

NEMATODE Integrated Management Strategy

Successful Nematode management requires an integrated strategy:

> Pest Identification

Knowing the species of nematode is required to understand the level of threat and what chemical and cultural controls will provide the desired results. Vereens can assist in collecting and managing the testing process.

➤ Control/Suppression of the Pest (Have you ever tried controlling Geese!) There is no "one size fits all" control product on the market. Nematodes are very adaptive and resourceful in outliving chemical controls. In addition, they can be very expensive and come with many restrictions. Utilizing a control/suppression strategy that introduces different active ingredients and modes of action is required. Additionally, proper placement and holding are critical for initial and longer-term control.

Increasing the Plants Damage Threshold

Irrespective of chemical control/suppression practices, anything that increased the plants threshold – making it survive under higher populations – can pay dividends. Improving root strength, functionality and regenerative capability

The following will provide our insights on practices that have been field demonstrated to be effective in improving performance and plant defense from Nematode infestations.





NEMATODE Integrated Management Strategy Control / Suppression Tactics



Proper identification of the specific species is critical to determining the threshold level and control measures.

Quick Sampling Guide:

Areas Suspected To Have Infestations -

Using a 1" soil probe, collect 10-12 probes in the suspect area using the $\,$

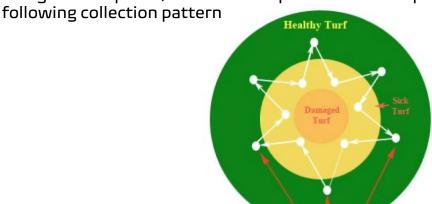


Diagram by Ganpati Jagdale

Since Nematodes generally do not survive near the surface due to harsh conditions, remover the top 2" of the sample.

Mix the sample thoroughly and place in a plastic zip lock bag. Clearly label the sample location on the bag.

Nematodes must be alive during the Lab extraction to provide proper results

Keep the bag cool and out of direct sunlight and heat. It is best to transport in an insulated cooler.

Use Express Mail / Overnight Delivery when sending to the lab and it is recommended to mail early in the week to prevent the sample from remaining in transit over a weekend.

Your Results will identify the various species present and the level of infestation. This information will be used to determine the best management strategy and tactics for control.



NEMATODE Integrated Management Strategy Control / Suppression Tactics



There are several effective chemical control options that include synthetic pesticides and organic oils. In our experience, an IPM approach delivers the best overall results

Chemical Control:

Once identified a nematicide can be applies to control specific species. The table below provides general information on the common products

Product	Species Controlled	Rate/Acre	Cost/Acre	Notes				
Indemnify a.i.: Fluopyram	Root Knot Lance ,Sting Ring, Dagger	17.1 fl.oz	\$1,717	17.1 fl. Oz. /acre max annual application				
Divanem Nemamectin a.i.: Abamectin	Root Knot Lance Sting	3.125 – 12.2 fl. Oz.	\$90 - \$350 \$54 - \$210	50 fl. Oz. / acre max annual application				
Application Uniformity and Placement: The addition of EXCALIBUR Soil Surfactant greatly improves the initial placement and uniformity of chemical distribution. This ensures the highest level and length of control.								
EXCALIBUR		64 fl oz	\$68.50					

Organic Control:

TRIGON Nematode Control combines Geraniol and Eugenol oils providing a 100% natural based control option. The product is exempt from EPA restrictions and can be used as often as needed. TRIGON Nematode Control performance has been validated through University testing and field results.

Product	Species Controlled	Rate/Acre	Cost/Acre	Notes
TRIGON Nematode Control a.i.: Geraniol / Eugenol	Root Knot Lance Sting	1.0 – 2.0	\$125 - \$250	Initial App 2.0 gl/ac followed by 1.0 gl/ac bi weekly



NEMATODE Integrated Management Strategy Control / Suppression Tactics



Even with intensive management and control strategies, trouble areas often remain. Utilizing the TRIGON Nematode Control Tablets tablets allows easy treatment of these areas.

TRIGON Nematode Control Tablet:

Eliminates the need to load up the sprayer to hit nematode "hot spots". The product has no use restrictions allowing applications a needed with no re entry limitations.

Product	Species Controlled	Rate/Acre	Cost/1000	Notes
Nematode Control Tablets	Root Knot Lance Sting	100-gram tablet / 3000 sq. ft.	\$4.85	No Use Restrictions





NEMATODE Integrated Management Strategy Increasing Plant Threshold



The right technology combined with sound cultural practices can dramatically increase the plant and root threshold when battling nematodes.

In addition, these practices can improve plant tolerance to diseases, stress and drought conditions.

The stronger the plant and roots – the more they can withstand!



Balance

Air and water in an optimum soil account for 50% of what we are dealing with. This balance is critical for soil life and activity.

Aerification
Irrigation
Management
Drainage
Soil Surfactants
Soil Amendments



Diversity-Vitality

Maintaining a diverse and robust population of soil biology increases the soils capacity to support increased agronomic demands.

Bacteria
Protozoa
Nematodes
Predatory/Non-Predatory



Plant/Root Health

Sea Plant Extracts have been proven to increase plant and root health. The cold extraction process preserves the rich mineral, vitamin and natural plant hormones. This allows plants to survive under increased pest pressures.

Key Vereen Products

EXCALIBUROARS HS/PS

Key Vereen Products

Earthworks
3-3-3 Myco
ENERGY EZPZ
ENERGY ESSENCE
MERGE
MERGE

Key Vereens Product

NETRIC
Concentrated
Sea Plant Extract
ROOT HONEY