

Trial EcoVigor: Nematode control in grapes

Product: EcoVigor **Trial setting:** Commercial farm
Crop: Grape **Location:** San Joaquin Valley, CA

Treated Area: 1 acre
Control Area: 1 acre

Objective

Change environmental conditions to limit populations of nematodes

Method of product application

A vineyard with a severe nematode problem was used for this trial. A one-acre plot was left untreated as blank control. Two one-acre plots were used for nematode treatments.

EcoVigor treatment: The soil around each drip well was carefully removed, 25 grams of chitin fines and 25 grams of EcoNutrient were added manually, and finally the holes were covered with a one inch thick layer of soil. Half a gallon of EcoVigor was diluted in water and applied per acre through the irrigation system. This application was repeated after 3 and 6 weeks.

A treatment with a well-know natural plant extract nematicide (Sincocin) in combination with a plant biostimulant made with plant extracts and minerals (Agrispon) was used as treated control. Agricultural Sciences Inc. in Dallas, Texas manufactures both products. Sincocin was applied at 26 ounces per acre and Agrispon at 16 ounces per acre.

Three different nematodes were counted in five 250 cc samples of soil at the beginning of the test, and after 2 months of treatment. The average count of the five samples was presented in the table below.

The nematodes counted were:

- Root knot nematode: *Meloidogyne sp.*
- Lesion nematode: *Pratylenchus sp.*
- Ring nematode: *Mesocriconema sp.*

Results

Nematode	Treatment	Initial Pop.	Final Pop.	% Reduction
Root knot	Control	168	159	5.4
	Sincocin + Agrispon	155	67	56.8
	EcoVigor	163	22	86.5
Lesion	Control	380	426	+12.1
	Sincocin + Agrispon	322	94	70.8
	EcoVigor	376	0	100
Ring	Control	812	925	+13.9
	Sincocin + Agrispon	857	211	75.4
	EcoVigor	833	35	95.8

A significant reduction in the number of all species of nematodes was achieved with both treatments compared with the blank control; however, EcoVigor was more efficient than the combination treatment Sincocin + Agrispon with all nematode species.