

Number: WCC-069

Title: Coordination of Integrated Pest Management Research and Extension/Educational Programs for the Western States & Pacific Basin Territories

Duration: 10/1/00 to 9/30/05

Description/Justification: Integrated Pest Management (IPM) has evolved from work initially focused on *insect* management to cooperative efforts that emphasize *integration* among all plant and animal protection disciplines. Our western regional IPM working group also evolved over the years. Initially, research was the focus with participants primarily representing faculty at land-grant universities. Currently, participants represent interdisciplinary scientists and extension educators at universities as well as researchers and decision-makers at USDA-ARS, USEPA and other public agencies involved in pest management.

This emphasis on interdisciplinary IPM systems reflects the diversity and complexity of western ecosystems, which range from high elevation deserts to tropical Pacific island maritime climates and include pest problems in rangelands and forests as well as more intensively managed dryland field crops, irrigated agriculture, and urban horticulture. Adding to this ecological complexity are potential adverse impacts of pesticides. After 25 years of public IPM programs in the U.S., pesticides remain a central part of pest control strategies in many crop production systems. Concerns remain about pesticide residues and food safety, costs of crop protection chemicals and long-term sustainability, groundwater contamination by agrichemicals and development of pesticide-resistant insects, pathogens and weeds. Potential regulatory loss of pesticides (especially due to implementation of the Food Quality Protection Act) further creates opportunities for IPM scientists to discover and deliver alternative pest management tactics that satisfy social, environmental, and economic goals.

Implementing pest management alternatives requires that we leverage the entire expertise and resources of IPM workers in the west. WCC-69 provides a framework by bringing together interdisciplinary IPM researchers and educators who explore common interests, insights and dilemmas while working toward the overall goal of planning regional research projects and designing improved educational activities. WCC-69 additionally provides a forum where information from other regional IPM working groups and USDA-CREES are described, reviewed, or shared among colleagues. Clearly, WCC-69 represents an opportunity for professionals to learn, coordinate, and implement integrated programs within common agroecological zones of the west.

Objective: Foster cooperative regional research and extension programs that solve critical pest management problems by enhancing communication among stakeholders, IPM research scientists, IPM extension specialists, and other professionals involved with integrated pest management strategies in the west.

Expected Outcomes:

1. Assess pest management research and extension needs affecting the western region.
2. Foster development and delivery of integrated pest management systems that protect human health and the quality of environmental resources while considering the profitability of pest control action.
3. Cooperate regionally and encourage collaborative pest management strategies among public agencies and stakeholders.
4. Increase stakeholder involvement in design and implementation of IPM programs.

Educational Plan:

1) *Annual meeting*

Pest management issues, research needs, educational approaches, and novel applications within regional agroecosystems will be topics for discussion at the annual meeting among professionals from western region universities and public agencies. Program Leaders at USDA CREES will provide updates about national IPM initiatives, directions, and trends along with regional information pertinent to the west. The annual meeting provides a forum for state Extension IPM Coordinators to discuss issues, dilemmas, and successes.

2) *Public IPM Symposium*

WCC-69 will sponsor at least one public symposium to foster interagency and regional linkages, dialogue, learning and information dissemination among IPM professionals with an emphasis on designing and implementing sustainable pest management systems. Stakeholder involvement will be encouraged depending on venue. A listserv could enhance continuous inquiry following the event.

3) *Western region IPM website*

An established WRIPM website will communicate IPM research projects with links to public education and possible curriculum development for highschools.

Participants: ARS, AES, and CES professionals participate regularly. EPA and USFW representatives attended this past year. Stakeholders will be invited to the symposium. The Table 1 lists those for whom Appendix H is on file.

Table 1

| <u>LAST NAME</u> | <u>FIRST NAME</u> | <u>AGENCY/ INSTITUTE</u> | <u>SPECIALTY</u> | <u>Appointment Percentage</u> | | |
|------------------|-------------------|------------------------------|------------------|-------------------------------|------------|-------------|
| | | | | <u>Res/</u> | <u>Ext</u> | <u>/Tea</u> |
| Alston | Diane | Utah State University | Entomology | 30 | 65 | |
| Bechinski | Ed | University of Idaho | Entomology | 5 | 80 | 10 |
| Blodgett | Sue | Montana State University | Entomology | 20 | 80 | |
| Brindley | William | Utah State University | Entomology | 50 | | 50 |
| Brown, Jr. | William M. | Colorado State University | Plant Pathology | | 100 | |
| Cranshaw | Whitney | Colorado State University | Entomology | 33 | 50 | 17 |
| Eiswerth | Mark | Univ. Nevada, Reno | Environ. Econ. | | 75 | 25 |

Table 1 (Continued)

| LAST NAME | FIRST NAME | AGENCY/ INSTITUTE | SPECIALTY | Appointment Percentage | | |
|-----------|------------|--------------------------------|-------------------------------|------------------------|-----|------|
| | | | | Res/ | Ext | /Tea |
| Goodell | Peter | University of California | Entomology/ Nematology | | 100 | |
| Greenough | Diana | Northern Marianas College | Plant Pathology | 100 | | |
| Johnson | Wayne | Univ. Nevada, Reno | Horticulture | 25 | 75 | |
| Jones | Vincent | University of Hawaii | Entomology | 70 | | 30 |
| Maxwell | Bruce | Montana State University | Weed Science | 80 | | 20 |
| McGiffen | Milt | Univ. of Calif-Riverside | Weed Science | 15 | 85 | |
| Morishita | Don | University of Idaho | Weed Science | 19 | 60 | 17 |
| Nissen | Scott | Colorado State University | Weed Science | 37 | 38 | 25 |
| Palumbo | John | University of Arizona | Entomology | 70 | 30 | |
| Peairs | Frank | Colorado State University | Entomology | 25 | 67 | 8 |
| Schwartz | Howard | Colorado State University | Plant Pathology | 50 | 50 | |
| Stougaard | Bob | Montana State University | Weed Science | 100 | | |
| Toscano | Nick | University of Calif.-Riverside | Entomology | | 100 | |
| Westra | Phil | Colorado State University | Weed Science | 50 | 50 | |
| Whitson | Tom | University of Wyoming | Weed Science | 20 | 80 | |
| William | Ray | Oregon State University | Horticulture/ Weed Science | | 100 | |
| Yudin | Lee | University of Guam | Entomology | | 12 | |
| Zalom | Frank | University of California-Davis | Entomology | 20 | 80 | |

Operational Structure: Two Administrative Advisors representing both AES and CES will guide the coordinating committee and report to the western regional Deans and Directors. Because a primary objective of this committee is to foster interdisciplinary research and extension involving all pest-related sciences, officers and members request the Deans and Directors to sponsor at least two professionals to attend the annual meetings as voting members; anyone else may participate. Officers include a chair, vice-chair who records meeting minutes and maintains a current email list, and a past-chair. Elections occur toward the end of the annual meeting and are installed immediately.

WCC-69 Chair date

WCC-69 past Chair (author) date

CES Administrative Advisor date

AES Administrative Advisor date

Henry A. Vance Jr. 8-11-00

Chairman, Western Directors date

ATTACHMENTS WCC-69 Petition Renewal:

ACCOMPLISHMENTS include discussions, planning, and implementation of IPM methods, information, and strategies that integrate pest disciplines into regional projects or agroecosystems. Professionals expect to discuss integration rather than disciplinary sciences. Due to the diversity of agroecosystems, crops, and situations, professionals explore common principles and unique aspects of IPM and how this influences priorities, grant writing, and applications. Research and Extension functions have been integrated. State IPM coordinators meet to share insights, projects, and ways to integrate faculty responsible for disciplinary pest management. Colleagues from USDA CREES describe national initiatives, directions, priorities, needs, and funding sources to state coordinators and attending professionals. WRC-69 has fostered multi-state projects. A western regional website has been developed that compliments other regional and the national site. Colleagues from EPA and USFW attended the recent meeting.