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G73-12 Iris Borer Control

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G73-12-A

NebGuide

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Iris Borer Control

Scouting, prevention and control of the iris borer.

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- Life History
- Prevention
- Control

This insect is the most serious insect pest of iris in Nebraska and is found virtually everywhere in the state. Damage is characterized by dark, streaked, or watery areas and ragged edges on the developing leaves of iris in May and June and extensive destruction of the insides of the rhizomes in July and early August. Examination late in summer will reveal a large white to pinkish caterpillar from 1 1/2 to 2 inches long in the rhizome, usually accompanied by a foul-smelling soft rot.

Life History

Adults (moths) emerge in September and October from the soil, mate, and deposit eggs on the dead leaves, particularly those that are dried and crinkled. Eggs usually are laid in crevices or rolled areas of the leaves, in groups of three to five or more. A single female moth is capable of depositing up to 1,000 eggs in her lifetime.

The egg overwinters and begins to develop in early spring. Eggs hatch during April and May and the young larvae begin to feed on young, rapidly growing iris leaves.

After feeding on leaf surfaces, causing scars from which sap runs down the leaf, the larvae assume a boring habit, entering the leaves and gradually mining downward. Leaf mining injury is characterized by dark, water-soaked areas or slits in the leaves. Some chewing also occurs on leaf margins.

When about half-grown (one-half to three-fourths inch long), iris borers reach the rhizomes, where they feed until late July or early August. As the borers feed, bacteria infect the rhizome, initiating the soft rot.

When fully grown, iris borer larvae are about 2 inches long, cylindrical, smooth, and plump with whitish to pinkish bodies and dark brown heads. Shortly after this stage is reached the larva leaves the iris rhizome and constructs a "cell" in the soil where the pupa stage is passed.

The pupa is a non-feeding transition stage between the larva (or worm) and the adult moth. Pupae are dark brown to black and are usually found in the top 2 inches of soil. After two to three weeks in the pupa stage, the iris borer moth emerges and the cycle is completed when the eggs are deposited. Moths are typical millers--dark grey to brown, with a wingspan of about 2 inches. There is only one generation per year.

Prevention

One key to iris borer prevention is removal and destruction of the previous year's dead foliage before April 1. This sanitation practice will reduce the problem by destroying overwintering eggs in the residues.

Control

Insecticide sprays of dimethoate (Cygon), lindane, malathion, or chlorprifos (Dursban) can be applied in late April through early May to kill larvae feeding on the leaves. At least two applications should be made, two weeks apart, to obtain satisfactory control. Many larvae can be killed by hand in May and June by squeezing infested leaves between the thumb and forefinger in the vicinity of the feeding injury. Destroy heavily infested rhizomes, along with the larvae. Some borers in the rhizomes can be killed by poking them with a piece of wire.

When resetting your iris beds, it is important to trim away damaged or rotted areas. To eliminate soft rots caused by bacteria, cut off the damaged parts of the rhizomes and dip the undamaged portions in a solution of 1 part of household chlorine bleach and 10 parts of water.

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