# **Identify** and **Avoid** 16 Pests That Will Kill Your Lawn In Days!

#### Pest #1 - Brown Patch

**SEASON:** Mid- to late summer.

**APPEARANCE**: Large, irregular circular areas, up to several feet in diameter, occur throughout the lawn. The patches usually have a brownish to gray discoloration with a water-soaked appearance around the edges. Normally, only the leaves and stems are attacked.

**FAVORABLE CONDITIONS:** High temperatures (75° to 95° F), heavy or dense thatch, high humidity, lush or weak growth from overfertilizing, and excessive moisture create perfect conditions for this disease to thrive in.



**SUSCEPTIBLE GRASSES:** It attacks Kentucky Blue, bentgrass, Bermuda grass, ryegrass, fescue, and zoysia grass.

**RESISTANT VARIETIES:** 'Manhattan II', and 'Pennant' perennial ryegrasses; 'Rebel II' and 'Wrangler' tall fescues.

# Pest # 2 - Fusarium Patch (Pink Snow Mold)

**SEASON:** Fall to spring.

**APPEARANCE**: Circular patches, 1 to 8 inches in diameter; tiny white or pink masses are sometimes seen on dead leaves. Fungal threads, also white or pink, become visible in early morning. Blades of grass are light tan and stick together. Small, white, or pinkish gellike spore masses are occasionally seen on dead leaves. This disease is called pink snow mold if it develops under snow or at the margins of melting snowbanks.



**FAVORABLE CONDITIONS:** Cool (40° to 60° F) temperatures and moisture.

SUSCEPTIBLE GRASSES: Ryegrass, fescue, zoysia grass, colonial and creeping bentgrass.

**RESISTANT VARIETIES:** 'Medallion' and 'Scaldis' fine fescues, 'Eclipse' and 'America' Kentucky bluegrasses, 'Manhattan II' and 'Pennant' perennial ryegrasses

## Pest #3 - Leaf Spot

**SEASON:** Spring to fall.

**APPEARANCE**: The most obvious symptom of this disease is elongated circular spots on the grass blades. These spots have a brown or straw-colored center with black to purplish borders.

**FAVORABLE CONDITIONS:** Cool (50° to 70° F), moist conditions are most favorable for the growth of leaf spot. The spots first appear on grass in shady areas of the lawn. They occur most commonly during wet, humid weather or in lawns that are often lightly sprinkled or mowed too closely.



SUSCEPTIBLE GRASSES: Kentucky bluegrass, fescue, and Bermuda grass.

**RESISTANT VARIETIES:** 'Julia' and 'Midnight' Kentucky bluegrasses, 'Banner II' fine fescue, 'Cimarron' and 'Rebel II' tall fescues.

## Pest # 4 - Necrotic Ring Spot

**SEASON:** Spring to fall.

**APPEARANCE**: "Frog-eye" patterns occur in the lawn; these are small circles of dead grass with a tuft of green grass surrounding and enclosing them. Infected leaves turn reddish purple.

**FAVORABLE CONDITIONS:** This fungus is the most active at relatively low temperatures (58° to 82° F), but dead spots may not become apparent until warm, dry periods in summer, when they seem to suddenly appear.



**SUSCEPTIBLE GRASSES:** The most susceptible is Kentucky bluegrass, particularly 'Arboretum', 'Fylking', 'Park', and 'Pennstar'. Bentgrass, creeping bentgrass, and fine fescues can also be attacked.

**RESISTANT VARIETIES:** None have been identified

## Pest # 5 - Dollar Spot

**SEASON:** The disease occurs from spring through fall, and is most active during moist periods of warm days (70-85°F) and cool nights (60°F) in the spring, early summer and fall.

**APPEARANCE**: Dollar spot symptoms vary depending primarily on turfgrass species, mowing height and nutrition level. Overall appearance of dollar spot on closely mowed bentgrass golf greens differs from that observed on taller Kentucky bluegrass, fine fescue and perennial ryegrass turfs.



**FAVORABLE CONDITIONS:** Several factors influence the occurrence and severity of dollar spot. Bentgrass, hybrid bermudagrass and zoysia are most susceptible; while St. Augustine and centipede are less frequently attacked by dollar spot.

## Pest #6 - Powdery Mildew

**SEASON:** Early summer to fall.

**APPEARANCE**: First symptoms are light patches of dusty, white to light gray growth on grass blades, especially during cool, rainy weather. Lowest leaves may become completely covered. Although generally not too serious a problem, it can become severe if not controlled. Heavily afflicted areas look as though they've been covered with lime or flour or sprayed with a coat of white paint.



**FAVORABLE CONDITIONS:** Slow or non-existent air circulation, shade, and high humidity with temperatures of 60° to 70° F.

**SUSCEPTIBLE GRASSES:** Kentucky bluegrass, zoysia grass, and Bermuda grass. Lawns growing rapidly because of excessive use of nitrogen fertilizer are extremely susceptible.

**RESISTANT VARIETIES:** 'Cindy' and 'Flyer' red fescues, 'America' and 'Chateau' Kentucky bluegrasses

#### Pest #7 - Red Thread

SEASON: Fall.

**APPEARANCE**: Small spots that appear water-soaked enlarge rapidly to cover a large part of the leaf. As the spots dry, the leaves fade to a light brown or tan. Pink webs bind the grass blades together. Later, the fungus forms thin, red-to-pink, finger-like structures at the tips of grass leaves, which gives the lawn a reddish cast.



**FAVORABLE CONDITIONS:** Most damaging in spring and fall in temperatures of 68° to 75° F and high humidity. Low levels of nitrogen favor its development. When the grass growth slows down due to a lack of nitrogen, the disease then becomes more prevalent.

SUSCEPTIBLE GRASSES: Red fescue, ryegrass, Kentucky bluegrass, and bentgrass.

**RESISTANT VARIETIES:** 'Biljart' and 'Claudia' fine fescues; 'Chateau' Kentucky bluegrass; 'Pennant' perennial ryegrass.

#### Pest #8 - Rust

SEASON: Midsummer to fall.

**APPEARANCE**: The lawn takes on a rust-colored cast, especially noticeable from a distance. Dust-like spores, the main symptom of this disease, form in circular or elongated groups on grass blades. Anything moving through a severely infested area will be covered by the spores, and may spread the disease.



**FAVORABLE CONDITIONS:** Moderately warm, moist weather. Dew that lasts for 10 to 12 hours promotes germination. Stress that restricts growth favors rust.

**SUSCEPTIBLE GRASSES:** Can affect most types of turfgrass, but Kentucky bluegrass is damaged most frequently.

**RESISTANT VARIETIES:** 'America' and 'Eclipse' Kentucky bluegrass, and 'Manhattan II' perennial ryegrass.

## Pest #9 - Pythium Blight

SEASON: Summer.

**APPEARANCE**: The first indication of this disease is the occurrence of irregular patches a few inches in diameter. In those areas, the grass blades appear water-soaked, soft and slimy. The blades soon wither and fade to light brown or straw color, sometimes reddish brown, particularly if the weather is sunny and windy. Then the patches join to form large damaged areas, often several feet in diameter. In the early morning, a white, cottony fungus can be seen on the blades of diseased plants.



**FAVORABLE CONDITIONS:** High temperatures and excess moisture.

**SUSCEPTIBLE GRASSES:** Tall fescue, bentgrass, Bermuda grass, Kentucky bluegrass, annual ryegrass.

# Pest #10 - Armyworms

**INSECT APPEARANCE**: The armyworm caterpillars are light tan to dark brown with yellow, orange, or dark brown stripes down the lengths of their backs. They are 3/4 inch to 2 inches long. Adult moths are tan or mottled gray with a wingspan of about 1 inch. They fly only at night or on overcast days. In daylight, they hide in the soil around grass roots.

**LIFE CYCLE:** Moths appear in late spring to early summer and lay hundreds of eggs at a time on the grass. Larvae hatch from eggs within 10 days and begin feeding. You may see the larvae hanging from threads on the grass. In the South, there may be as many as six generations a year.



**DAMAGE THRESHOLD:** More than five larvae per square vard indicates infestation.

**CONTROL:** Spray with Bacillus thuringiensis, carbaryl, chlorpyrifos, diazinon, neem, or pyrethrum. Or, treat with diazinon or chlorpyrifos lawn granules, which also work effectively.

### Pest # 11 - Billbugs

**INSECT APPEARANCE**: Billbug larvae—which do most of the damage—are white, legless grubs about 3/8 inch to 1/2 inch long, with snouts used for burrowing and chewing off plants.

**LIFE CYCLE:** Overwintering adults emerge in midspring when they often can be found crawling on sidewalks and driveways. Soon after emerging, they lay eggs on the stems of grass plants. Grubs generally emerge in May or June and then tunnel into the stems, from where they eventually will migrate into the root zone.



**DAMAGE THRESHOLD:** More than one grub per square foot of lawn.

**CONTROL:** Spray grass foliage and thatch in spring (when the adult billbugs are moving around). Use carbaryl, chlorpyrifos, diazinon, or neem.

## Pest #12 - Chinch Bugs

**INSECT APPEARANCE**: Adult chinch bugs are small, from 1/16 to 1/4 inch long, depending on the species. Most are black with white wings, each of which has a distinctive triangular black mark. Young chinch bugs are smaller, wingless versions of their parents, but are red with a white back stripe.

**LIFE CYCLE:** Adult chinch bugs overwinter in both the North and South and emerge as early as March. For the rest of the growing season, they feed by sucking the juice from grass blades, injecting a poison that causes blades to turn brown and die. They are especially active during hot, dry weather.



**DAMAGE THRESHOLD:** To find chinch bugs, push a bottomless 2-pound coffee can into the affected lawn area, about 2 inches deep. Fill it with warm water. Any chinch bugs present should float to the surface. If more than 20 chinch bugs appear, control is warranted.

CONTROL: Sabadilla, chlorpyrifos, diazinon. Reduce nitrogen fertilizer, and plant resistant grass.

#### Pest # 13 - Cutworms

**SYMPTOMS:** As with armyworms, cutworms leave small, 1- to 2-inch-wide patches of brown grass in newly seeded and established lawns; the plants are eaten off at soil level.

**INSECT APPEARANCE**: The larvae of cutworms are plump, smooth, and almost always curl up when disturbed. They can be various colors but are most often gray, brown, or black; some are spotted or striped. They often grow to 2 inches long. The moths are dark and fly at night.



**LIFE CYCLE:** Moths lay their eggs in late summer, and after hatching, cutworm larvae over winter in trash and clumps of grass. Larvae resume feeding early in spring (and only at night). They mature into moths in July or August.

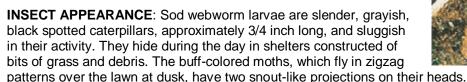
**DAMAGE THRESHOLD:** Use the pyrethrum test (listed below), to determine how pervasive these insects are. If you find more than 10 larvae per square foot, it's time to act. Cutworms don't seriously damage grass unless there is a severe infestation. More damage may be done by birds scratching at the turf to feed on the larvae.

**PYRETHRUM TEST**: Other insects, such as sod webworms, can be driven to the surface of the soil by drenching a patch of lawn with pyrethrum, a natural pesticide. Mix 1 tablespoon of a 1- to 2-percent pyrethrum pesticide in 1 gallon of water. Mark off about 1 square yard, and apply the entire gallon mixture as evenly as possible using a sprinkling can. If those insects are present, within a few minutes they will rise to the surface of the lawn, where you can then spot and identify them.

**CONTROL:** Bacillus thuringiensis, carbaryl, chlorpyrifos, diazinon, neem, pyrethrum.

#### Pest # 14 - Sod Webworms

**SYMPTOMS:** One- to two-inch-wide dead patches with grass blades chewed off just above the thatch line. Usually prevalent in the hottest, driest areas of the lawn. Silky white tubes found nestled in the root area.





**LIFE CYCLE:** Over-wintering larvae emerge and begin feeding (at night or on overcast days) in spring. They mature into moths in early summer. Throughout the summer, the moths fly over the grass and drop eggs, which hatch into larvae and repeat the feeding cycle on the grass. There may be as many as three generations per season.

**DAMAGE THRESHOLD:** Fifteen or more larvae per square foot indicates treatment is necessary.

**CONTROL:** Bacillus thuringiensis, carbaryl, chlorpyrifos, diazinon, neem, pyrethrum, resistant grasses

#### **Pest #15 - Ants**

**SYMPTOMS:** Most ants do not pose a problem as pests. The Carpenter ant however, is a different story. Carpenter ants may move from decaying portions of the wood into sound lumber in the process of enlarging the nest. They cut galleries with the grain following the softer parts of the wood.

**INSECT APPEARANCE**: The body of an ant is clearly divided into three sections: the head, the thorax, and the gaster. (The narrow waist is actually within the abdomen, so the part of the abdomen behind the waist is called the gaster.) The waist can be made up of one or two small segments, depending on the species.



**LIFE CYCLE:** The pupa emerges as an adult. The entire life cycle usually lasts from 6 to 10 weeks. Some queens can live over 15 years, and some workers can live for up to 7 years.

**DAMAGE THRESHOLD:** Fifteen or more larvae per square foot indicates treatment is necessary.

#### Pest #16 - Grubs

**SYMPTOMS:** Grass grubs attack the roots of most pasture plants, but their numbers are highest under susceptible species such as white clover and ryegrass and very low under the resistant lucerne and Lotus major. Tall fescue supports relatively high populations of grass grub but with little effect on plant production.

**INSECT APPEARANCE**: The larvae are C-shaped when relaxed, creamy white in colour, and have a light tan head and a horseshoe-shaped cluster of anal bristles. They moult (cast their skins) three times. Newly hatched larvae are about 5 mm long and weigh only 2-3 mg.



**LIFE CYCLE:** Most grass grubs hatch in December and January and pupate 9-10 months later. They are found up to 150 mm below the soil surface. The first larval stage lasts about 3 weeks and the second about 6 weeks. The third instar is present until the following September or October, but completes its growth and stops feeding about July, depending on the conditions. The pupal stage lasts 3-4 weeks.

**DAMAGE THRESHOLD:** Grubs of all species feed on the roots of many plants, but prefer the fibrous roots of turfgrasses. As the root system is destroyed, sections of turf wilt, turn brown and can be easily pulled back to reveal grubs beneath. Secondary damage is also caused by skunks searching for grubs as food. Damage is most severe in the fall and the spring when the grubs are increasing in size rapidly and feeding near the surface.