

# THE NEMATODE THREAT TO VINE LONGEVITY & YIELD GROWERS CAN'T SEE

Nematodes are microscopic roundworms that feed on plant roots, causing devastating vigor and yield reduction across the vineyard. According to the University of California, above-ground symptoms of nematode damage are mostly unthrifty vines.

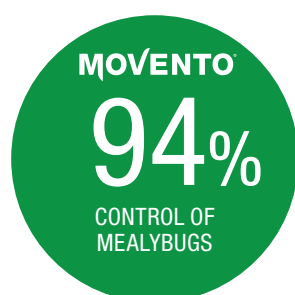
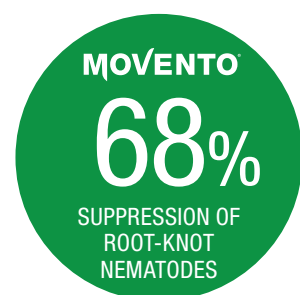
Nematode infestations are commonly found in areas of the vineyard where vines lack vigor, growth and abundant yields. Effective nematode management relies on a variety of measures that can help enhance vine longevity and yield.

NEMATODES CAUSED  
**\$157 B**  
IN YIELD LOSS  
WORLDWIDE<sup>1</sup>

ROOT-KNOT NEMATODES CAUSED  
**\$1 BILLION**  
IN ANNUAL LOSSES  
TO THE WINE  
INDUSTRY

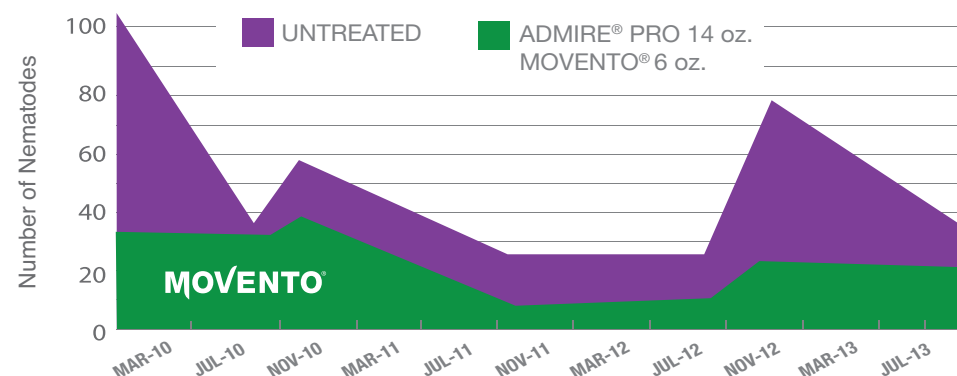
## UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION TRIALS SHOW:

University of California Cooperative Extension trials show early May and post-harvest applications of Movento® can help result in 68% suppression of root-knot nematodes and 94% control of mealybugs.



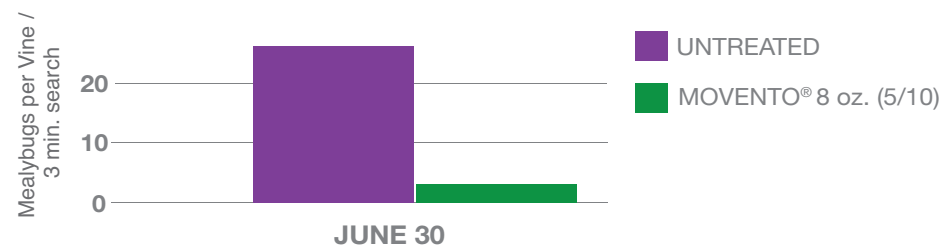
## MOVENTO® SUPPRESSES ROOT-KNOT NEMATODES BY 68%

Four-year trials show Movento insecticide/nematicide combined with Admire® Pro insecticide from Bayer provides long-lasting efficacy against root-knot nematodes.



## MOVENTO® CONTROLS MEALYBUGS BY 94%

Recent trials conducted by the University of California Cooperative Extension – Kern County indicated that an early May application of Movento® led to a 94% reduction in the number of mealybugs found in vineyards.



Movento provides allover protection from mealybugs and nematodes throughout the season to help grape vines grow their strongest. Include Movento as part of your pest management program to protect your grapes and help ensure improved root health and higher quality fruit.

## NEMATODES BEST MANAGEMENT PRACTICES<sup>2</sup>

### Field evaluation and nematode sampling:

It is crucial to identify the nematode species present and estimate the population size through nematode sampling.

### Vineyard preparation pays off:

Vineyard preparation can also include the use of fumigation, where suitable, to help lower nematode populations when initially planting a vineyard.

### Virus transmission considerations:

Some nematodes are vectors to plant diseases that should be eliminated before establishing new vineyards.

### Crop protection products:

Movento, applied as a foliar application, is a nematode management tool that will translocate to roots where nematodes feed, providing an easy way to manage nematodes.

### Rootstocks:

Plant only certified nematode-free or nematode-resistant rootstocks.

### Root health:

A healthy soil can help plant growth while providing organic matter decomposition, nutrient cycling, fertility and water purification, helping the plant better tolerate nematode populations.

### Good weed management helps:

Use herbicides at fallow since various weeds are hosts to nematodes.

### Sanitation:

Use appropriate sanitation practices. Avoid moving soil between fields. Clean equipment of soil before relocating to different fields.

### Cultural practices:

Manures and soil amendments can improve vine vigor and reduce the impact of nematodes.

**MOVENTO®**



Find out what Movento can do for you at [Movento.us/grapes](https://www.Movento.us/grapes)

<sup>1</sup>"Nematodes: A Threat to Sustainability of Agriculture," Satyandra Singh, Bijendra Singh and A. P. Singh.

<sup>2</sup>University of California Integrated Pest Management Program.