we finalize it.
- There are a number of UA Extension publications, many quite old, that deal with agronomic crop production and pest management. Rick and Erin are putting together a list of these publications. Some of these, for crops / pests determined to be a priority based on survey data, may be revised as an outcome of this project. (We have committed to publish / revise 4 Extension resources as project deliverables.)
- Sam will review the list of available UC IPM guidelines / resources related to what we determine to be key pests of key crops.
- Kurt reminded us about the APMC Summit and the priorities that were generated through that process. Rick and Al will review the notes and priorities from that meeting and take into account any items related to agronomic crops while drafting the survey.
- Peter's Cotton Pest Losses survey and the variations developed by John Palumbo for melons and lettuce may serve as models for how to organize some of the questions in a condensed format.

III. Develop Survey Information Items / Questions

Survey Questions / Topics

Note: I have tried to capture the gist of what we talked about asking on the survey and the kinds of question format that we discussed. The wording on all of these is very rough draft at this point, but let me know if you have any comments / corrections / suggestions.]

- Indicate your level of interest / involvement in production for each of the following crops. [We'll provide a list of crops. This will be a scale item with ranking from 1 to 7.]
- Indicate your level of concern with each of the following generally types of pests in each of these crops. Choices are weeds, insects, diseases, nematodes and vertebrates. [Rank from 1 to 7.]
- For each crop, for each category of pesticides, we will try to identify specific needs, probably in conjunction with the previous bullet item. These needs are: No products labeled for this crop; pesticides available are not effective; there is not enough information available.
- What percentage of acres for each of these crops is professional scouted for pest management? [Provide a range of percentages, or just fill-in-the-blank.]
- Please estimate the percentage of pesticide applications for each of these crops that are reported to the Arizona Department of Agriculture on form 1080. [Provide a range of percentages, or just fill-in-the-blank.]
- Please indicate which of the following types of pesticide delivery methods are being used [or considered?] in these crops. Choices are seed treatments, transgenics, aerial applications, custom applications, self-applied. [Are there other choices? I assume this would be a "check all that apply question. Would it be better to ask on what % of planted acres each of the methods are used?]

- For each crop, we will ask people to select or rank their top 3 to 5 locally-relevant information needs related to pest management. The choices are: Cultural control / crop production information; crop rotation; efficacy / pesticide information; pest biology and identification; pest sampling and detection; pest thresholds; timing of treatments; biological control; new technologies; host plant resistance / tolerance; pesticide resistance information; abiotic factors [note: we should try to narrow this down to no more than 10 items].
- Possibly adjacent to and integrated with the question from the previous bullet, we will list the top 5 or so pests that we have identified for each crop based on pre-survey information. We will also include perhaps 3 blank spaces where people can write in additional “top pests.” Next to each pest they will check a box to indicate the level / frequency of pest occurrence. Choices are never, rarely (not every year), often, always. In a separate item for each of the pests listed, they will identify or rank how easy or difficult it is control the specific pest.

This is a lot! And there are challenges to figure out how best to layout and develop each of the questions, and that is what part of the team will work on next. Rick, Erin, Sam & Al meet on Monday be try to develop the basic skeleton for all of the questions.

IV. Survey Opportunities & Format

- A. Data collection options. Face-to-face paper, audience response, online, phone, interviews, focus group, *others?*
 - The group seems to be leaning toward a face-to-face paper survey.
 - Linda Masters mentioned she will have an opportunity this summer to interview some growers in LaPaz County. She would like to integrate a few key questions into this.
 - We will also conduct a focus group, probably next spring, hopefully after we have processed and analyzed data from the survey. The focus group will allow us to get more insight into some of the key issues by getting direct input from stakeholders in discussion format.
- B. Sampling strategies: how can we ensure representative data
 - The group did not really talk about this much. But the goal should be to implement the survey in all major production areas of the state and try to ensure that the target audience is well represented in each region.
- C. Opportunities to implement survey
 - Yuma: Aug 26 pre-season workshop (about 100 attendees)_
 - Yuma Ag Summit, mid-March, 2010 (850 attendees)
 - Desert Ag Conference, May 2010
 - The group did not discuss other specific opportunities, but should identify these in the near future.