STOP 15

Dr. John Knierim

Turfgrass Insects and Nematodes. Turfgrass in Michigan is subject to relatively few pests. Major damage normally occurs from white grubs (and occassionally wireworm) attacking the roots or sod webworms which clip off and consume leaf blades. White grubs and wireworms normally become a problem in seedings established on land previously committed to agricultural crops. They destroy the roots causing irregular patches of dead sod. Under heavy infestations the patches of dead grass can be rolled back like a rug due to the destruction of the roots by the larvae. Sod webworms are most commonly a problem in newly laid sod. The larvae feeds during the night by consuming blades of grass. At first injury appears as irregular trails of dead grass; but later the turf assumes a ragged unhealthy appearance over large areas. The larvae can be found in the thatch just above the soil level in silken burrows they construct.

Bluegrass and bentgrass turf is commonly infested with root lesion, pin, stylet, cyst, and spiral nematodes. Although these nematodes are harmful to numerous crops, only the spiral nematode, Helicotylenchus digonicus, has been shown to be pathogenic on turf grasses grown in Michigan. Shortened root systems due to nematode feeding sometimes results in a symptom during the drouthy part of the summer known as "summer dormancy". This symptom disappears, and the grass becomes green again as soon as the upper 1 or 2 inches of soil receives adequate moisture to support plant growth.

A research study is under way to investigate the survival of nematodes in sod under environmental conditions to which they are subjected during movement of bluegrass sod from the sod farms to the consumer within and without of the state.

STOP 16

Eugene E. Saari

Turfgrass Diseases. Grass clippings can result in a buildup of dead plant debris known as thatch. An extensive buildup of thatch becomes a problem to good turf management, because of the cultural problems it creates and the increase of disease incidence.

Many of the fungi which cause lawn diseases are capable of growing on both living and dead plant material. Consequently, thatch can act as a reservoir for a disease-causing fungus. Thatch also restricts the growth and development of a good root system. Extended periods of hot, humid weather can be very damaging to grasses growing in heavy thatch.

Mechanical or chemical means are now available to remove thatch. Top dressing with mixtures similar to the basic soil structure will encourage microorganisms to break down thatch. Adjustment of the pH to neutral or slight acidity is also recommended.