

Optimizing your 2023 monitoring program for Navel Orangeworm (NOW)

OPTIMIZING YOUR 2023 MONITORING PROGRAM FOR NAVEL ORANGEWORM (NOW)

Navel Orangeworm (*Amyelois transitella*), or NOW, is a key pest in almond and pistachio orchards throughout California. A robust monitoring program for NOW is crucial to keep you prepared to make the right treatment decisions throughout the season. Every orchard block is unique, so using your monitoring tools properly to gather site-specific information on pest activity gives you the freedom to customize your control program.

A quality monitoring program utilizes complementary trap types to gather information throughout the season. For example, egg traps provide insight on female activity in your orchard, pheromone traps track male activity, and PPO + pheromone traps provide a multi-gender attraction that is particularly helpful in orchards under mating disruption. When we take the information gained from these traps together and combine them with end of season harvest data, we can complete a better picture of the season.

It is important to remember when and where to use these monitoring tools. Egg traps are great for establishing a biofix at the beginning of the season, which can then be used as the starting point for degree-day tracking. However, they are not as reliable as you move through the season. Egg trap counts become more variable as mummy or new crop nuts compete for attraction.

Monitoring “in season” is best accomplished by pheromone traps that use the specific female pheromone to attract male NOW. Pheromone traps provide a real-time estimate of new flights and their peaks. Although, they will not provide reliable flight information in an orchard using mating disruption. Mating disruption, such as CIDETRAK® NOW MESO™, disrupts the pheromone communication between male & female NOW, so pheromone traps are highly suppressed.

When using mating disruption, employing the PPO lure, in addition to a pheromone lure, provides a multi-gender attraction that will achieve measurable trap captures throughout the season. When used under the right circumstances, Trécé’s monitoring tools provide meaningful information to strengthen your IPM program.

Regardless of the monitoring program you decide to use, there is one key factor that is the most important: CONSISTENCY!! The behavior of NOW makes it nearly impossible to create true trap thresholds for damage prediction, so comparing

your historical averages to in-season data will give you the necessary context to make decisions. It is important to remember that maintaining consistency, by using the same lures, trap styles, trap positionings, etc., in your program is the best way to reasonably compare trap data year after year.

More information regarding PHEROCON® monitoring and CIDETRAK mating disruption may be seen on Trécé's website or under IPM PARTNER® Guidelines for Use.



Navel Orangeworm, *Amyelois transitella*



PHEROCON IV NOW Egg Trap



PHEROCON VI Delta Trap



PHEROCON NOW PPO + HR L2 Lure



PHEROCON NOW L2-L Pheromone Lure