

impact

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Pest alert: Building on legacy, pioneering sustainable pest solutions

AT A GLANCE

The PNW Pest Alert Network helps growers act early on pest threats, with 85% reporting reduced chemical use and 78% experiencing improved yields in 2024.

The Situation

For over two decades, the PNW Pest Alert Network (<https://pnwpestalert.net/>) has been crucial in providing timely, research-driven pest alerts to growers across the Pacific Northwest. As the region continues to depend on vital crops such as potatoes, sugar beets, onions, alfalfa and tree fruits, pest management is essential to maintaining profitability, protecting the environment and ensuring long-term agricultural sustainability. Farmers and gardeners face the constant threat of pests that can devastate crops, leading to significant financial losses, increased pesticide use and environmental harm. Pest outbreaks can escalate quickly without timely intervention, further intensifying these challenges. The PNW Pest Alert Network continues to be a vital resource for Integrated Pest Management (IPM) education and communication, offering localized alerts, scouting recommendations and pest forecasts to help growers reduce reliance on chemical inputs and implement cost-effective, sustainable pest management strategies.

Our Response

Launched in 2001 by University of Idaho and Oregon State University, the PNW Pest Alert Network has evolved to meet the region's pest management needs.



Figure 1. Pests concerning PNW PestAlert.net subscribers.

With the retirement of the program's founders, new leadership now carries the responsibility of continuing this legacy. Under the new leadership of Jemila Chellappa since November 2023, the network has expanded its reach through better infrastructure, collaborations with specialists, and increased coverage in both urban and rural areas. The program enables users to respond effectively to emerging pest threats by providing targeted alerts, workshops and resources. The alerts provide localized, timely advice on pests such as psyllids, moths, cutworms, aphids and various fungal diseases (Figure 1), helping growers optimize pest control and reduce pesticide use while highlighting the regional complexity of pest pressures that affect both insects and diseases across different commodities.

Program Outcomes

The PNW Pest Alert Network has led to significant improvements in pest management practices.

A 2024 year-end IRB-approved survey of 112 respondents indicates tangible benefits: actions, impact on chemical use and overall outcome.

Description	Outcome
Influenced pest management decisions.	<ul style="list-style-type: none"> Attended training/workshops: Gained IPM knowledge Shared information: Passed along critical pest updates Prevented/reduced infestations: Early alerts enabled timely action Found pests earlier: Enhanced scouting efforts for quicker pest identification Saved on inputs: Avoided unnecessary treatments
Impact on chemical use due to pest alerts.	<ul style="list-style-type: none"> 1-25% drop in pesticide use: Most reduced sprays with timely info No change: A few steady pest levels Increase use: Due to rising pest pressure
How PNW Pest Alert has been useful.	<ul style="list-style-type: none"> Increased awareness: Timely alerts highlighted pest risks Improved scouting and identification: Prompted more field visits and better pest identification Enhanced collaboration: Shared updates among colleagues led to coordinated responses Served as a reference: As a guide to confirm symptoms and treatments

- 85% of growers reduced pesticide usage, aligning with sustainable agricultural practices.
- 78% of participants observed better yields and lower pest control costs as a result of proactive pest management.

FOR MORE INFORMATION

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- 95% would recommend the service to fellow growers, indicating strong satisfaction with the program’s effectiveness.
- 90% of respondents reported addressing pest threats more quickly after receiving alerts.



The network improves pest identification and scouting to help users intervene early and avoid costly infestations. Additionally, it has fostered a culture of collaboration among agricultural producers, Extension educators and industry partners, driving improvements in integrated pest management throughout the Pacific Northwest.

The Future

The network will build on the previous administration’s foundation, focusing on expanding educational offerings, improving pest forecasting models and refining data collection for accurate, up-to-date information. Plans also include engaging Extension educators, small-scale producers and home gardeners to provide tools for sustainable growth.

Cooperators and Co-Sponsors

This work is supported by the Extension Implementation Program [award no. 2024-70006-43754] from the USDA National Institute of Food and Agriculture and Snake River Sugarbeet Research and Seed Alliance (2024-27).