

THE CALIFORNIA DECISION AID SYSTEM (DAS) FOR NAVEL ORANGEWORM MANAGEMENT IN TREE NUTS



WHAT DAS FOR NOW PROVIDES

- Real-time male and female NOW flight activity and trap counts from a regional networks of traps
- Localized NOW and crop phenology models for almonds and pistachios using high resolution weather data
- Predicted pest pressure maps and crop susceptibility timelines
- Recommends optimal spray timing, mating disruption windows and other key monitoring and management activities aligned with UC IPM guidelines
- Opportunities and incentives for coordinated NOW management with neighboring orchards
- Enables growers and PCAs to share anonymized data within regional groups to improve predictions

*Scan to learn
more and enroll!*



Overview

The Decision Aid System (DAS) is a web-based, science-driven platform that helps California tree nut growers and PCAs make informed, regionally coordinated pest management decisions for navel orangeworm (NOW). The DAS combines real-time monitoring data, localized weather models, and crop phenology tracking to forecast pest activity and guide management timing across pistachio, almond, and walnut orchards.

Adapted from the proven Washington State University DAS framework for similar orchard pests, this new version for NOW integrates trap data, regional weather feeds, and UC IPM management guidelines to deliver practical, actionable insights for improved pest control and reduced crop loss.

By facilitating coordinated monitoring and control efforts, DAS aims to improve NOW control efficacy, reduce aflatoxin risk, increase economic viability and environmental sustainability, and serve as a model for sustainable pest management in tree nut production.

While tree nut growers across California are encouraged to participate and engage in DAS, the initial focus of this project will be in West Fresno and Modesto. Growers in these areas are encouraged to contact our team for more information on how to participate.



Benefits of Participating

- Greater accuracy in monitoring activity, crop development, and vulnerability
- Increase pesticide efficacy through better treatment timing
- Maximize the impact of mating disruption through regional scaling of adoption
- Gain insight on regional NOW activity and crop damage trends relative to your own orchards
- Enhanced coordination and adoption of best management practices among growers and PCAs in shared regions
- Lower NOW damage and aflatoxin risk
- Contribution to a new statewide model advancing sustainable IPM in tree nuts

How to Participate

Growers and PCAs can engage with the DAS in two ways:

1. **Enroll to Access Models, Regional Monitoring Data, and Receive Automated Alerts**
 - Complete the DAS onboarding form to register your operation and orchard sites
 - Create a DAS account to run localized pest and crop models
 - View live trap data, receive management alerts, and access personalized recommendations
2. **Join a Coordinated Management Group**
 - Collaborate with nearby orchards and PCAs to coordinate sanitation, mating disruption, and harvest timing
 - Share data (anonymized) on sanitation levels, bloom events, pesticide timing, and crop damage to improve model accuracy
 - Group participants will be eligible for discounted mating disruption products



Contact Us

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Visit the site to learn more & enroll

<https://treenuts.decisionaid.systems/>

Grower and PCA Support

The project team provides full technical assistance during enrollment and setup including personalized onboarding, data entry templates, field staff assistance, and continuing education workshops and field days.

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