

NEMATODES: ROOT HEALTH & TREE LONGEVITY THREAT

| GROWERS CAN'T SEE |

UNSEEN BUT FIERCE ON ROOT HEALTH

Nematodes, microscopic roundworms barely visible to the naked eye, pose a serious problem for walnut and almond growers. Even with proper sanitation and fumigation practices, nematodes can still become an issue after setting new trees. Nematode populations can build up in the soil, attack tree roots and impact overall tree health.

NEMATODE THREATS TO ORCHARD HEALTH AND LONGEVITY



**ROOT
DAMAGE**



**REDUCED
WATER &
NUTRIENT
UPTAKE**



**LOW TREE
VIGOR**



**DISEASE
TRANSMISSION**



**-345 Lb./A
REDUCED
CROP YIELD¹**

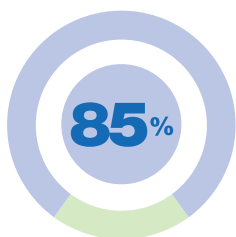


**A NEMATODE-CAUSED
TREE DEATH CAN CREATE
25YRS
OF YIELD LOSS IN
YOUNG TREES**

BEST PRACTICES FOR TREATING NEMATODES³

1. Sample for nematodes to determine the presence, species and number of nematodes through an experienced lab.
2. If possible, fumigate the soil prior to planting new trees. This will reduce the number of nematodes initially but will offer only a temporary solution.
3. Applications of Movento[®] in established orchards resulted in a reduction of nematode populations. Movento does offer a nematode management tool that can easily be incorporated into a tree nut grower's cultural practices.

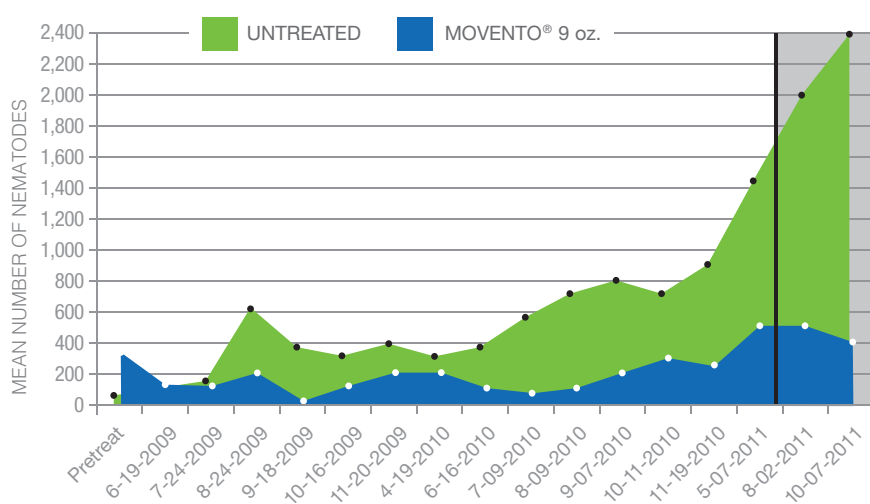
RESEARCH SHOWS APPLICATIONS OF MOVENTO[®] IN ESTABLISHED ORCHARDS HELPED RESULT IN:



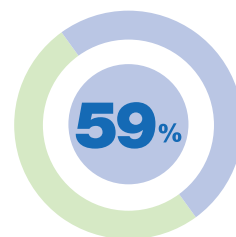
**SUPPRESSION OF
RING NEMATODES**

MOVENTO[®] SUPPRESSES RING NEMATODES BY 85%

Ring nematodes/500g sample in almonds (2009–2011)*
(Butte & Padre pooled, n=24 trees)



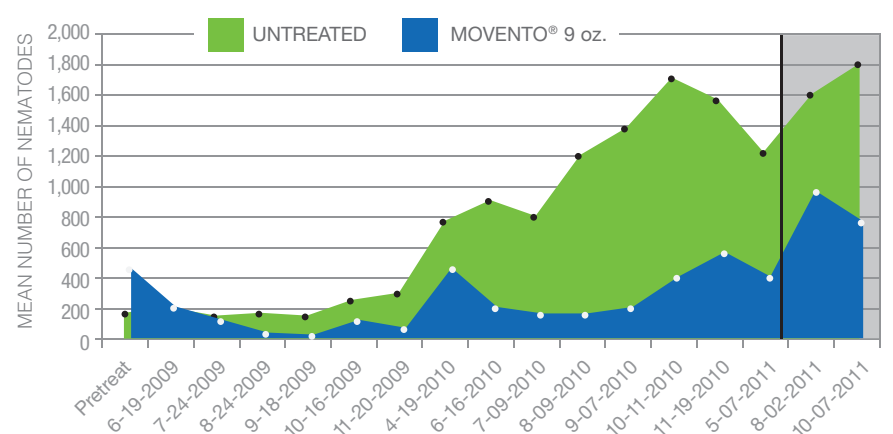
*Trial conducted by Gary Branses, Bayer CropScience, Kerman, CA, 2009–2011.



**SUPPRESSION OF
ROOT-LESION NEMATODES**

MOVENTO[®] SUPPRESSES ROOT-LESION NEMATODES BY 59%

Root-lesion nematodes/500g sample in almonds (2009–2011)*
(Butte & Padre pooled, n=24 trees)



Movento[®] insecticide is the only foliar application with downward movement within the tree to protect roots by suppressing nematodes. Include Movento as part of your pest management program to protect tree root health, improve vigor and produce high yields year after year.

MOVENTO[®]



Find out what Movento can do for you at Movento.us/tree-nut

¹Average yield loss in lbs. per acre is based on *California Agricultural Statistics Review*, 2014–2015. California Department of Food and Agriculture.

²"Nematodes: A Threat to Sustainability of Agriculture," Satyandra Singh, Bijendra Singh and A.P. Singh.

³University of California – Cooperative Extension. Department of Agriculture and Resource Economics. UC, Davis, 2012.