Fostering a Network of Partnerships to Address Pest Management Issues in Arizona


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University of Arizona
Maricopa Agricultural Center
Integrated Pest Management

“A long-standing, science-based, decision-making process that identifies and reduces risks from pests (insects, weeds, pathogens, vertebrates) and pest management related strategies”

– Pest Biology
– Environmental information
– Technology
– Reduces Risk: economics, human health, and the environment

-- USDA: The IPM Roadmap
3.89 Million Dollars in Pest Management Center Monies

USDA IPM Program

4 Regional Centers

$972,000 in Western Pest Management Center Monies

Western IPM Center

- Connect to stakeholders
- 2-way information network
- Competitive grants
  - Center grants
  - Manage some federal grants
Federal funding: ~100k in 3(d) monies (2007)
Competitive grants and partnerships

Arizona Pest Management Center

- Connect to AZ stakeholders
- 2-way information network
- State, regional, national
- Internal competitive grants

A Strategic Re-Organization of Integrated Pest Management (IPM) Resources at UA to Enhance Pest Management Research and Education
GOAL:
Create a working environment in which the science and implementation of IPM can thrive in Arizona

What is the APMC?

- Virtual center - a network of partnerships
  - Scientific community - UA and beyond
  - Partner organizations
  - Diverse “Stakeholders”
- Spans all pest management interests (urban, agriculture, natural resources)
- Full-time faculty IPM Program Manager
  - Organizational support for all IPM activities
Funding for the APMC

- **IPM Program Manager**
  - 40% Federal IPM 3(d) funds
  - 10% State Extension funds
  - 50% Extramural Grants

- Program support through internal IPM grants (IPM 3(d) funds)
- Project-based state partner support (e.g., ACPA project)

http://cals.arizona.edu/apmc/projects.html
Goals of the APMC

- Focus on pest management priorities (local stakeholder needs)
- Improve communication & visibility
  - Within AZ, regionally and nationally
- Foster partnerships - leveraging
- Measure and communicate impacts
- Better compete for national and regional resources
Focus on Priorities

- Arizona Pest Management Center Summit, June 2006
- Pest Management Strategic Plans
  - IPM in Schools (national)
  - Desert Cotton
  - Desert Turf

2006 APMC Summit

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Improving Communication

- Websites:
  - Arizona Pest Management Center
  - Arizona Crop Information Site (alerts)
- Email lists
- Arid Southwest IPM Network
- Western IPM Center Advisory Comm.
- “IPM Delivers” publication
Goals of the APMC

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Foster Partnerships

- AZ Plant Diagnostics Network (USDA, ADA)
- Pest control advisors manual (ACPA, ADA)
- Pesticide use database (ADA, NASS)
- IPM in schools & childcare (ADEH, EPA, USDA)
- Research collaborations: regional Lygus management project
RAMP: Lygus Management

- USDA-CSREES, Risk Avoidance & Mitigation Program (RAMP)
- $2,500,000 over 4 years
- “Developing and implementing field and landscape level reduced-risk management strategies for Lygus in Western cropping systems”
- Upland & Pima cottons, seed alfalfa, vegetable & vegetable seed crops, eggplant, chiles, guayule, lesquerella, dry beans

RAMP Team

Collaborators
- Corbett (Corbett Learning)
- Dutilleul (McGill)
- Hutmacher (UC-Davis)
- Jimenez (UC-CE)
- Kerns (TX A&M)
- Molinar (UC-CE)
- Mueller (UC-CE)
- Spurgeon (USDA)
- Tronstad (UA)
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Measuring Impact

- Crop Pest Losses and Impact Assessment Work Group
- Pesticide use reporting database - measuring program adoption
- Program Evaluation Research & Support Work Group
- “IPM Delivers” (handout)
Goals of the APMC

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APMC Foundation Awards

<table>
<thead>
<tr>
<th>Network/Group</th>
<th>Award</th>
<th>IDC</th>
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<tbody>
<tr>
<td>Arid Southwest IPM Network</td>
<td>100,000</td>
<td>20,000</td>
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<tr>
<td>Crop Insect Losses Working Group</td>
<td>50,000</td>
<td>10,000</td>
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<tr>
<td></td>
<td><strong>150,000</strong></td>
<td><strong>30,000</strong></td>
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### Stakeholder Engagement

<table>
<thead>
<tr>
<th>Term Award IDC</th>
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<tbody>
<tr>
<td>Cotton Pest Management Strategic Plan</td>
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<tr>
<td>National School IPM PMSP</td>
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<tr>
<td>Western School IPM Working Group</td>
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</tbody>
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**Total**

32,000 6,400

![Stakeholder Engagement](image)

### APMC Enabled Projects

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Reduced-Risk IPM for Melon Aphid</td>
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<tr>
<td>Measuring Adoption of IPM</td>
</tr>
<tr>
<td>Areawide Lygus management</td>
</tr>
<tr>
<td>Whitefly Resistance Management</td>
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</table>

**Total Competitive**

3,279,700 752,401

*248,513 to partner institutions
## APMC Supported Projects

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Term</th>
<th>Award</th>
<th>IDC</th>
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</thead>
<tbody>
<tr>
<td>Nematodes for Urban Pest Control USDA Regional IPM Competitive Grant</td>
<td>Stock &amp; Gouge</td>
<td>2 yrs</td>
<td>60,000</td>
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<tr>
<td>Cotton Pesticide Data 2004 Western IPM Center (UC-Davis)</td>
<td>Baker</td>
<td>1 yr</td>
<td>5,000</td>
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<tr>
<td>Enhancing Agricultural Productivity Through Educational Partnerships</td>
<td>Technology Research Initiative Fund</td>
<td>1 yr</td>
<td>125,360</td>
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<td>190,360 13,000</td>
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## APMC Summary

<table>
<thead>
<tr>
<th>IPM Effort</th>
<th>Amount</th>
<th>IDC</th>
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<tr>
<td>APMC Foundation Awards</td>
<td>150,000</td>
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<td>Stakeholder Engagement</td>
<td>32,000</td>
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<td><strong>Total Competitive</strong></td>
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<td>765,401</td>
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<tr>
<td>Extension Support</td>
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<tr>
<td><strong>Total IPM Effort</strong></td>
<td>3,497,560</td>
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Constraints

- **IPM = A lot of ground to cover!**
- **Human resource limitations**
  - Seeking permanent IT line for APMC
  - Seeking more Extension support $$$
  - Need more interdisciplinary campus & county faculty
- **Lack significant & consistent state-based operating dollars**

**Partners in IPM**

- Federal & Regional IPM program
- UA Research, Extension & Partners
- End Users of IPM
Questions?

cals.arizona.edu/apmc