



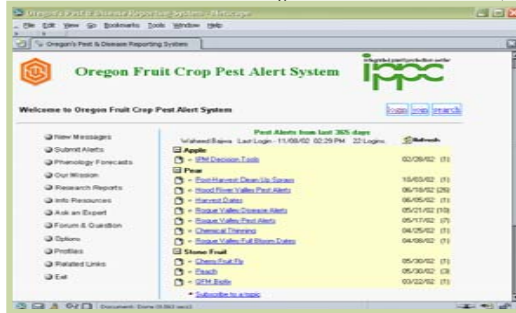
# An Internet-based Pest Alert and Management System for Oregon

(<http://ippc.orst.edu/pestalert>)



Waheed Bajwa<sup>1</sup>, Phil VanBuskirk<sup>2</sup>, Rick Hilton<sup>2</sup>, and Steve Castagnoli<sup>3</sup>

<sup>1</sup>Integrated Plant Protection Center (IPPC), <sup>2</sup>Southern Oregon Exp Station, <sup>3</sup>Hood River Cooperative Extension, Oregon State University, Corvallis, OR 97331-8530, USA.



Home page of Oregon Pest Alert System

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## Introduction

The Oregon Pest Alert system (ORPAS) is a versatile, extendable, reproducible extension communication network for local and regional scale reporting and warnings of pest incidence and outbreaks. ORPAS is a database-driven, email supported application server that offers (1) Near-Real Time Pest Alerts, (2) Phenology Forecast, and (3) Preparedness Management Strategies to growers. The information is dually endorsed by extension agents and/or research specialists. The system also facilitates exchange of news, discussion, and internet resources between growers, agricultural field workers, extension, and research personnel, for all disciplines involved in pest management.

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## Objectives

- Deliver near-real time pest alerts (and phenology forecasts) coupled with expert advice to serve pest management needs of growers both locally and regionally.
- Build a system as a modular framework to be readily extended to other regions, crops, and pests.



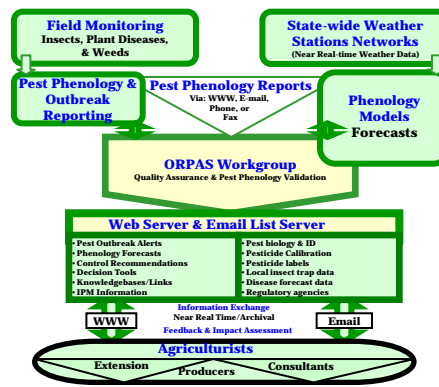
An email message is automatically generated by the system when an alert is posted by a moderator

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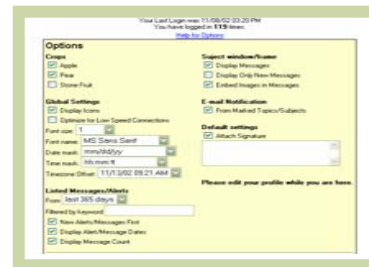
## Abstract

The Oregon Pest Alert System (ORPAS), based on integrating e-mail, websites, and databases, provides an electronic means for sharing immediate pest outbreak alerts, forecasts, and other timely information between growers, field personnel, extensionists, and researchers. The system encourages precise and judicious action and is expected to improve pest management decision-making by stakeholders. Events to be reported include pest development status and buildup, levels of biocontrol agents, and other pest-related occurrences. The system offers the advantage of immediacy and information sharing between various stakeholders. Users need to register (free) and can then customize their choices according to crops or situations of interest. The regional and multi-regional scale deployment of this interactive, integrated system encourages development of areawide integrated pest management programs, and promotes a landscape-scale perspective for all stakeholders.

## Oregon Pest Alert System (ORPAS)



Information processing and decision support components of Oregon Pest Alert System



Registered user can customize their choice according to crops and situation of interest



Examples of alerts available from Web Interface

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## Scope and Features

- Interactive; Customizable; Multiway Information Exchange.
- Integration of Web, Email, and Databases.
- Near-real time pest warnings and management information.
- A facility to share news events locally and regionally.
- Expandable and transferable to any pests, crops, and regions.
- File uploading for real-time web posting, & digital diagnosis.
- Repository of historical data on pest incidence and outbreaks for future studies (risk assessment, pest Model validation).
- Features: Pest Alert Notices; Phenology Forecasts; Control Recommendations; Pest and Pesticide Information; News; Discussion; Internet Resources; Research Reports; Searchable Frequently Asked Question Database; Web-based System Administration.

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## Access Information/Statistics

**Date of Initiation:** March 1, 2002  
**Email Subscribers:** 80  
**Total Alerts (March-September 2001):** 78  
**Web Clients** (unique IP # in the web access log)  
 Current Usage: 21-26 users/day  
 Oregon: 11 -15 users/day  
 All others: 10 - 11 users/day

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## Expected Outcomes and Impacts

- Improved IPM decision making and better management actions.
- Reduction in pesticide use; Encourage judicious use of pesticides.
- Improved pesticide-use efficiency and grower economics.
- Data on the incidence and outbreaks gathered in ORPAS databases will be analyzed and used for insect and disease model validations.
- The regional and multi-regional scale deployment of interactive, integrated tools encourages development of areawide integrated pest management programs, and promotes a landscape-scale perspective for all stakeholders.