

Nematode Problems in Home Lawns

Nematodes are major pests of lawns throughout the Southeastern United States. They are microscopic roundworms that live in the soil and on plant roots. Nematodes are particularly a problem in areas with warm temperatures and sandy soils.

Nematodes injure lawns by feeding on plant root cells with their needle-like mouth parts (stylets). The root system becomes damaged to the point where the lawn cannot properly absorb water and nutrients. The lawn becomes thin and weak, making it much more susceptible to other stresses, such as drought.

Symptoms

Nematode damage to lawns may appear very similar to symptoms caused by other stresses, so a close examination of the site and a soil test are important. Accurate diagnosis of nematode damage can be made when the following types of evidence are considered:

Above-Ground Symptoms: The lawn may appear yellow, weak and slow to grow. Areas of the lawn may begin to thin, allowing weeds to invade easily. During periods of drought or mild stress, the lawn may wilt. Affected areas may appear irregular in size and shape, since the numbers of nematodes can vary greatly within a few feet.

Below-Ground Symptoms: Grass roots that are short, stunted, or have knots and swollen areas on them may indicate a nematode problem. The root system may also appear shallow with areas that are dead or branched excessively.

Laboratory Test Results of a Soil Sample:

Nematode sampling guidelines are available from any local county Extension office. There is a

nominal charge for each sample to help defray the costs of operating this service. Samples will be analyzed to determine the types of nematodes present and their quantities, so appropriate recommendations for control can be made.

Lawns Commonly Affected

All types of lawns grown in South Carolina can be affected by nematodes. The most damage occurs to lawns grown in the sandy coarse textured soils of our state. The Sandhills areas of the Carolinas and the sandy portions of our coastal areas are commonly infested with the most destructive nematode, the sting nematode. Sting nematodes are generally limited to coarse-textured soils that are high in sand content. They can cause serious damage to any type of lawn that is grown in the region.

Ring nematodes also commonly occur in sandy regions of South Carolina. Centipedegrass is very susceptible to their damage. Infested lawns typically have poor growth, become thin and easily invaded by weeds.

Prevention & Treatment: Once nematodes are identified as a serious problem in your lawn, there are several things that can be done. First, there are no chemicals available to control nematodes in the home lawn, even if applied by a certified pesticide applicator. Methods that can reduce the effects of a nematode problem are:

- **Improving the Overall Health of the Lawn:** Maintaining a healthy lawn is the best way to manage nematode damage in home lawns. Irrigate the lawn during periods of drought and keep fertility levels adequate. Use deep and infrequent irrigation to encourage deep root growth. Keep the lawn free from insect

and disease problems. A healthy lawn with a root system slightly damaged by nematodes may be able to survive if other stresses are kept to a minimum.

- ***Planting a Different Kind of Grass:***
Selection of a different species of turfgrass may provide a solution to certain nematode infestations. For instance, substituting St. Augustinegrass for centipedegrass in areas heavily infested with ring nematodes has been successful in some instances. Choose a substitute grass only after careful consideration of the site and maintenance requirements of the turfgrass in question.

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