



**IPM Coordinating Committee
Maricopa Agricultural Center
March 21, 2013 – 10:00 am to 2:00 pm**

Membership:

Paul Baker (Entomology)	Stacey Bealmer (Yuma County)
Casey Butler (stakeholder)	Peter Ellsworth (Entomology, MAC)
Jim Farrar (Director, WIPMC)	Lin Evans (PCA, stakeholder)
George Frisvold (Ag Economics)	Dawn Gouge (Entomology, MAC)
Shawna Loper (Maricopa/Pinal/Pima Counties)	Ed Martin (ex-officio, CE)
Mike Matheron (Plant Sci, YAC)	Bill McCloskey (Plant Sciences)
Tom Montoya (PCA, stakeholder)	Ayman Mostafa (Maricopa/Pinal/Pima Counties)
John Palumbo (Entomology, YAC)	Jack Peterson (AZ Dept. of Ag.)
Barry Pryor (Plant Sci, AZ PDN)	Bob Roth (ex-officio, MAC)
Ursula Schuch (Plant Sciences)	Kai Umeda (Maricopa County)

Pending Members:

Department Head representative (TBD)

Guests:

Barry Tickes, Assistants in Extension: Marco Peña, Lydia Brown, Wayne Dixon

Meeting Notes

Extension IPM Competitive Grant – some background on the program was provide by Peter Ellsworth. Although this grant support infrastructure, the RFA requires that we cover in the proposal, what are our “next steps”? What are we trying to improve? How are we increasing capacity for delivery and evaluation of IPM programs?

History. 10th anniversary of the APMC! We anticipated from our beginnings that the EIPM program would eventually become competitive. Review of APMC org chart. Most of our EIPM funding goes into “orange bubbles”, assistants in extension, which are about 50% supported through this grant. APMC was funded \$175k / year for the past 3 year cycle; we have received an additional \$55k (plus ERE) from CALS each year, but that is not guaranteed moving forward. This investment leverages > \$1 million. When program went competitive we jumped from about \$100k / year to \$181 in the first year. This year, we will apply for \$250 / year, \$750 total for 3 years. Proposal due April 16. (April 10 to Sponsored Projects).

Potential focal areas we could apply for include diagnostics, but this is an area we are not strong in and may not be very competitive to capture funds. Last year, we employed Garret Hughes as a student who supported diagnostics in Wendy Moore’s lab. We no longer have a student in this position. The AZ Plant Diagnostic Network has an investment in diagnostics for regulation and quarantine issues. Wendy Moore from Entomology will be joining our meeting via Google+ at 11 am and we will further discuss our plan for how we will address diagnostic needs in our proposal. Carl Olsen, associate curator of the insect museum, is now ¼ time; Phil Jenkins, curator of the plant herbarium, has retired; Mary Olsen has reduced her time; Mike McClure, nematologist, is also retiring. We are losing capacity for diagnostics. How will we address these needs?

We are interested in all input we can get to write the best proposal we can. This is a focus session for that input. *Is there any way we can do things better?*

Review of major points from EIPM RFA:

- Demonstrate effective education efforts for IPM implementation and include plans for measurement of success.
- The program is now competitive. Available funds will be distributed among the highest ranked EIPM coordination proposals
- Not all applicants should expect to be funded. They will fund “up to” 52 proposals. They could receive up to 75 from eligible organizations.
- About 8.5 mil expected for this EIPM Coordination program. (Could be affected by sequestration.) *Update: The EIPM budget was cut 8% from expected levels.*
- Each proposal must have 3 elements
 - Coordination and administration
 - At least 1 primary emphasis area
 - Optional secondary emphasis areas

Reviewers for EIPM Program – Conflict of interest concerns make it difficult for this program to identify qualified, knowledgeable reviewers who do not have biases that would work against us. Peter solicited input on potential reviewers from this committee. (Handout) Homework: *please read the intangible characteristics listed on the handout and let Peter know if any of the names suggested should be dropped off the list.*

Budget: should be based on shared values. These are our Key Assumptions:

- Historically, we have been constrained by human capital and coordination
- Teams value the investments made by APMC in human assets...
- ...So much so, they are committed to sharing the fiscal burden of supporting them
- Conclusion: each AiE will be funded 50% through this program along with a small amount of operational funding.

Peter shared a DRAFT budget for comment (\$250k/year). We assume no additional support from CALS, but will request it (after our grant is submitted). Our budget assumes additional investment from MAC of about \$29k. 50% of Fournier and 3 AiEs. Also budgeted 25% of Ursula’s technician and 25% of Lucy Li (works with Dawn’s program). Modest travel & operation funds are included for Teams, Peter and AiEs.

Follow up budget discussion:

- Why maintain a web person since Theresa left? All she did was to help us maintain things on a part time basis. ACIS is old and inefficiently designed and there is a lot of work that could be done to re-design a modern website that would fit our needs.
- It should be a priority because it is related to communication.
- The college has a new “web team”; they developed the new plant sciences website and did a great job at a low price. Bill recommends working with them on this project.
- Should we maintain 25% funding for Tilak, who is a research technician (could raise concerns in the proposal)? It is up to the Leadership Teams to manage the resources of their group. The Community IPM LT needs to discuss this for their group.

Leadership Team Updates

- **Community IPM Team:** Bryan Stevens quit in July 2012. We have a search ongoing. Hope to have someone on board by July or sooner. This team focused on “School IPM Inside and Out” program; combining all their expertise to work with pilot schools in Phoenix area and Tucson to develop this systematic approach. The team did initial assessments in 4 schools, gave extension education programs at 2 or 3 of them. Also did City of Phoenix training. Ed noted that Monica Pastor is doing Ag Literacy with several schools: she may have contacts with additional schools. **What changes / enhancements does the team need?** Dawn sent a list that was mainly resource-driven.
- **Vegetable IPM Team.** Due to Marco, the team has delivered on its commitments. Have focused on bi-weekly Veg IPM Updates, which include research-based publications, represent IPM in regional and local meetings. We do pest diagnostics for veg industry. Interact with stakeholders formally and informally. Melon and Lettuce insect losses workshops collect data (that help us assess IPM programs). **What do we need?** Barry has been doing herbicide damage diagnostics, they will be expanding to include insecticide and fungicide diagnostics. They have a state-of-the-art facility. Barry has a specialty crops proposal pending. All of this is to support Extension needs for troubleshooting diagnostics: pesticide injury and residue testing. They don’t see it as a competition with a commercial lab. John: we will do this whether there is funding support through EIPM or not. They are establishing new tests and practices; Marco coordinates these efforts. There is a research component to this in developing the diagnostic techniques, but all of that is to support needs in extension. They have equipment needs and asked for 25% support for a technician that would work in that lab. Marco wants to develop publications from a lot of the information that the Veg team has developed over the past few years. They want to enhance their image database for insects and weeds. John’s post-doc is taking great photos. This is related to his interest in improving ACIS. Website redesign has to be mobile friendly. Marco: can we develop a distributed approach that would allow multiple people to enter information? Yes, in a database driven, modern website we would do this.
- **IPM Assessment. Recent activities and news:** (1) Developed a computer version of the cotton pest losses survey – still a work in progress, but we did implement at meetings in Dec; (2) Currently updating pesticide products and rates in pesticide use database; (3) Improved location data for programmatic mapping of data in pesticide use database; (4) Processed several years of PDF 1080 scans separating them and adding them to the database for quick lookups and error fixes; (5) recently obtained termite application data which Wayne has put into a database. This is our first non-ag pesticide data resource and we hope it will be helpful for IPM assessment, pesticide use trends, etc.
Needs: (1) Maintain 50% of Wayne’s position; (2) We need server support to address many of the issues the group has talked about with ACIS / web needs. That is a high priority for much of what we could do. There are multiple possible solutions: cheapest would be a virtual server through CALS, with unlimited bandwidth. This, plus other software licenses, etc. would run us about \$3,200/yr. (3) Audience response technology, more clickers, etc. \$2,100. (4) Ongoing web support funds (vice Theresa) important to maintain. (5) If we find the right web person, maybe they could also relieve some burden on Wayne for certain routine tasks: data entry and correction, etc.
- **Agronomic IPM Team:** Lydia is working on a field guide to natural enemies of arthropods. She has been working with Bill on glyphosate resistance. Bill & Lydia revised weed questions on the Cotton Pest Losses survey – good data for future

assessment. Submitted a WIPMC proposal with Ayman on developing thresholds for alfalfa weevil [*Update: not funded*]. Have worked on about 20 IPM Shorts. She worked with PCAs and growers this summer, getting demos out. (There will be meeting of the Agronomic / Cotton IPM Field Crops Leadership Team immediately following this meeting.) **Needs:** human assets are most important. Maybe an additional AiE dedicated to the weed resistance issues.

Overall, EIPM Program values:

- Networking – “great value in having a network of IPM programs”
- Stakeholder engagement – “important to program development...implementation...involvement” Team Leaders: think about key stakeholders to provide letters of support.
- Collaboration (multistate)...but no funds designated specifically for this
- Continuity of program (supports infrastructure)

Areas of Emphasis – From RFA (areas we expect to apply for shown in orange):

Primary COORDINATION Program Emphasis Areas (must include at least one – no funding cap within the \$300,000 per year application cap):

- **IPM Implementation for Agronomic Crops**
- IPM Implementation for **Animal Agriculture**
- IPM Implementation in **Communities*** (aka, IPM Training for **Consumers / Urban Environments**)
- **IPM Implementation for Specialty Crops**

**Our Community IPM team and programs do not fit well in the primary area. IPM Implementation for Communities does not address what our team does. (Focus is homeowners and retailers.)*

Secondary COORDINATION Program Emphasis Areas (may be included if appropriate – individually capped at \$50,000 each):

- IPM Coordination within **Conservation** Partnerships
- **IPM Support for Pest Diagnostic Facilities** (possible inclusion in our proposal)
- IPM Training and Implementation in **Housing** (*)
- IPM Education for **Pesticide** Applicators (*)
- IPM in **Public** Health (*)
- IPM on **Recreational** Lands (*)
- **IPM Training and Implementation in Schools**
- IPM Partnerships in **Wide-Area** Pest Monitoring and Reporting Systems

(*) These areas we are doing things in; but we would not be competitive in these areas compared to other states we would be compared to in the grant review process. We will incorporate the elements we need into our proposal into the areas where we are more competitive.

Should we explicitly apply for Diagnostics Area of Emphasis?

Wendy Moore, Entomology, updated us on current status of diagnostics: She is the new curator of the Insect Museum, Asst. professor of insect systematics. She has funding to renovate the facilities and the insect collection. Recently received an endowment to have a visiting systematist come to UA to work on specific taxonomic groups of insects each year. Carl Olsen will retire, but wants to stay on at 25%. He is willing to continue ID clinic. He has 36 years as a curator of the collections and has done insect diagnostics. She is concerned that they may not meet the demands for insect diagnostics as they have in the past. There are also needs for plant, nematode and plant pathology diagnostics that are being unmet. She has discussed with Paul Baker and Peter developing a more sophisticated approach to diagnostics: possibly building voucher collections of key pest insects with high-resolution photos in online database, which would be open to the public. This would reduce some of the demands for diagnostics, once established. There is a large demand from stakeholders, in agriculture and from homeowners – about 5,000 requests each year (emails, photographs, phone calls, specimens). We do not (so far) charge for these services.

Carl trains master gardeners on insect ID each year and will continue to do so. Gene is going to be in a new position that replaces Carl's position, bringing the collection up to modern standards (80%) & 20% Extension. In Extension role, he will oversee the development of voucher collections and putting database online, rather than directly dealing with the public. They are considering funding a graduate student with web skills and diagnostic skills to work with Carl to develop the online database and to help build voucher collections. She and Dawn Gouge mentor a student, Chris Gibbs, who may be a good candidate for this role, if funded through APMC. She has funding for Carl for 2 years. Views this as a period to transition between the old way of doing things and the new way.

AZ PDN met last week. ADA and APHIS are represented on that committee and understand the importance of good diagnostics and the economic impact it has on trade. We have discussed drafting a joint letter with the APMC, AZPDN, ADA and USDA APHIS, asking for college support for ongoing diagnostics across all areas (insects, plants, diseases, nematodes).

If we apply for this emphasis area, we are not at full functionality, but we are at an important transition point. We could apply for a modest amount in the secondary areas of emphasis, rather than the full \$20k. *Update: we did not apply for this area of emphasis.*

The RFA does not allow assistantship support for grad students, according to IPM Program leader on webinar. Peter is unsure because it is not explicit in the RFA. We will get clarification on this point before we submit the proposal.

Grant PIs. From National Program Leader: it makes it difficult for them to identify grant reviewers because there are more conflicts of interest. Just Peter and AI will be PIs this time.

More from the RFA

- “Applicants must recognize...this program does not directly create knowledge through foundational research” In other words, it needs to emphasize the education outreach aspect, not research aspect.
- It has to be “Transdisciplinary”
 - Not a synonym for interdisciplinary or multidisciplinary
 - Addresses strategic approaches that spans boundaries of many disciplines in a holistic or systems approach

- Must also consider the human element of social and economic issues in decision making, expanding beyond what might ordinarily be considered in a scientific study.
- Considers effects of one action on another as dynamic.
- Collaboration is encouraged in every emphasis area. (In previous cycle there was a separate funding line for collaboration. Now gone.) Partnership with stakeholders: we need letters of support that document these relationships.
- Collaboration beyond state borders is important. Identify one key partnership for each Area of Emphasis and get a letter of support. Examples we have of multistate collaborations: OSU, WIPMC, PRiME, Alfalfa IPM, Crop Pest Losses, School IPM, Veg IPM, Cotton IPM, IPM science. Please help us identify these relationships.
- “Continuity of IPM extension programs from one year to the next is a broad concern.” We will highlight our successful establishment of new infrastructure (AiEs, leadership teams, IPM-CC). We also have commitments to assessment and long term monitoring of IPM impacts (APMC Pesticide Use database & Crop Pest Losses).
- Leverage is appreciated, but not required. “It is not considered in the evaluation of applications”.

Ideas and Comments:

- IPM Assessment: think about how we can broaden our assessment data beyond what we have in the 1080 pesticide use database.
- Has there been discussion with ADA about evaluating the 1080 form itself? The problem is that any of those things require a change in rules.

Concluding Comments:

- Homework assignment regarding potential reviewers: please respond by April 15.
- Stakeholder letters of support for our proposal: please present us ideas, contacts by next week.