

IMPACT



Canyon County, 501 Main; Caldwell, Idaho 83605; 208-459-6003; Fax: 208-454-6349

Treasure Valley Pest Alert Network (TVPestAlert.net) Alerts Growers to Current Pest Outbreaks Summary of 2002 Season

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 \$311 million. In 2002 the farmgate value of crop production in Malheur County, Oregon was \$90 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 \$600 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 growers, field representative, or other subscriber by e-mail, fax, or telephone. Submissions are verified by University of Idaho or Oregon State University Cooperative 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

In 2002 there were 8,975 site visits, 213 subscribers and 51 pest alerts were posted to the website. A post-season evaluation shows that 38.3 percent of the subscribers are farmers, 35.0 percent are field representatives, 20.0 percent are government and 6.7 percent have other occupations. The primary crops grown by the website subscribers are small grains, onions, corn, sugarbeets, forages, alfalfa seed, potatoes and peppermint. Alerts posted in 2002 included both primary and secondary insect and disease pests of the above mentioned crops.

In an end of the year evaluation, 100 percent of survey respondents said the website was useful to their organization. On a Lickert scale of 1 to 5, usefulness averaged a score of 4.1. Following are comments from the evaluation:

- *“I used it (TVPestAlert.net) to assist the crop advisors in watching what pests were coming into our area. I know the hatch information was of particular interest to the crop advisors and growers when they were trying to time spray applications.”* (Simplot Company Field Representative)
- *“Made me more alert to the possible danger of a certain pest or disease. I didn't have any major pest problems because through pest alert I caught them in time.”* (Grower)
- *The alfalfa seed, corn, onion and sugarbeet pest notifications helped me decide when to scout my fields and helped me to improve the accuracy and timing of my pesticide applications.”* (Grower)

The web site has achieved many the objectives for which it was designed. In a large diversified agricultural production area it has established a growing network of professional subscribers actively reporting and receiving pest outbreak information. TVPestAlert.net has improved the efficiency of scouting by giving growers and field representatives a rapid "heads up" on pest outbreaks. As evidenced by subscribers' comments, it has also improved timely and efficacious use of pesticides and in some cases reduced or prevented ineffective pesticide use. In addition, the resource pages give clients current and accurate pest specific IPM information.

Future

Operation of the website will continue during the 2003 field season. In 2003 a concentrated effort will be made to expand website services to tree fruit.

Cooperators

Steve Reddy; UI Washington County Ext. Educator
Brad Geary, UI Potato/Onion Specialist
Tim Davis, UI Payette County Ext. Educator
Ben Simko, OSU Malheur County Ext. Agent
Lynn Jensen, OSU Onion/Potato Specialist
Clint Shock, OSU Malheur Exp. Station Supt.

For More Information

Jerry Neufeld, Extension Educator
Canyon County Extension
University of Idaho
501 Main Street
Caldwell, Idaho 83605
208-459-6003
Fax: 208-454-6349
Email: jerry@uidaho.edu

32-03jneufeld-outbreaks.doc
11/03