SUMMARY | PEST MANAGEMENT ADVISORY COMMITTEE GRANT REVIEW MEETING
CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION
February 11, 2016
Produced by the Center for Collaborative Policy, CSU Sacramento

Contents

1. Attendance

Pest Management Advisory Committee (PMAC) Members

1. Anne Katten, California Rural Legal Assistance Foundation
2. Caroline Cox, Center for Environmental Health
3. Jenny Broome, Driscoll Strawberry Associates, Inc.
4. Jim Farrar, UC Statewide Integrated Pest Management Program
5. John Steggall, California Department of Food and Agriculture (CDFA)
6. Ken Giles, UC Davis Department of Biological & Ag Engineering
7. Kevin Wright, California Agricultural Commissioners and Sealers Association
8. Laura Brown, California Citrus Mutual
9. Marcia Gibbs, Sustainable Cotton Project
10. Rachel Kubiak, Western Plant Health Association
11. Rebecca Sisco, UC Davis, Western Region IR4 Program
12. Terry Gage, California Agricultural Aircraft Association
13. Avinash Kar, Natural Resources Defense Council
14. William Thomas, California Cattlemen's Association

California Department of Pesticide Regulation (DPR)

15. Brian Leahy, Director
16. Joe Damiano
17. Mark Robertson
18. Doug Downie
19. Christine Uhrik

Facilitation Support

20. Tania Carlone, Center for Collaborative Policy, CSUS
21. Stephanie Horii, Center for Collaborative Policy, CSUS

2. Background

Introductions and Chair's opening comments

Brian Leahy, Director of the Department of Pesticide Regulation (DPR), welcomed everyone and thanked them for joining the meeting. He introduced a new pending Pest Management Advisory Committee (PMAC) member, Jim Farrar with UC Statewide Integrated Pest Management (IPM) Program.

DPR's Pest Management Research Grant Program aims to stimulate innovation and progress in California. The 2016-2017 grant program has $1.1 million available for funding proposals. The balance of funds will be awarded competitively to projects focusing on fumigants or other high-risk pesticides; however, $600,000 is legislatively mandated to fund projects that address IPM solutions to agricultural field fumigants. DPR expects it will fund two to four projects.

Background on DPR's Pest Management Research Grant Program and Basic Procedures

Dr. Doug Downie provided an overview of the grant application process and the fourteen proposals.

Key grant program milestones are as follows:

- Concept proposals were received by October 1, 2015.
- Full proposals were received by December 16, 2015.
- Following the review period, grant projects will be selected March 21, 2016.
- Project start date is July 1, 2016.

DPR selected 14 project proposals for PMAC members' review. The following table summarizes the 14 proposals:

2016/2017 Research Grant Summary of Submitted Proposals		
Proposal Short and Full Title	**Principle Investigator**	**Budget**
Tripp / Marina del Ray	**Michael Tripp**,	$149,461
Choe / Bed Bugs Reducing risks associated with bed bug management through early detection and maximization of insecticide efficacy	**Dong Hwan Choe** UC Riverside	$250,937
Espino / Tadpole Shrimp	**Luis Espino**	$220,349
Joseph / Cabbage Maggot Alternate approaches to manage cabbage maggot in the Central Coast of California	**Shimat Joseph** UCCE, Monterey	$403,090
Dudley - Tamarisk Biocontrol	**Thomas Dudley**	$139,120
***Westphal - Anaerobic Fermenters** Suppression of plant-parasitic nematodes with digestates from anaerobic fermenters	**Andreas Westphal** UC Riverside	$243,196

2016/2017 Research Grant Summary of Submitted Proposals		
Proposal Short and Full Title	**Principle Investigator**	**Budget**
***Ploeg/Becker - Fumigant Alternatives in Carrot**	**Anton Ploeg / Jörn Becker**	$494,932
***Browne - ASD in Almond** Optimizing anaerobic soil disinfestation for management of Prunus replant problems	**Greg Browne** USDA	$230,000
Michailides - Bot Canker in Walnuts Infection events used to efficient and sustainable spray programs to manage Botryosphaeria canker and blight of walnuts	**Themis Michailides** UC-ANR	$274,943
***Lewis/Hodson - Nematodes in Carrots** Rapid detection and damage threshold analysis – decision making tools for nematode management in carrots	**Edwin Lewis / Amanda Hodson** UC Davis	$236,845
Blecker - Maintenance Gardeners Identify impediments and develop strategies to expand numbers of licensed maintenance gardeners and landscape professionals	**Lisa Blecker** UC-IPM	$250,813
***Aegerter/Stoddard - Grafted Tomatoes** Further research on the potential for soil fumigant use reduction in California using grafted tomatoes	**Brenner Aegerter / Scott Stoddard** UC Davis	$106,332
Godfrey - Alfalfa Weevil Improved management of alfalfa weevil in California alfalfa to facilitate water quality protection and sustainability	**Larry Godfrey** UC Davis	$280,646
Sutherland - Termite Bait Stations Demonstration of bait station system efficacy for reduced-risk subterranean termite management in California	**Andrew Sutherland** **UC-ANR**	$138,369
**** Project is eligible for the $600,000 for IPM alternatives to agricultural field fumigants.***		

Dr. Downie explained that the objective for this meeting was for the PMAC to recommend which project proposals DPR should consider for possible Pest Management Research Grant funding.

Dr. Downie reminded the PMAC that committee members are not eligible to receive funds through a project unless they recuse themselves from the grant review process. However, organizations with which PMAC members are generally associated are eligible for funding. In addition, only PMAC members who submitted review scores prior to the meeting may vote and rank during the discussion. Several PMAC members asked for clarification on whether the recusal policy calls for PMAC members to recuse themselves from the grant review process for that project, or from the entire review process. Dr. Downie said DPR's interpretation was that the PMAC member should recuse him/herself from the entire review process, but DPR would consult with its legal counsel to confirm.

A PMAC member commented that it would have been helpful to have copies of their review comments at the meeting for reference.

A couple PMAC members also asked for clarification on the $1.1 million allocation. DPR staff explained the $600,000 is legislatively mandated to fund projects focused on agricultural field fumigant alternatives. The remaining $500,000 can go towards other fumigant-focused projects

and/or high-risk pesticides-focused projects. Per PMAC request, DPR identified the 5 project proposals it deemed as fumigant-focused: proposals from Westphal, Ploeg/Becker, Browne, Lewis/Hodson, and Aegerter/Stoddard (Identified with an asterisk [*] in the projects summary table above). PMAC members requested DPR staff provide more detailed and clear instructions for how PMAC should rank projects going forward.

Dr. Downie introduced the facilitator, Ms. Tania Carlone, from the Center for Collaborative Policy, California State University, Sacramento. Ms. Carlone reviewed the meeting goals:

- Identify the proposals PMAC considers fundable
- Rank those proposals in order of preference
- Record merits and concerns for all proposals
- Provide Grant Program feedback

3. Rankings Based on Reviewers' Scoring

Prior to the meeting, 13 PMAC members reviewed and scored the 14 proposals. The numeric scores were converted to ranks, where 1 was the most highly regarded proposal and 14 was the least, as presented in the following chart:

2016/2017 Research Grant Review Summary by Reviewer, Initial Review																		
Project	**Rank**	**R1**	**R2**	**R3**	**R4**	**R5**	**R6**	**R7**	**R8**	**R9**	**R10**	**R11**	**R12**	**R13**	**Avg**	**High**	**Low**	**$**
Browne - ASD in almond	**1**	1	3	1.5	3	11.5	2	3	1.5	2	4	12	1	2	**3.7**	1	12	$230,000
Godfrey - alfalfa weevil	**2**	7	1	6	1.5	7	4.5	1	5.5	11	5	1	6	7	**4.9**	1	11	$280,646
Lewis/Hodson - nematodes in	**3**	6	8.5	7	6	3.5	1	2	3.5	7	8	2.5	5	6	**5.1**	1	9	$236,845
Aegerter/Stoddard - grafted tomatoes	**4**	2.5	12	4	11	5.5	7	4	1.5	3.5	11.5	4	4	2	**5.6**	2	12	$106,332
Westphal - anaerobic fermenters	**5**	4.5	6	3	4.5	1	9	6	9	12	9	10.5	2	4.5	**6.2**	1	12	$243,196
Dudley - tamarisk biocontrol	**6**	2.5	7	1.5	#N/A	9	11.5	9	5.5	14	10	8	3	2	**6.9**	2	14	$139,120
Sutherland - termite bait stations	**7**	4.5	11	5	1.5	3.5	11.5	12.5	8	10	13	2.5	7	4.5	**7.3**	2	13	$138,369
Espino - tadpole shrimp	**8**	13	2	14	7	8	4.5	6	3.5	3.5	11.5	5.5	10	13	**7.8**	2	14	$220,349
Ploeg/Becker - fumigant alts in	**9**	12	5	12	8	2	8	8	10.5	1	3	10.5	13	11	**8.0**	1	13	$494,932
Joseph - cabbage maggot	**10**	10	4	13	#N/A	13.5	6	11	7	8.5	2	5.5	12	10	**8.5**	2	13	$403,090
Michailides - Bot canker in walnuts	**11**	9	8.5	11	11	5.5	14	10	12	5	1	8	11	9	**8.8**	1	14	$274,943
Choe - bedbugs	**12**	8	14	8	4.5	13.5	10	12.5	13	6	6.5	8	8	8	**9.2**	5	14	$250,937
Blecker - maintenance gardeners	**13**	14	10	10	11	11.5	3	14	10.5	8.5	6.5	14	14	14	**10.8**	3	14	$250,813
Tripp - Marina del Ray	**14**	11	13	9	9	10	13	6	14	13	14	13	9	12	**11.2**	6	14	$149,461

The following PMAC members contributed initial review scores: Anne Katten, Bill Thomas, Caroline Cox, Cliff Ohmart, John Steggall, Kevin Wright, Laura Brown, Marcia Gibbs, Paul Towers, Rebecca Sisco, Robert Ehn, Terry Gage, and Veena Singla.

4. Discussion of Proposals

Due to the high number of proposals, the initial discussion focused on which proposals the PMAC members felt were less fundable compared to the other proposals. The group agreed to remove two proposals: Tripp – Marina del Rey and Blecker – Maintenance Gardeners. However, PMAC members discussed the merits and concerns for all 14 projects proposals. Below is a summary of PMAC members' comments for each of the 14 proposals. Comments reflect

individual PMAC member observations, not consensus opinions. Thus, merits and concerns may occasionally appear to be contradictory.

[Removed from Meeting Poll] Tripp - Marina del Rey: Hydrodynamic fate and transport modeling for dissolved copper mitigation strategies in the Marina del Rey Harbor

Concerns

- It is unclear how the study would isolate copper components in the treatments from the control grids to ensure no cross-contamination.
- Lacks data collection to support model results.

Merits

- Conceptual design of the model is good.
- Dissolved copper is a major problem and warrants further investigation.

[Removed from Meeting Poll] Blecker - Maintenance Gardeners: Identify impediments and develop strategies to expand numbers of licensed maintenance gardeners and landscape professionals

Concerns

- The methodology is not sufficiently robust to elicit the necessary feedback (because undocumented workers may fear being deported) in a systematic and research-based manner (e.g., identify a target number of interviews and include a human subjects protocol).
- Timeline did not seem feasible. It should have had a more appropriate, step-wise approach.
- More suitable for the Pest Management Alliance Grant program (Alliance Grant).

Merits

- Unlicensed maintenance gardeners and landscape professionals is a major issue and needs to be addressed.

1. Browne - ASD in Almond: Optimizing anaerobic soil disinfestation for management of Prunus replant problems

Concerns

- Nematodes are a long-term problem; this research should continue past the proposed short term studies.
- The rationale for the sequence of events was unclear. One would expect the micro-trials to inform the orchard trials. The purpose and desired outcome for outreach efforts was also unclear.

Merits

- This project focuses on tree crops where information is lacking; past fumigant work focused primarily on strawberries.

- The project contains multiple phases (e.g., lab work, field tests, and trial plots), leveraging its technical strengths.
- The principal investigators conducted substantial preemptive work to garner support from researchers and the industry.
- The project has a large applied research and economic feasibility component.
- The technique may work better in the Central Valley as opposed to the Central Coast.
- The budget overhead was much lower than other proposals.

2. Godfrey - Alfalfa Weevil: Improved management of alfalfa weevil in California alfalfa to facilitate water quality protection and sustainability

Concerns

- The proposal does not show a lot of industry involvement or support, which leads to questionable applicability.
- The project seems to call for a large staff to mobilize quickly if funded.
- It would be interesting to analyze the yield and quality of the crop after the various treatment applications.
- Malathion treatment for aphid control may potentially complicate study results.

Merits

- The approach is multifaceted and considers multiple benefits (e.g., explores the water quality impacts).
- The project has a clear focus on high-risk pesticides (e.g., organophosphates and pyrethroids).
- It is prudent to establish economic thresholds for IPM methods. If the study demonstrates the IPM economic benefits, the industry will likely readily adopt these new methods.
- The project targets a very important crop that is data-poor. In the past, the industry has not offered much support for quality research on IPM approaches.

Requested Clarification

- The proposal was unclear on the size of the experimental blocks.

3. Lewis/Hodson - Nematodes in Carrots: Rapid detection and damage threshold analysis – decision making tools for nematode management in carrots

Concerns

- The step from laboratory treatments (one plant per plot) to field studies seems premature. Perhaps this warrants additional research to create a stronger rationale for transferring laboratory data to field applications (e.g., different soil compositions in laboratory trials).
- Farmers may still fumigate for other pests (even if they do not detect nematodes); it would be interesting to analyze the treatment effect on fungal pathogens and weed seeds.

- The geospatial applicability of this information is questionable. One nematode detection challenge is that their populations can be highly localized and may call for extensive soils samples before detection.

Merits

- The project could aid in creating a tool to lower fumigant use in carrots.
- The current common method to identify nematodes is extremely laborious and therefore, nematode studies are rare. This study could provide a welcomed alternative detection method and spur more future nematode research.
- The project fits the Grant Program's priorities well.
- Conducting successful IPM strategies relies heavily on accurately identifying your pest populations.
- This study could benefit other agricultural industries, because carrots are often used as a rotational crop.
- Using molecular tools to characterize soils and detect difficult pests like nematodes could greatly help agricultural businesses comply with CDFA nematode regulations.

4. Aegerter/Stoddard - Grafted Tomatoes: Further research on the potential for soil fumigant use reduction in California using grafted tomatoes

Concerns

- Perhaps the industry should be funding this study since it has done so in the past for this research.
- Seed companies should be involved.
- The methodology seemed to follow a trial and error approach; the research approach would assumingly be more informed than this.
- The proposal was vague and omitted methodology details.
- The project does not place much emphasis on yield, which is a major selling point for growers. Perhaps the researchers could collect data comparisons on yield.

Merits

- This project offers a potential for a fairly quick solution to reduce fumigant use on tomatoes.
- The proposed budget is reasonable, probably because it is leveraging existing work.
- The prospects of reduced health risks from reduced fumigant use is very important and beneficial to the industry.
- The study offers a novel approach.

5. Westphal - Anaerobic Fermenters: Suppression of plant-parasitic nematodes with digestates from anaerobic fermenters

Concerns

- This method has been explored in the past but was limited by the high cost.
- The proposal's stakeholder support was low (only one stakeholder support letter). If the study lacks support from the traditional industry players, they may perceive the approach too risky.
- This study may not fit with the Grant Program priorities because it does not directly apply to production agriculture.
- Is there sufficient digestate readily and consistently available to make this approach economically feasible?
- The methods used in Germany (e.g., using rice maize silage) may not work in California.

Merits

- PMAC should support innovative approaches, even if there are risks.
- The project has a robust study design to transfer lab data to the field.
- The project could lead to improved soil health and reduced fumigation.
- The study builds upon previous work in Germany, which offers more support of its feasibility.
- Dairy waste and nematode control are both major problems in California.
- The project team is multidisciplinary.

6. Dudley - Tamarisk Biocontrol: Biocontrol as an alternative for invasive tamarisk management in southern California

Concerns

- Perhaps this project suits the Alliance Grant program better. The technology already exists, the method just needs to be implemented.
- The tamarisk beetle will likely spread and evolve on its own.
- Expediting the tamarisk beetle population range risks litigation if there is habitat destruction or negative impacts on endangered species.
- Perhaps implement a local example in California to determine if the biocontrol method would succeed in the rest of California.

Merits

- This project reapplied at an opportune time. Tamarisk is an ongoing issue in the wetlands.
- Tamarisk causes major economic and environmental damage, such using a lot of water. This current drought emphasizes the urgency of controlling tamarisk.
- Funding request is reasonable.
- The study could help expedite tamarisk beetle populations into targeted areas.

- Tamarisk is a persistent species and a major problem throughout California, and people use a number of chemicals to try to get rid of it. This biocontrol method could reduce these pesticide applications.
- The biocontrol success in Colorado indicates it might succeed in California.
- The applicant answered PMAC's questions; if the PMAC feels the project applies more to the Alliance Grant program, it should have provided that guidance last year.

Requested Clarification

- Some ecological questions remain about the involved species (e.g., does the endangered willow flycatcher nest in other plant species and possibly will not be significantly affected by the tamarisk beetle control?).
- Provide the geographic scope of the problem.

7. Sutherland - Termite Bait Stations: Demonstration of bait station system efficacy for reduced-risk subterranean termite management in California

Concerns

- A challenge with any bait station approach is human impatience. If people do not see immediate results, they are less incentivized to use this approach. This calls for public outreach and education on the benefits of bait stations.
- Timeline seems overly-ambitious.
- The project appears to be a test of an existing manufactured product, warranting industry funding rather than the Grant Program. Some PMAC members believe the project suits the alliance program better; however, the proposal already went through the alliance program and was told it was more of a research grant. Therefore, it might not fit within the scope of the Grants Program altogether.
- The proposal noted licensing issues as a challenge; that suggests a need for an administrative solution rather than research funding.

Merits

- Bait stations may offer a logical and safer alternative to spraying liquids around a house.
- If the bait stations are efficacious, people will likely readily purchase them.
- The proposal demonstrates it has the collaborative support among the cooperating entities.
- The project offers a unique IPM strategy.
- The current liquid termiticides include pyrethroids and neonicotinoids, which can pose a high health risk in urban areas in terms of water contamination.

8. Espino - Tadpole Shrimp: Developing IPM approaches to reduce the environmental risks of pyrethroid use for control of tadpole shrimp in rice

Concerns

- Five hypotheses may prove to be overly ambitious, and the practical application of the resulting information is unclear.

- The project seemed to promote rice burning as an alternative to pesticide, which has its own health risk hazards. This does not seem like an ideal alternative.

Merits

- People use a lot of pesticides, such as pyrethroids, in an attempt to control the tadpole shrimp problem. This project provides an alternative to the high risk pyrethroids, which are also hard to detect in water.
- Study is ambitious with five hypotheses in an attempt to collect a lot of information on the life cycle of this species. If that information can pinpoint more effective timing for pesticide applications, that pesticide reduction may justify funding the research.
- Satisfies the IPM criteria well.

Clarification

- What low-risk pesticides does the study propose using?

9. Ploeg/Becker - Fumigant Alternatives in Carrot: IPM alternatives to soil fumigants in California carrot production

Concerns

- The study's scope seems too small to justify the requested funds. The 'study utility per dollar' seems to be higher for the other carrot proposal.
- Exploring the efficacy of alternative chemical nematicides may not be a proper use of the Grant Program funds. Examining different chemicals' efficiency should be conducted by the manufacturers.

Merits

- This is an important problem that warrants attention.
- The project has a large multidisciplinary team, and the proposal supports stakeholder involvement.

10. Joseph / Cabbage Maggot: Alternate approaches to manage cabbage maggot in the Central Coast of California

Concerns

- The cost for this project is high. The benefits of the study may not justify the cost.
- The project does not appear to offer innovative approaches for developing sustainable practices.
- The proposal lists several objectives and requires high effort. Perhaps the proposal could be divided into two projects.

Merits

- Cabbage maggot has been a long-standing and intractable problem.
- The study adopts multifaceted approaches to identify IPM alternatives to the high pesticide use.
- The proposal appears to have good support from various stakeholders.

- The substantial amount of proposed work seems to justify the requested budget.

Requested Clarification

- Identify the alternative pesticides involved in the study.

11. Michailides - Bot Canker in Walnuts: Infection events used to efficient and sustainable spray programs to manage Botryosphaeria canker (bot canker) and blight of walnuts

Concerns

- The proposal should have emphasized and explained the magnitude of the problem more clearly to present the rationale for the study.
- The project does not focus on high-risk pesticides; therefore, may not align with the Grant Program's priorities.
- The project goals and expected deliverables did not seem to rationalize the cost.
- The proposal described the problem with little data to support its statements. It seemed there was not sufficient outreach with the involved parties (e.g., pest control advisors).

Merits

- The study builds on previous IPM research.
- Bot canker affects several crops besides walnuts. With future climate change-induced heat stress, negative impacts from bot canker will likely increase.

Requested Clarification

- Provide description on State Water Resources Control Board's involvement and role with the project.

12. Choe - Bed Bugs: Reducing risks associated with bed bug management through early detection and maximization of insecticide efficacy

Concerns

- The proposal did not sufficiently describe the economic implications of early detection techniques (e.g., cost-effectiveness and feasibility for mass production).

Merits

- Pesticide application has a high likelihood of human exposure.
- Early detection monitoring techniques would be beneficial.

5. Revised Rankings and Summary Recommendations

Based on the discussion, PMAC members who had participated in the initial review re-ranked the remaining 12 proposals.

A PMAC member observed that the top six projects amount to more than the $1.1 million allotted (four fumigant-focused projects amount to approximately $816,000, and the other two projects amount to approximately $420,000). He posed the question to the group whether a project in the bottom six warranted displacing one of the top six to optimize allocation of the

$1.1 million. A few PMAC members suggested the group discuss this issue after individuals re-rank the projects.

Re-ranking results are shown in the table below:

2016/2017 Research Grant Review Summary by Reviewer, Meeting Review																	
Project	**Rank**	**R1**	**R2**	**R3**	**R4**	**R5**	**R6**	**R7**	**R8**	**R9**	**R10**	**R11**	**R12**	**Avg**	**High**	**Low**	**$**
Browne - ASD in almond	**1**	1	1	4	1	2	1	1	1	1	1	3	1	**1.5**	1	4	$230,000
Godfrey - alfalfa weevil	**2**	2	4	1	2	1	2	7	6	6	3	1	4	**3.3**	1	7	$280,646
Lewis/Hodson - nematodes in	**3**	3	3	2	3	6	3	4	5	5	6	2	3	**3.8**	2	6	$236,845
Aegerter/Stoddard - grafted tomatoes	**4**	4	2	3	5	7	6	3	4	4	2	4	5	**4.1**	2	7	$106,332
Westphal - anaerobic fermenters	**5**	5	6	7	7	11	7	2	2	3	4	7	2	**5.3**	2	11	$243,196
Dudley - tamarisk biocontrol	**6**	6	5	9	6	4	8	5	3	2	5	6	9	**5.7**	2	9	$139,120
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Sutherland - termite bait stations	**9**	7	8	10	12	12	10	9	7	7	7	10	8	**8.9**	7	12	$138,369
Joseph - cabbage maggot	**9**	10	7	11	10	3	4	11	11	12	9	9	10	**8.9**	3	12	$403,090
Michailides - Bot canker in walnuts	**10**	11	12	6	11	8	12	6	10	9	11	8	7	**9.3**	6	12	$274,943
Ploeg/Becker - fumigant alts in	**11**	9	10	8	9	9	9	8	12	10	12	11	9	**9.7**	8	12	$494,932
Choe - bedbugs	**12**	12	11	12	8	10	11	12	8	8	8	12	11	**10.3**	8	12	$250,937
Blecker - maintenance gardeners	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$250,813
Tripp - Marina del Ray	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$149,461

PMAC members reflected that the re-rankings remained very similar to the initial rankings and did not have additional concerns or comments on the projects.

6. Grant Program Process Feedback

PMAC members were invited to provide feedback to DPR on the Grant Program review process. The following summarizes suggestions for improvements:

- Provide PMAC reviewers with clear directions/guidelines for reviewing proposals.
- Include reviewers' ratings and comments in the meeting packet prior to the meeting.
- Send e-mail reminders one week prior to a meeting and proposal review deadlines.
- Provide pitchers of water at future meetings.
- Send an e-mail response confirming DPR received a PMAC member's proposal review.
- Increase the selection criteria standards for proposals (and offer clear guidance to applicants on the standards). 7-9 proposals is a manageable number of proposals for PMAC to review.
    - If DPR receives a high number of proposals, consider online methods to gather PMAC members' input to taper down the number of proposals that progress to the official PMAC review. This helps maintain transparency, and PMAC members have the opportunity to see the full range of applicants' proposals.
- Offer applicants more guidance on what is a realistic budget.
- Provide clarification on the PMAC review recusal policy in regards to how close does someone need to be to a project to trigger recusal. Consider the reality that the IPM community is fairly small.

7. Closing Remarks

Mr. Leahy concluded the proposal review discussion by thanking PMAC members for reviewing and commenting on the proposals. Their recommendations provide invaluable input for DPR's proposal review.

Upcoming PMAC Meeting

- Pest Management Alliance Grant Review Meeting - May 12, 2016
    - Proposal reviews due by May 9, 2016 at 9:00 p.m.