# Arizona Crop Information Site Technical Support IPM Proposal 2006

Project Leader: Al Fournier

Project Team Members: Peter Ellsworth (Maricopa Agricultural Center / Entomology), John Palumbo (Yuma Agricultural Center / Entomology), Mary Olsen (Plant Sciences), Mike Matheron (Plant Sciences), Jeff Silvertooth (Soil, Water & Environmental Science), Russ Tronstad (Agricultural and Resource Economics), Pat Clay (Area Ag Agent, Maricopa county), Kurt Nolte (Area Ag Agent, Yuma Co.), Randy Norton (Director, Safford Ag. Center), Kai Umeda (Area Agent, Agriculture and Natural Resources/Turf, Maricopa)

**Location:** Statewide effort, with impact on campus, county, and experiment station personnel. Benefits can be accessed worldwide.

#### **Situation and Need**

The mission of the Arizona Crop Information Site (ACIS) is to provide growers, pest control advisors (PCAs), pest managers, and allied agricultural industries, county Extension personnel, researchers, state and Federal regulators, and the general public with current, independent, research-based desert crop production and protection information. Since its inception, ACIS has greatly enhanced stakeholder access to critical, timely information related to Arizona crop management across all major crops (e.g., cotton, citrus, vegetables, grains, forage) and all types of pests (weeds, insects and diseases). ACIS has facilitated rapid dissemination of scientific information that has helped to inform pest management decision-making and other crop production efforts statewide. Growers, PCAs, and other stakeholders have attested to the importance and usefulness of ACIS to their crop and pest management activities (see attached Position Statement). Monthly activity on the site is on the order of tens of thousands of hits (see table 1 in the attached 2005 final report). The ACIS website has been used by numerous Extension personnel as an important communication channels that provides links to key clientele.

This valuable communication tool, which our clientele have come to rely on, was threatened following the loss of Program Coordinator (J. Jones) in October 2004, and a lack of available staff to maintain the website. Thanks in part to funding from a 2005 IPM proposal last year, we were able to hire a part-time student to maintain ACIS and re-invigorate our communication and relationship with agricultural clientele throughout the state. A modest investment (\$5000 IPM grant leveraged with \$5000 in other support funds) yielded significant benefits and outcomes, as described in the attached final report. We are requesting a similar level of funding this year through this proposal to maintain this important resource.

The loss of this important web resource would impede our ability as extension educators to communicate critical information to our agricultural clientele in a timely and economic manner and forces us to rely on more diffuse and less efficient methods of communication. In the long-run, this would impact our relationship and credibility with key stakeholder groups, who may turn to other, less independent and less science-based, information sources (primarily industry).

#### **Relevance to Priorities**

This project specifically addresses two Arizona Pest Management Center (APMC) IPM priorities: (1) It provides easy access to resources that address the broad pest management needs of pest managers, growers and other clientele working in a variety of crops statewide; and (2) it links applied IPM research with statewide (potentially worldwide) outreach by providing clientele timely access to important research data (e.g., cotton variety trial data posted prior to 2006 planting season). As shown on the APMC organization chart, ACIS spans virtually all or production/pest management programming and so is a support tool for a broad range of faculty. Furthermore, good and consistent communication with stakeholders facilitated by ACIS builds trust and credibility in the extension system.

# **Outputs:**

### Activities:

- Post new events (meetings, workshops, etc.) of interest to agricultural clientele; this is an important vehicle for promoting extension meetings as well as regional conferences, etc.
- Provide email updates to clientele via the ACIS email list, which alerts people to new events and newly posted information and resources.
- Post new "Pest Alerts" as they become available, to inform clientele of potential new threats to Arizona agriculture (e.g., Citrus Greening).
- Continue to organize, format and post a backlog of crop/pest management information; progress was made in 2005, but there is more work to be done here.
- Continue to educate clientele *and* faculty about ACIS as a communication resource.
- Continue to seek other sources of extramural funding to support and expand ACIS.

## **Products:**

- New and revised information posted to ACIS; some information may also be reproduced in Extension bulletins, fact sheets, newsletters and other "traditional" extension formats as needed or appropriate.
- The less tangible "product" of these efforts is the relationship-building impact frequent and consistent communication with our stakeholders can have.

*Participation:* Major users of ACIS include growers, pest control advisors, rangeland managers, agricultural industry representatives, county extension personnel, researchers and specialists, state and Federal regulators.

## **Expected Outcomes and Impacts**

#### Short-term:

- Continued availability of current research and educational information for clientele.
- Continued posting of new events and email updates will keep clientele informed and promote the success of our extension meetings.
- Continuity of communication with stakeholders will not be disrupted.
- ACIS serves as an extension programming tool, in that is highlights where gaps exist and where work and/or publication is needed.

#### Medium-term:

• Availability of timely information will help to improve crop/pest management practices in multiple crops.

- ACIS will improve the efficiency and effectiveness of communication efforts of extension educators (on campus, in counties, and at research centers), which should improve morale and time management of UA staff.
- Improved communication with stakeholders achieved through ACIS will inform our grant-writing efforts and improve our competitiveness for regional and national funding by increasing stakeholder input.

## Long-term:

- ACIS support will improve our relationship and credibility with agricultural clientele.
- A long-term goal is to extend the ACIS model to other program areas, particularly community IPM, including turf, horticulture, school IPM and structural IPM. This goal is dependent upon availability of resources and the interest level of faculty working in these areas.

#### Plan for Evaluation:

The usefulness and vitality of ACIS will be measured by the number of web hits to various areas of the site. The functionality, relevance and content of ACIS will be evaluated using stakeholder input obtained at meetings, workshops, via email communication, etc.

## Inputs/Budget:

We are requesting \$7,500 for salary support for a part-time web specialist to maintain and expand ACIS. We will leverage this by continuing to seek partial ACIS support through APMC extramural grants that have outreach components.

Al Fournier will invest time into this project to supervise the part-time web specialist and to communicate with faculty and stakeholders.

### Continued Funding:

We have continued to seek external support for ACIS from commodity groups. A proposal submitted to the Arizona Cotton Growers Association for technical support of ACIS in October 2005was not funded. I will continue to seek buy-in and financial support for this important resource from key stakeholder groups.

# Arizona Crop Information Site (ACIS) Technical Support 2005 IPM Proposal: Final Report

<u>Background:</u> Prior to initiation of this project, ACIS was not actively maintained (no updates provided) from October 2004 through mid-June 2005.

<u>Summary:</u> The funds provided through this grant were used to hire a part-time student worker (Charles Reid) who began work on Jun 13, 2005. This allowed us to provide regular updates to ACIS, including posting of new events, presentations, commodity reports and other research data, and publications. In addition, some new areas of the site were created, such as a page for a regional IPM survey of transgenic crops. Some highlights of our activities are presented below. For a relatively modest investment, we were able to revitalize our communication with agricultural stakeholders and maintain this important resource for growers, pest control advisors, extension personnel and other clientele.

# Activities and Outcomes (Highlights):

- Charles Reid hired on Jun 13, 2005.
- ACIS input solicited from 55 CALS faculty on Jun 15, 2005.
- Updated an ACIS email list previously maintained by Jenny Jones. Circulated sign-up sheets at various extension meetings; deleted bad address. (Currently 218 recipients). ACIS email updates alert list members when new events or other information is added to the website. Ten email updates plus a few "special topic" emails were sent between June 13 2005 and March 31 2006.
- New events were posted on a regular basis. Over 30 meetings, workshops, conventions, seminars and field days were advertised from June 2005 through May 2006, covering a range of commodities and topics, including cotton, vegetables, melons, rangelands, turf, landscape/nurseries, irrigation, farm safety, crop insect losses and IPM assessment.
- Posted "Pest Alert" for Citrus Greening, and links to regulatory information.
- Participated in Western region survey on IPM for herbicide tolerant and insecticide resistant crops, posting a solicitation and link to the questionnaire.
- Updated "Research" area of the site, posting (7) 2003-2005 commodity reports for cotton, vegetables, and forage and grain. Each of these contain numerous research articles.
- Posted about 12 new research/extension presentations and posters.
- Created links to new publications and resources, such as the CALS site "Tools for Risk Management in Ag Operations."

<u>Web Statistics:</u> Table 1 summarizes ACIS activity since the website was revived as a result of this project. For comparison, statistics for March 2005 (when site was not maintained) and March 2006 are shown side by side, indicating a 2.6-fold increase in web sessions and a 1.4-fold increase in total web hits between years. These data show the impact that active site maintenance can have on the utility of this resource to our stakeholders.

Table 1: Summary of ACIS web statistics.

	March 2005	March 2006	June 22, 2005 – Mar 28, 2006
<b>Total sessions</b>	35,236	87,760	446,648
<b>Total page views</b>	114,879	203,229	1,496,633
Total hits	308,827	433,855	3,431,992
Avg. hits per day	11,029	15,495	12,257