

Harnessing marketplace power to improve health, environment and economics

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2009 IPM Excellence Award

2009, 2008, 2005, 2004 US EPA Pesticide Environmental Stewardship National Champion 2005 US EPA Children's Health Recognition Award Winner 2003 US EPA Region V Recognition Award Winner

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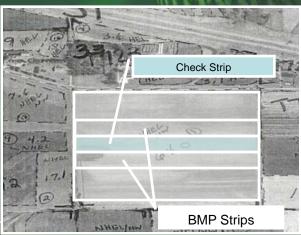
Agriculture





Communities







Seventh International IPM Symposium, March 2012



in ipminstitute



Pest control. Peace of mind.

Why more IPM now?

- Resistance: Weeds, corn rootworm, codling moth, fruit diseases. We can do better to preserve crop protection technologies.
- 2. Introduced invasives: Brown marmorated stink bug, spotted wing drosophila require adjustments in long-standing IPM systems.
- 3. Drift management, pesticide residue management....

Grower Incentives for IPM

- National working group since '06. Funded by USDA NIFA North Central IPM Center. More than forty active participants including NRCS staff, Extension, CCAs, other consultants.
- Priority: Increase access to NRCS programs for IPM to protect natural resources. Currently less than 2% of EQIP funding is used for IPM.
- Increased access in MI, WI, OH, IN, IA, MN.
 Currently working in FL, MO, KS. In OH our
 new EQIP 595 options accounted for 82% of all
 595 contracts allocated in 2009.

IPM Credential Effort Objectives:

 Create opportunity for recognition and professional development for 1500 or more crop consultants specializing in IPM.

- 2. Ditto for crop consultants working in specialty crops.
- Improve access to NRCS Technical Service Provider program for crop consultants.

Background

- CCA credential is premier program for professional crop consultants.
 - >12,000 CCAs
 - 95 Certified Professional Crop Consultants (NAICC)
 - 60 Certified Professional Horticulturists (ASHS)
- Extensive infrastructure provides regionspecific programs meeting needs of ag retail and independent crop advisors.
- CCA credential recognized by NRCS as meeting key requirements of Technical Service Provider (TSP) program.

Background continued

- NAICC recognizes CCA exam as a qualifying exam for its CPCC credential.
- NRCS 595 IPM Practice Standard suffers from lack of qualified TSPs.
- At least 1500 consultants specializing in IPM are not currently certified and face obstacles to demonstrate competence to NRCS and potential clients.
- IPM is multi-disciplinary, has no professional organization "home"; requires collaborative approach.

Market overview: CCAs in specialty crops

Leading specialty crop states	CCAs: specialty	CCAs: pest mgt.	CPCCs: specialty	TSPs with EQIP	
(by number of farms)	crop expertise	expertise	crop expertise	595 expertise	
California (45,546)	43	93	1	5	
Florida (14,320)	22	13	6	6	
Texas (13,421)	3	16	5	2	
Michigan (10,034)	19	18	3	4	
Pennsylvania (9927)	3	9	1	3	
Washington (9651)	3	3	1	0	
Oregon (9623)	0	2	0	1	
New York (8779)	4	9	2	21	
North Carolina (7864)	4	17	7	22	
Wisconsin (7800)	11	37	2	22	
Top ten states (125,000)	112	217	28	86	
US estimates (247,772)	177	601	(68) (260		

Market overview: more detail

Leading specialty crop states	CCA & tree fruit	CCA & vegetable	CCA & small	CCA & cannery	
(by number of farms)	experience	experience	grains	crops	
California (45,546)	20	19	2	2	
Florida (14,320)	14	8	0	0	
Texas (13,421)	1	1	1	0	
Michigan (10,034)	10	9	0	0	
Pennsylvania (9927)	0	2	1	0	
Washington (9651)	0	0	3	0	
Oregon (9623)	0	0	0	0	
New York (8779)	1	2	0	1	
North Carolina (7864)	1	2	1	0	
Wisconsin (7800)	0	9	0	2	
Top ten states (125,000)	47	52	8	5	
US estimates (247,772)	53	83	35	6	

Market overview: state associations

State	Organization/Association	Overall members	CCA members	CPCC members	TSP members
CA	California Association of Pest Control Advisers (CAPCA)		525		
FL					
TX	Texas Association of Agricultural Consultants (TACC)		8	5	
MI					
PA					
WA					
OR					
NY					
NC	North Carolina Agricultural Consultants Association (NCACA)	41			
WI	Wisconsin Association of Professional Agricultural Consultants (WAPAC)	101	40	5	3
Total		4169	573	10	3

Draft performance objectives:

- I. ECOLOGICAL PRINCIPLES AS THEY RELATE TO PEST MANAGEMENT
- II. THE IPM CONCEPT
- III. UNDERSTANDING PESTS
- IV. MANAGEMENT METHODS FOR IPM PROGRAMS
- V. MONITORING AND DECISION-MAKING GUIDELINES
- VI. HOW TO SET UP MONITORING PROGRAMS AND FIELD TRIALS
- VII. HEALTH AND ENVIRONMENTAL CONCERNS ASSOCIATED WITH PESTICIDE USE
- VIII. SETTING UP AN IPM PROGRAM

Performance objectives detail:

I. ECOLOGICAL PRINCIPLES AS THEY RELATE TO PEST MANAGEMENT

A. Levels of ecological organization

i. Define key ecological terms: natural selection, ecological niche, habitat, population density, ecotype and species diversity.

ii. Distinguish between a population and community of organisms.

iii. List factors that impact population regulation.

iv. Describe how age distribution impacts growth rate of a population.

v. Contrast density dependent and density independent limiting factors.

vi. List three types of population dispersal patterns.

vii. Describe how a community and the abiotic (nonliving) environment function together as an ecosystem.

B. The ecosystem concept

i. Describe how energy flows through an ecosystem.

ii. Describe the role of photosynthesis in an ecosystem.

iii. Describe a biogeochemical cycle in an ecosystem.

iv. List examples of abiotic components.

v. Describe a food chain.

Steering committee members participating Sept. 26-27:

David Biddinger, biocontrol specialist & senior research associate, Penn State University

Phil Cochran, consulting agronomist, Cochran Agronomics

Kevin Erb, conservation professional development and training manager, University of Wisconsin

Bruce Erickson, agronomic education manager, American Society of Agronomy

Peter Goodell, IPM advisor, University of California IPM Program

Jim Jasinski, assistant professor, IPM Program, Ohio State University Extension

Bryan Jensen, IPM program manager, University of Wisconsin

Allison Jones, executive vice president, National Alliance of Independent Crop Consultants

Charles Mellinger, director of technical services, Glades Crop Care

Benjamin Smallwood, soil scientist, Natural Resource Conservation Service (NRCS)

Stan Winslow, president, Tide Water Agronomics

One potential scenario:

- 2011: Finalize performance objectives and exam questions. Develop study guide.
- 2. 2012: CCA program pilots IPM specialty exam/credential.
- 3. NAICC accepts exam as alternate for CCA exam. (NAICC currently accepts state licensing exams in five states including California.)
- 4. NRCS recognizes CCA IPM credential towards 595 TSP qualification.

Down the road?

- 1. State/regional IPM performance objectives reflecting cropping systems: annual vegetables, perennial fruit, turf and ornamentals?
- 2. Specialty crop performance objectives for IPM, soil and water, crop and nutrient management, and state/regional CCA exams with specialty crop content as alternate to agronomic crop track?
- 3. CCA "pest management" becomes IPM?



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