2016-2017 Pest Management Research Grant Evaluation

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Outline

- Research Grant Funding Priorities
- Critical dates
- The proposals
- Scores and discussion process

The Nitty Gritty – Funding Priorities

- $1.1 million dollars available
- By legislative mandate $600,000 must fund projects that address IPM solutions to agricultural field fumigants.
- The balance of funds will be awarded competitively to projects focusing on fumigants or other high-risk pesticides.
- DPR will consider proposals requesting $50,000 to $500,000.
- DPR expects to fund two to four projects.

Critical grant program dates

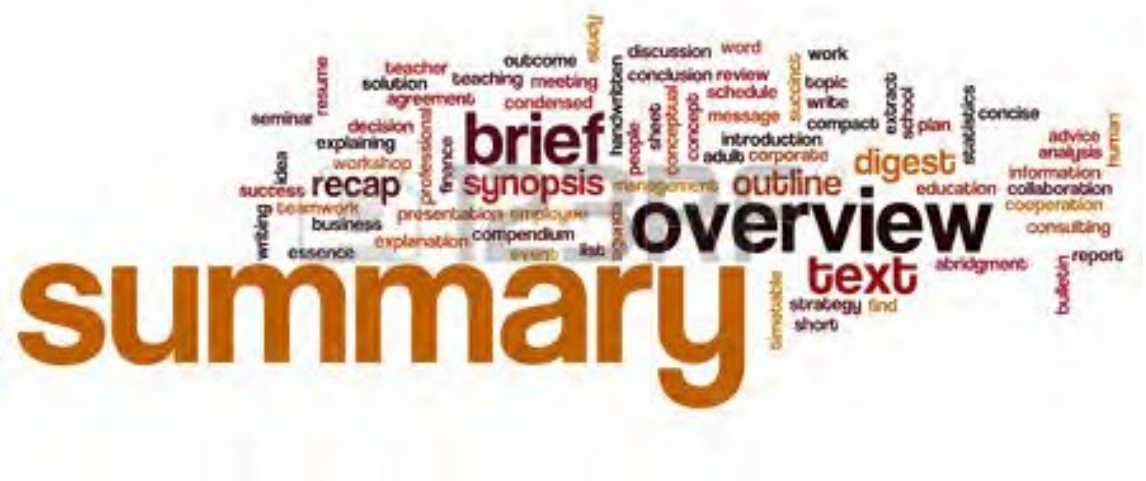
- 18 concepts were received October 1, 2015
- Applicants invited to submit proposals October 22, 2015
- 14 proposals were received December 16, 2015
- Grants to be awarded, March 21, 2016
- Project start date, July 1, 2016

Proposals reviewed

14 proposals

- 5 ag fumigant
- 4 ag non-fumigant
- 1 wildland
- 4 urban

Brief summary of proposals



Hydrodynamic Fate and Transport Modeling for Dissolved Copper Mitigation Strategies in the Marina del Rey Harbor

PI: Michael Tripp
Organization: County of Los Angeles
Amount Requested: $149,461

Develop a two-dimensional hydrodynamic fate and transport model of Marina del Rey Harbor to evaluate mitigation strategies for elevated dissolved copper levels in the water column.

Short title: Tripp / Marina del Rey

Reducing risks associated with bed bug management through early detection and maximization of insecticide efficacy

PI: Dong Hwan Choe
Organization: UC, Riverside
Amount Requested: $250,937

To reduce risks associated with repeated applications of insecticides:

- Development of an inexpensive and effective bed bug monitor that can be easily installed and maintained.
- Study the effect of fecal accumulations found in harborages on residual efficacy of insecticides targeting bed bugs.

Short title: Choe / Bed bugs

Developing IPM approaches to reduce the environmental risks of pyrethroid use for control of tadpole shrimp in rice

PI: Luis Espino
Organization: UCCE, Colusa
Amount Requested: $220,349

Reduce pyrethroid use in rice to control the tadpole shrimp (TPS) by developing IPM tactics for monitoring and managing TPS populations and identifying low-risk pesticide alternatives.

Short title: Espino / Tadpole shrimp

Alternate Approaches to Manage Cabbage Maggot in the Central Coast of California

PI: Shimat Joseph
Organization: UCCE, Monterey
Amount Requested: $403,090

Investigate IPM tactics to manage cabbage maggot (*Delia radicum*) in the Central Coast; survey for biological control agents; investigate the utility of alternate insecticide delivery methods; investigate ovicidal effects of commonly used insecticides and non-target effects of insecticides.

Short title: Joseph / Cabbage maggot

Biocontrol as an Alternative for Invasive Tamarisk Management in Southern California

PI: Thomas Dudley
Organization: UC, Santa Barbara
Amount Requested: $139,120

Assess the process of tamarisk beetle (*Diorhabda carinulata*) colonization, and feasibility for re-distribution, to achieve benefits of invasive tamarisk biocontrol in southern California, while minimizing defoliation risk to sensitive species.

Short title: Dudley / Tamarisk biocontrol

Suppression of plant-parasitic nematodes with digestates from anaerobic fermenters

PI: Andreas Westphal
Organization: UC, Riverside
Amount Requested: $243,196

Determine if effluents from anaerobic digestion of animal manures and food wastes can be implemented in CA high value crops to develop alternative soil treatments to improve sustainability and to diminish the environmental impact of agricultural production.

Short title: Westphal / Anaerobic fermenters

IPM alternatives to soil fumigants in California carrot production

PI: Anton Ploeg **/** Jörn Becker
Organization: UC, Riverside
Amount Requested: $494,932

Evaluate an alternative management program for carrot consisting of rotation with root knot nematode resistant vegetable crops, novel non-fumigant nematicides, and Pythium-specific fungicides to develop an economically and ecologically advantageous alternative to soil fumigation for California carrot production.

Short title: Ploeg/Becker
Fumigant alternatives in carrot

Optimizing anaerobic soil disinfestation for management of Prunus replant problems

PI: Greg Browne
Organization: USDA-ARS
Amount Requested: $230,000

Optimize anaerobic soil disinfestation (ASD) for management of Prunus replant disease and plant parasitic nematodes on almond and stone fruits in order to facilitate commercial adoption of ASD for management of almond replant problems.

Short title: Browne / ASD in almond

Infection Events Used for Efficient and Sustainable Spray Programs to Manage Botryosphaeria Canker and Blight of Walnuts

PI: Themis Michailides
Organization: UC-ANR
Amount Requested: $274,943

Investigate disease monitoring methods and infection events of Botryosphaeria canker and blight of walnut to develop a sustainable and efficient spray program during the season (bloom to postharvest) and avoid unnecessary sprays.

Short title: Michailides
Bot canker in walnuts

Rapid detection and damage threshold analysis - decision making tools for nematode management in carrots

PI: Edwin Lewis / Amanda Hodson
Organization: UC, Davis
Amount Requested: $236,845

Enhance integrated pest management in carrots for root knot nematodes by developing accurate nematode monitoring and damage thresholds.

Short title: Lewis/Hodson
Nematodes in carrots

Identify Impediments and Develop Strategies to Expand Numbers of Licensed Maintenance Gardeners and Landscape Professionals

PI: Lisa Blecker
Organization: UC-IPM
Amount Requested: $250,813

- Develop strategies that can assist in reducing environmental and human health risks associated with "bad actor" pesticide active ingredients used by maintenance gardeners and landscape professionals.
- Identify gaps in knowledge, impediments to education and licensing, and incentives to become licensed.

Short title: Blecker / Maintenance gardeners

Further research on the potential for soil fumigant use reduction in CA using grafted tomatoes

PI: Brenna Aegerter / Scott Stoddard
Organization: UC, Davis
Amount Requested: $106,332

Evaluate the performance of grafted tomatoes to better understand their potential for commercial California growers.

Short title: Aegerter/Stoddard
Grafted tomatoes

Improved Management of Alfalfa Weevil in California Alfalfa to Facilitate Water Quality Protection and Sustainability

PI: Larry Godfrey
Organization: UC, Davis
Amount Requested: $280,646

- Improve integrated pest management of alfalfa weevil pests by developing refined and usable treatment thresholds, a novel biological control method, and bioinsecticides.
- Additional studies will be conducted to investigate the impacts of recently adopted and impending genetic modifications to the alfalfa plant on alfalfa weevil survival and biology.

Short title: Godfrey / Alfalfa weevil

Demonstration of bait station system efficacy for reduced-risk subterranean termite management in California

PI: Andrew Sutherland
Organization: UC-ANR
Amount Requested: $138,369

- Evaluate the efficacy of registered bait station systems for subterranean termite management.
- Demonstrate the use of three registered bait station systems to eliminate colonies of western subterranean termites and protect single-family homes from termite infestation in California.

Short title: Sutherland / Termite bait stations

Todays Goals:

- Identify the proposals PMAC feels are fundable.
- Rank those proposals in order of preference.
- Record strengths and concerns for all proposals.
- Grant Program feedback: https://docs.google.com/forms/d/1iWakoGWhU12alfijqmdznsQtuIEAhihkR2hVO2Dggb4/viewform

Recusal:

- PMAC members are not eligible to receive funds through a project unless they recuse themselves from the grant review process.
- Organizations with which the committee members are associated are eligible for funding.

Folder Contents:

- Agenda
- Ground Rules
- PMAC Score totals
- Presentation
- Proposal Abstracts

Tania Carlone, Associate Facilitator, CSUS Center for Collaborative Policy
Stephanie Horii, Assistant Facilitator, CSUS Center for Collaborative Policy

Now is the time for questions….

Scores

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 -	**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	**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	**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 carrots	**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	**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