Treasure Valley/Pacific Northwest Pest Alert Network Alerts Growers to Current Pest Outbreaks

The Situation
The Treasure Valley in Idaho and Oregon encompasses one of the largest contiguous irrigated agricultural production regions in the Pacific Northwest supporting the production, processing and marketing of dozens of crops. The farm gate value of crop production in the Treasure Valley is approximately $540 million annually. Adding the value of farm gate potato sales from all of Idaho to farm gate sales in the Treasure Valley totals to over 1.1 billion dollars annually.

A wide range of economically important disease, insect, and noxious weed pests exist within the Pacific Northwest’s complex agro-ecosystem. Pest management and crop protection issues are extremely important from economic, environmental and human health perspectives. Based on University of Idaho Crop Enterprise Budgets, pesticide expenses range from 14% to 29% of the operating costs of the high valued crops alfalfa seed, onions, potatoes, and sugar beets. Pest control inputs are most effective when used in a timely and expeditious fashion. Environmental issues of watershed enhancement, endangered species protection, as well as applicator and farm worker protection create a critical need for an area wide integrated pest management system.

Our Response
Knowledge of current pest conditions is commonly scattered among growers, crop professionals and Extension faculty and is not uniformly distributed to the production agriculture industry. In 2001, a website called TVPestAlert.net was developed by University of Idaho and Oregon State University Cooperative Extension faculty members to deliver timely pest information across the Treasure Valley. In 2004, at the request of the Idaho potato industry, website operations expanded to all potato producing areas in Idaho and the website added the name PNWPeatAlert.net.

The website is designed to receive information from growers, field representatives, or other subscribers by e-mail, fax, or telephone. Submissions are verified by University of Idaho or Oregon State University Cooperative Extension faculty before posting to the website. Then, an e-mail notice is automatically sent to all subscribers registered for the affected crop. The e-mail identifies the crop and pest, and contains a link to the alert. Alerts are also linked to research based pest identification, life cycle, integrated pest management (IPM), and control information on the Internet.

The Treasure Valley Pest Alert Network is an innovative IPM tool designed to increase communication and provide educational information that can be used in managing pests. 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 can be effective for pests that occur every year, they are not cost effective for many pests that irregularly reach economic thresholds. Pesticides should only be applied as needed.
and based on accurate and timely information to help minimize production costs and help protect the environment.

**Program Outcomes**

There were nearly 25,000 website visits in 2004 and 366 subscribers. A demographic analysis of subscribers’ occupations shows there are approximately 31% producers, 40% private industry representatives and 17% university/government personnel using the site. Approximately 65% of website users are from the Treasure Valley of Idaho and Oregon, 20% are from eastern Idaho and 10% from the Magic Valley. We are now reaching the intended audience in the Treasure Valley and southern Idaho.

An evaluation of the website in 2004 showed 98.1% of survey respondents felt the website was useful to their organization. On a scale of 1 to 5, usefulness averaged a score of 4.02.

Following is one of the questions asked in the 2004 program evaluation and the percentage of survey respondents that marked each statement.

- **Which statement below best reflects your views?**
  - Because of information received through TV/PNW PestAlert.net…
    - I was able to reduce the number of sprays applied to my crops. 11%
    - A spray I applied was more effective due to the timeliness of the application. 22%
    - I was able to eliminate a spray application. 7%
    - I increased my field scouting to document the pest level in my fields. 60%

As a result of subscribing to TV/PNW PestAlert.net, an increased number of growers are implementing the IPM practice of scouting their fields to document pest levels before implementing control measures. In addition, the 2004 survey shows that TV/PNW PestAlert.net subscribers are using 2.6% less chemical on their number one crop than they were before subscribing to TV/PNW PestAlert.net.

Below are some comments received on the 2004 evaluation:
- I improved the timeliness of my chemical applications and improved my scouting methods because of the pest alert network. (Treasure Valley Grower)
- Helped me to watch for mildew in beets for better timing. Helped in timing of field scouting for peach aphid in potatoes. (Magic Valley Grower)
- I was able to scout more successfully as I knew what others were seeing. I was able to adjust my products used to control different pests. (Industry Field Representative)
- I reduced the number of applications of blight spray. I improved my timeliness of scouting for the right pest at the right time. (Eastern Idaho Grower)
- I improved the timeliness and reduced the number of my applications, the program felt like another set of eyes watching out for my crops. (Eastern Idaho Grower)

**Cooperators**

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**2004 Funding Sources**

Idaho Alfalfa and Clover Seed Commission
Idaho Potato Commission
Idaho Sugarbeet Industry

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