

# NEW MD TECHNOLOGY AND PRODUCTS INTRODUCED IN 2018 – HOW DID THEY FARE?

Nut growers today are increasingly finding that good winter sanitation and chemical applications alone are no longer enough to combat the growing spread of navel orangeworm. As a result, greater numbers of growers now are using mating disruption to increase their success in warding off the pest as part of an integrated pest management strategy.

Two new mating disruption products developed and manufactured by insect monitoring and control company Trécé — CIDETRAK® NOW



Vince Chebny, Lab R&D Manager for Trécé

MESO for almonds and pistachios, and CIDETRAK® CMDA + NOW MESO for walnuts – entered the market in 2018 and already are drawing positive reviews from nut growers and pest control advisers.

Trécé developed the products in its own laboratory, then fine-tuned and field-tested the two solutions in collaboration with researchers from the University of California, Davis and USDA’s Agricultural Research Service, for maximum effectiveness. “We saw

excellent results across the board,” said Brad Higbee, Trécé’s Director of Field Research. “Growers and PCAs were pleased with every aspect of the products, ease of application, and reduction in both trap capture and damage.”

According to Higbee, CIDETRAK® NOW MESO for almonds and pistachios significantly increases the number of unmated NOW females

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and dramatically reduces the number of multiple-mated females by more than half. Correspondingly, the data shows a 50-80% reduction in damage compared to grower standard insecticide programs in trials where there was a difference.

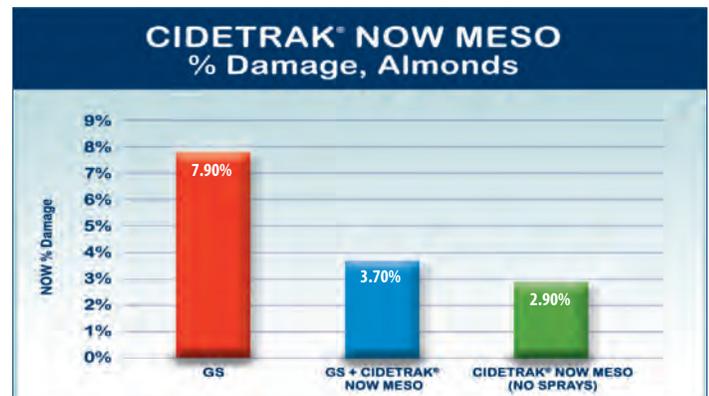
CIDETRAK® CMDA + NOW MESO for walnuts is equally effective. A unique combination of codling moth (CM) pheromone and a patented male and female behavior modifying kairomone (DA) as well as NOW pheromone allows growers to disrupt codling moth males and females and NOW males.

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— Dirk Ulrich, almond grower/consultant

“More and more researchers are endorsing the benefits of mating disruption,” Higbee said. “Growers and PCAs are also praising the effectiveness of both products and now consider them an essential part of a complete pest management program.”

Dirk Ulrich, an almond grower, research PCA and CCA used CIDETRAK® NOW MESO on a test plot in 2018 and was surprised to discover he had higher pressure than he anticipated before trial initiation.



Source: Dirk Ulrich, 2018



Brad Higbee, Director of Field Research for Trécé and Dirk Ulrich, almond grower/consultant

“The navel orangeworm seems to be expanding its range and density in different areas,” Ulrich said. “I had an area on one ranch that I farm that has been pretty low pressure. I’ve never really had damage, and I’ve never really sprayed for NOW, but this year, I encountered much more pressure and I had more damage than ever before.”

According to Ulrich, NOW damage has been climbing steadily, rising from less than 1 percent in 2015 to 1 percent in 2016 and then more than doubling to 2.2 percent in 2017.

“In fact, I used the grower standard with and without CIDETRAK NOW MESO compared to the grower standard insecticide program alone. This consisted of three hull-split sprays timed appropriately. The damage was 7.9% in the grower standard, 3.7% or about 53% less in the grower standard plus CIDETRAK® NOW MESO and 2.9% or about a 63% reduction in the CIDETRAK® NOW MESO alone. Very impressive performance to say the least, even though, I had put it on later than I would normally, due to the late registration!”

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“Moreover, I really liked the simplicity that Trécé built into the uniquely packaged/RTU application system that allowed for fast and accurate application at the very low rate of 20 per acre. My rate of application was around 4 acres per manhour. The packaging allowed me to open what I needed, which on a large scale will allow for greater inventory management and checking field utilization and labor use.”

Ulrich will be using NOW MESO in 2019. “I’m planning on using it on larger acreage. Great product! I plan to recommend it to my growers this season!”

Another Trécé product engineered for walnuts, CIDETRAK® CMDA + NOW MESO, addresses the double threat of infestation that occurs when nuts damaged by codling moths serve as a breeding site for navel orangeworm. Research has demonstrated that pear ester DA and CM and NOW pheromones in a CIDETRAK® CMDA + NOW MESO dispenser significantly reduces mating and walnut nut damage from codling moth and navel orangeworm.

CIDETRAK® CMDA + NOW MESO, which uses two dispensers, one for each moth, are hung together on one hanger and placed 20 per acre at mid-canopy. The dispensers are easy to hang and labor efficient.

Hanging them together has demonstrated more than 95 percent disruption and reduction in male moth capture in pheromone traps for codling moth and navel orangeworm.

Codling moth is different with each generation. First-generation larvae cause the nutlets to drop from the tree under certain conditions. Nuts attacked by larvae of the second and third generations remain on the trees. Feeding damage to the kernel leaves them unmarketable and they are also a breeding site for NOW, which may result in 8-12 or more surviving NOW larvae vs. one CM larvae.

Second-generation larvae frequently enter through the side of the husk where the two nuts touch. After the shell hardens, the larvae enter the nuts through the soft tissue at the stem.

Codling moth not only damages the nut, but it provides a breeding site for NOW. This makes it vital to prevent codling moth damage.

Monitoring continuously with pheromone/kairomone based traps, establishing and tracking degree days, checking canopies for damage and calculating the level of infestation is necessary season long for best results.



CIDETRAK NOW MESO applied in pistachio orchard

Rich French, distributor with Bear River Supply used CIDETRAK® CMDA + NOW MESO last year and said, “It’s a good tool in the toolbox, and we will be using it again this year.”

Programs that have used CIDETRAK® CMDA + NOW MESO or CIDETRAK® NOW MESO alone or in combination with insecticide sprays have been found to be very effective.

There is an immediate need to protect your harvest from NOW. Left un-treated, the economic damage on growers will be devastating. The time to act is now. The need is immediate.

Trécé is a leading innovator in mating disruption and control systems, for both conventional and organic use.



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