

IMPACT



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Treasure Valley Pest Alert Network Alerts Growers to Current Pest Outbreaks

The Situation

Southwest Idaho's Treasure Valley spans several county borders and crosses the Idaho border into eastern Oregon. This valley contains one of the largest contiguous irrigated agricultural production regions in the Northwest. Irrigation projects support a diversified production, processing and marketing economy with dozens of crops. In 2000, the farmgate value of crop production in Canyon County was approximately \$200 million. In 1999 the farmgate value of crop production in Malheur County, Oregon was \$86.4 million. Adding the gross income of commodities produced in the adjacent counties of Owyhee, Payette and Washington pushes the direct farmgate value of this industry to nearly \$400 million dollars annually.

A wide range of economically important disease, insect, and noxious weed pests exist within this complex agro-ecosystem. Pest management and crop protection issues are extremely important from economic, environmental and human health perspectives. Based on University of Idaho Enterprise Budget Sheets, on average 15 to 20 percent of the cost of production of Treasure Valley crops are taken up by pest control inputs. These inputs include pesticides, custom applications, and management overhead amounting to tens of millions of dollars annually. Pest control applications are most beneficial when used in a timely fashion. Issues of environmental protection, applicator and farm worker safety, and reduced input costs created a critical need for an improved area wide information network to support integrated pest management practices.

Our Response

It is difficult to rapidly disperse pest outbreak information over a wide geographic region such as the Treasure Valley. Knowledge of current pest condition information is usually scattered among growers and crop professionals. An interactive Internet-based site called TVPestAlert.net was developed by University of Idaho and Oregon State University Cooperative Extension System faculty members to deliver timely crop pest information across the Treasure Valley.

The website is designed to receive information from any grower, field representative, or other subscriber by e-mail, fax, or telephone. Submissions are verified by University of Idaho or Oregon State University Extension faculty before posting to the web site. An e-mail notice is automatically sent to all subscribers who are interested in the affected crop. The e-mail identifies the crop and pest, and where to obtain the alert. Alerts are automatically linked to research based pest identification, life cycle, IPM, and control information on the web.

The Treasure Valley Pest Alert Network is an innovative IPM tool designed to increase communication and improve management decisions when pest outbreaks arise in the Treasure Valley. Growers benefit from timely and accurate information on the occurrence of pest outbreaks and appropriate control measures. Without timely information, crop losses can occur. One strategy to minimize losses from pests is to apply pesticides whether they are needed or not. While blanket applications of pesticides or even organic controls can be effective for pests that occur every year, they are not cost effective for many pests that irregularly reach economic thresholds. Crop yield, quality and environmental benefits are assured and input costs minimized through timely pest control information.

Program Outcomes

The website became operational in March of 2001 and received 5,899 visits during the course of the growing season. There are currently 114 subscribers to the site and 51 pest alert messages were posted from March to late September 2001.

One grower shared about his use of the website and how he personally benefited from it. In mid August an alert about black bean aphids in sugarbeets was posted after the information was reported by The Amalgamated Sugar Company (TASCO). The grower said he was not aware these insects were pests in sugarbeets. He decided to check his fields and found the aphids at an uneconomic level. He then worked with his field representative from TASCO to monitor the aphid population until they judged it was sufficient to warrant an insecticide application. In another example, onion growers were using fungicides to treat fields experiencing a

problem that was undiagnosed. After a diagnosis was made, growers learned through TVPestAlert.net that the problem was Iris Yellow Spot Virus and there is no treatment. At that point, they stopped the unnecessary fungicide applications.

A formal evaluation of the website was conducted at the end of the 2001 growing season. One of the survey questions asked of subscribers was "Give an example of how this website helped you during the year?" Following are a few of the responses we received: 1) *"it alerted us of a possible problem. We were not aware of a situation until message/information was received."* 2) *"alerted me to new virus on onions (iris yellow spot)."* 3) *"not only did we receive notification in a timely manner, but also its general location and treatment"* 4) *"kept me alert on bugs in alfalfa seed and problems in onions and beets."*

Future

Operation of the website will continue during the 2002 field season. Crop coverage will be expanded to commercial tree and fruit crops.

Cooperators

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