



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

Arizona Invasive Species Advisory Council Dec 4, 2007

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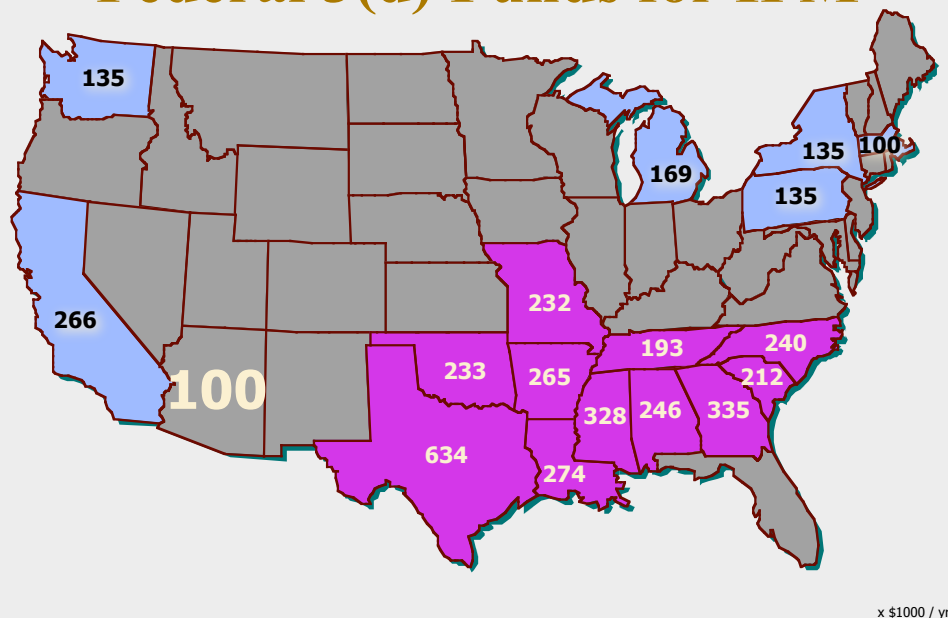
Integrated Pest Management

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

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

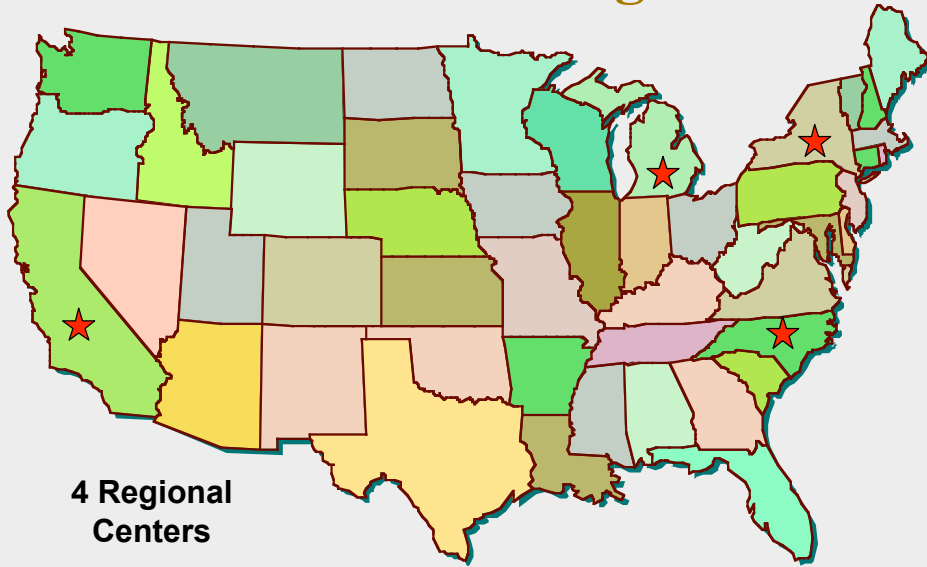
-- USDA: The IPM Roadmap

Federal 3(d) Funds for IPM



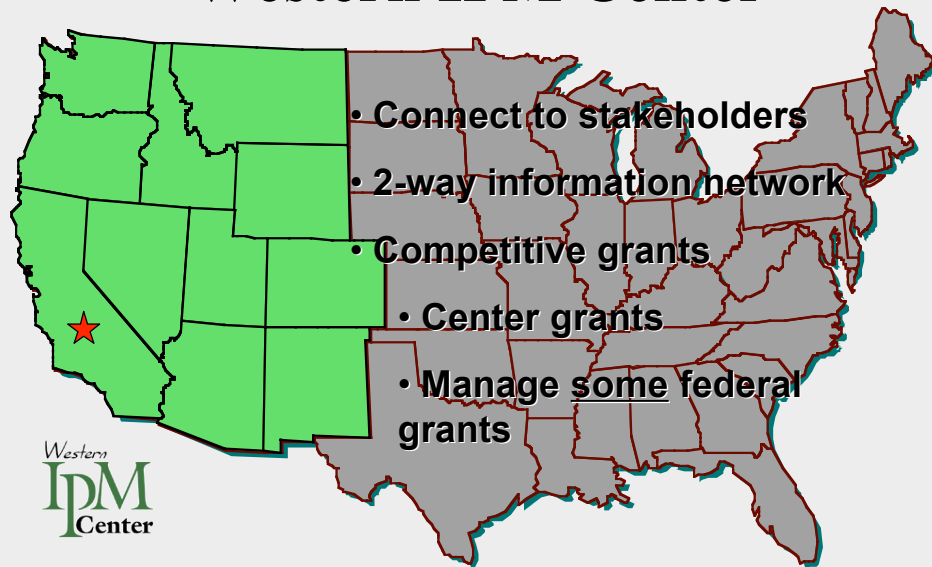
3.89 Million Dollars in Pest Management Center Monies

USDA IPM Program



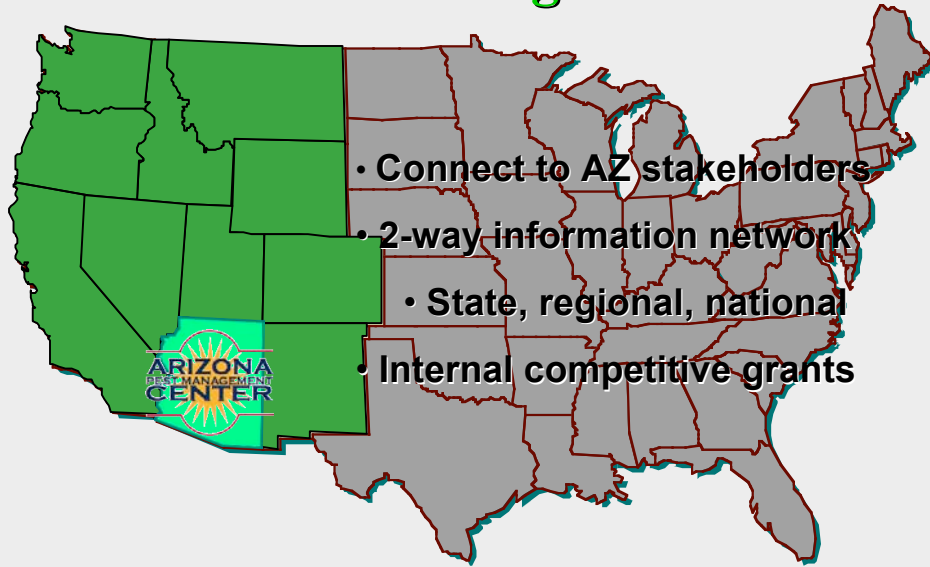
\$972,000 in Western Pest Management Center Monies

Western IPM Center



Federal funding: ~100k in 3(d) monies (2007)
Competitive grants and partnerships

Arizona Pest Management Center



***A Strategic Re-Organization of Integrated
Pest Management (IPM) Resources at UA
to Enhance Pest Management Research
and Education***

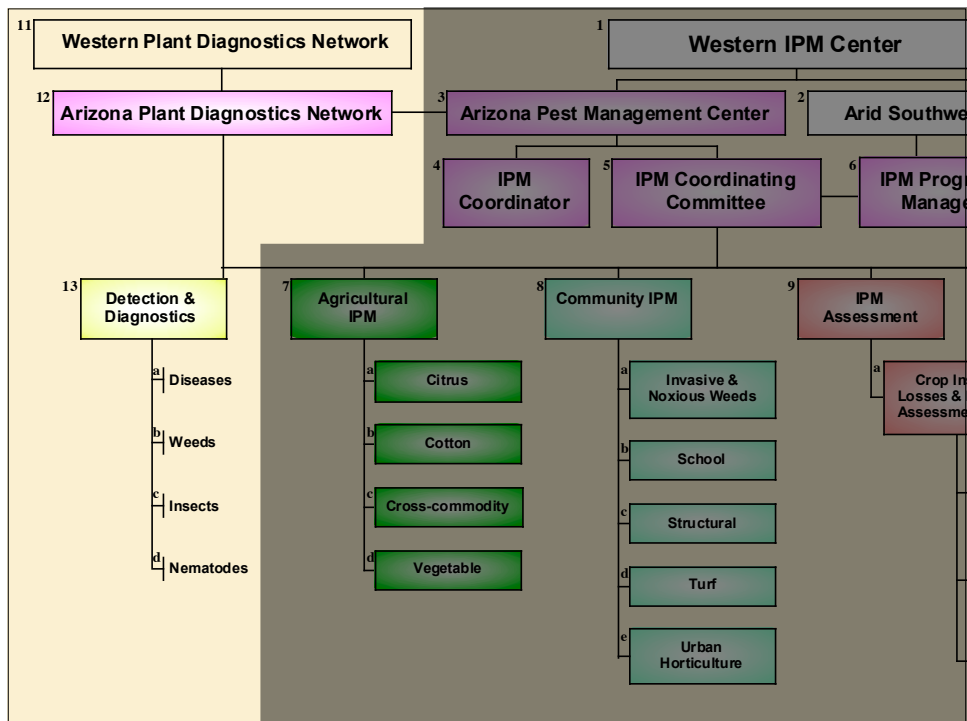
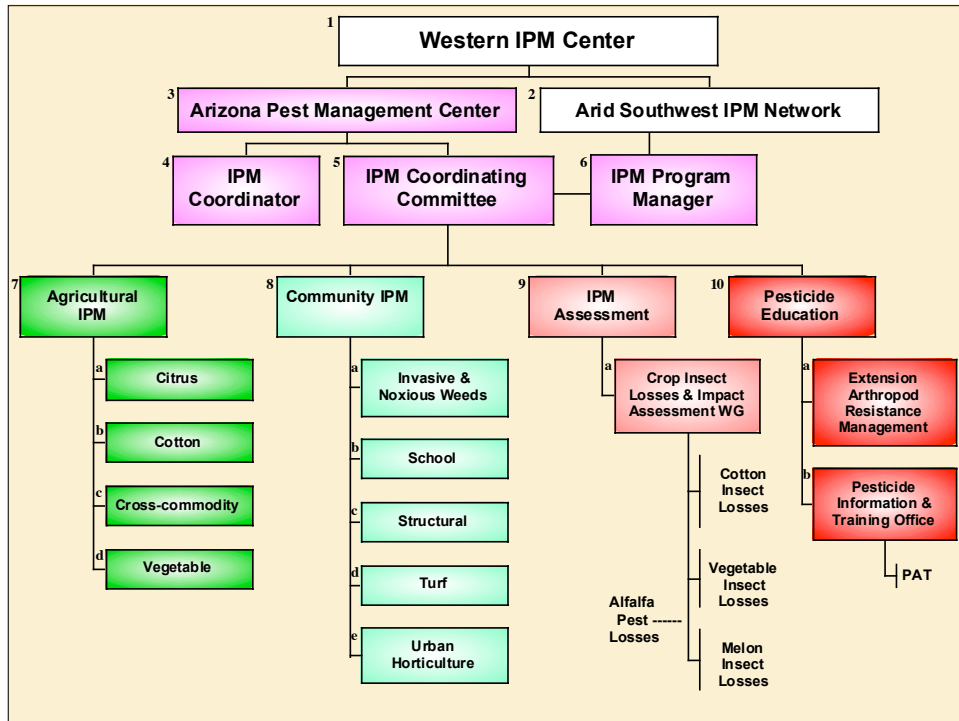


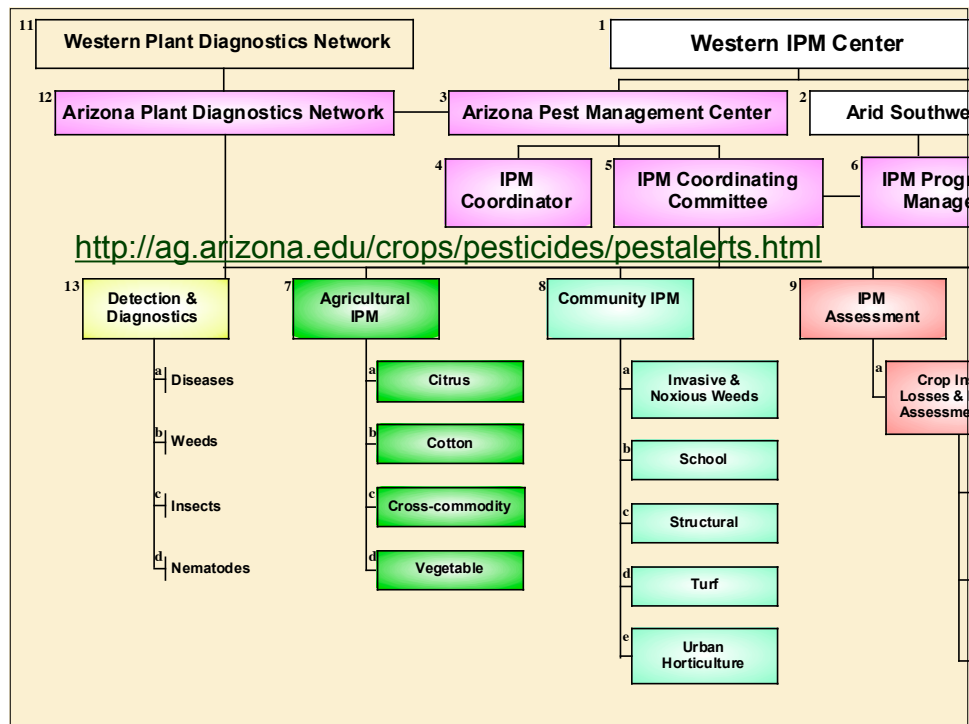
GOAL:

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***

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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

AZ Crop Protection Assoc AZ Dept of Agriculture AZ Dept of Environmental Quality AZ Dept of Health Services AZ Nursery Association AZ State University Polytechnical BASF Corporation Bayer CropScience Brandt Consolidated Bureau of Indiana Affairs Chandler Unified School District City of Phoenix Desert Tree Farm Desierto Verde Dow AgroSciences The Dune Company Ecolab Pest Elimination Gilbert Public Schools Hopi Environmental Protection Organization Horizon Insect Diet & Rearing Research IPM Institute of North America Inter Tribal Council of AZ Jayburg & Wilke Kyrene School District Lin Evans Enterprises MAC Advisory Council Master Gardeners Program Mesa Public School District Nichino America Orkin Pest Control Pharma Pacifica Salyer American Fresh Foods Pascua Yaqui Tribe Seeds West Sunland Chemical Co. Texas Cooperative Extension Service Tohono O'odham Nation Truly Nolan Tucson Unified School District University of Arizona University Termite & Pest Control USDA Animal & Plant Health Inspection Service USDA Arid Lands Ag Research Center USDA National Ag Statistics Service US Environmental Protection Agency US Forest Service Valent Corporation Western IPM Center Wilbur-Ellis Co. Yuma Cooperative Extension Advisory Council

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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**

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Fostering Partnerships

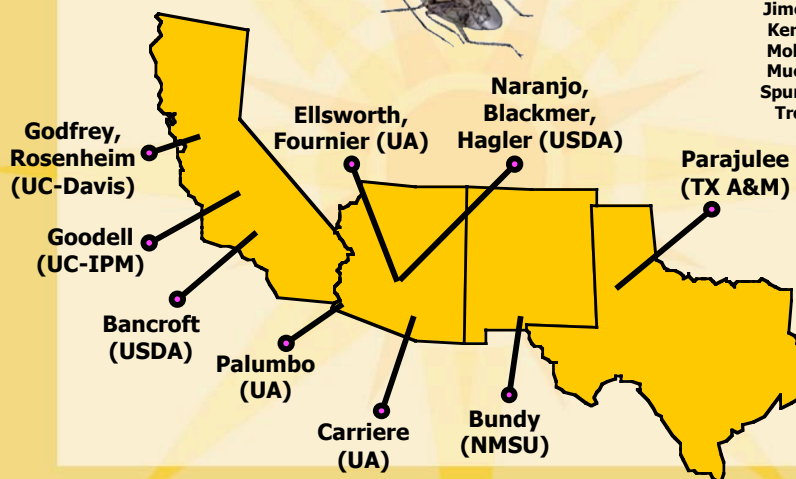
- AZ Plant Diagnostics Network (USDA, ADA)
- Pest control advisors manual (ACPA, ADA)
- Pesticide use database (ADA, NASS)
- IPM in schools & childcare (ADEH, EPA, USDA)
- Research collaborations: regional *Lygus* management project

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)

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APMC Foundation Awards

			Term	Award	IDC
Arid Southwest IPM Network	Western IPM Center	Ellsworth, Fournier, Palumbo, Baker	5 yrs	100,000	20,000
Crop Insect Losses Working Group	Western IPM Center	Ellsworth, Fournier, Palumbo	5 yrs	50,000	10,000
				150,000	30,000

+ 50K
+ 20K



Stakeholder Engagement

			Term	Award	IDC
Cotton Pest Management Strategic Plan	Western IPM Center (UC-Davis)	Ellsworth, Fournier, Palumbo, Baker	1 yr	12,000	2,400
National School IPM PMSP	Western IPM Center (UC-Davis)	Gouge, Fournier, Green	1 yr	10,000	2,000
Western School IPM Working Group	Western IPM Center (UC-Davis)	Gouge, Snyder, Fournier et al.	1 yr	10,000	2,000
				32,000	6,400



APMC Enabled Projects

			Term	Award	IDC
Reduced-Risk IPM for Melon Aphid	USDA Pest Management Alternatives	Palumbo, Jones, Teegerstrom	3 yrs	178,700	35,740
Measuring Adoption of IPM	USDA Regional IPM Competitive Grant	Ellsworth, Carriere, Fournier, Palumbo	2 yrs	60,000	0
Areawide Lygus management	USDA Risk Avoidance and Mitigation Program	Ellsworth, Palumbo, Carriere, Fournier, et al.	4 yrs	2,500,000	504,351*
Whitefly Resistance Management	NRI	Carriere, Tabashnik, Dennehy, Ellsworth et al.	3 yrs	359,000	175,910
Total Competitive				3,279,700	752,401

*\$248,513 to partner institutions

APMC Supported Projects

			Term	Award	IDC
Nematodes for Urban Pest Control	USDA Regional IPM Competitive Grant	Stock & Gouge	2 yrs	60,000	12,000
Cotton Pesticide Data 2004	Western IPM Center (UC-Davis)	Baker	1 yr	5,000	1,000
Enhancing Agricultural Productivity Through Educational Partnerships	Technology Research Initiative Fund	Brown et al.	1 yr	125,360	0
				190,360	13,000

APMC Summary

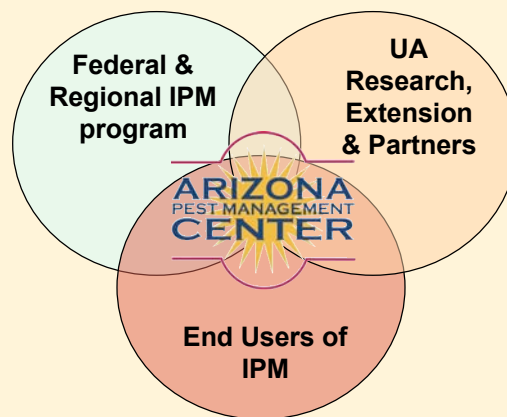
IPM Effort	Amount	IDC
APMC Foundation Awards	150,000	30,000
Stakeholder Engagement	32,000	6,400
APMC Enabled Projects	3,097,700	716,001
APMC Supported Projects	190,360	13,000
Total Competitive	3,470,060	765,401
Extension Support	27,500	
Total IPM Effort	3,497,560	

+101K

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



Questions?



cals.arizona.edu/apmc