

<u>Identification and Treatment of Common Pest and Disease</u> Problems in the Residential Lawn

Being able to identify common pest and disease problems is an important part of maintaining a healthy and visually appealing lawn. In order to identify common pest and disease problems in the residential lawn, it is important to be able to identify what type of turf grass mix your lawn contains. The three most common types of grasses used in the northern part of the United States are <u>Kentucky Bluegrass</u>, <u>Perennial Ryegrass</u> and <u>Tall Fescue</u>, which is often mixed with Bluegrass and Perennial Ryegrass. When you have identified which type of grass you have, you can more readily identify which disease your lawn may be infested with, since each variety tends to have its own diseases and pests.

Lawn Diseases

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Affecting all 3 types of Grasses

Gray Snow Mold

Symptom: This mold commonly has a gray, gel-

like appearance. Spots are approximately 12" in diameter.

Time: Late winter, early spring

Damage: Mats down the grass; if severe

enough, it will leave a brown, dead

spot.

Cause: Often the result of poor late-season

mowing practices, because long grass in the winter harbors this

disease

Treatment: Grass should be cut to proper length

before it goes into dormancy in northern climates. This is the

easiest and most economical way to prevent this disease, but it can also be prevented using a preventive

systemic lawn fungicide.



Fairy Ring

Symptom: Mushrooms growing in a circular

band on the lawn in the spring and summer. Diameter can be from 1-12'. Within the band, the grass is darker green than the rest of the

lawn

Damage: Unsightly, and can kill the grass

within the band

Treatment: Fertilize the lawn well and kick the

mushrooms down



Fairy Ring
Department of Crop &
Soil
Sciences at Penn State

Affecting Cool Season Grasses

Leaf Spot

Symptom: Prominent black oval spots on the

blade of grass

Time: Shows up in early May and late

August

Damage: Thinning of the turf over several

years if not treated

Cause: Associated with high humidity and

low mowing heights (1.5" or less)

Treatment: Can be prevented by following good

lawn-cultural practices.

This means mowing at a height of 2.5 – 3 inches and irrigating during the early morning hours, from 5:30

to 10:30 A.M.



Leaf Spot Plant Disease Diagnostic Lab at Kansas State



Red Thread

Symptom: Can be identified by its fuzzy pinkish

red threads and is usually found in patches less than 12" in diameter

Time: Most commonly found in the spring

and in the fall months

Damage: If severe enough, could kill the grass Cause: Often a result of long grass, improper

fertilization and water- soaked lawns

Treatment: Can be prevented by mowing at

proper heights, implementing a sound fertilization program and by

proper irrigation.



Bag Worm
Department of Entomology
at Purdue University

Pink Patch

Symptom: Very similar to Red Thread but

lacking the fuzzy threads. It simply

appears as a pink circle.

Time: Spring.

Treatment: Can be prevented using the same

practices used to prevent Red Thread

(see above)



Pink Patch http://www.agry.purdue. edu/turf/tips/2003/pink %20patch%20mycellium. jpg



Fusarium Blight (also affecting Bluegrass and Perennial Ryegrasses)

Time: Summer

Damage: If not treated, will eventually kill the

infected spot of turf

Cause: Common in lawns that are compacted

or have heavy thatch (decomposed grass matter). The disease begins small but begins to spread when daytime temperatures are 90° F and when nighttime temperatures are

above 70∘ F.

Treatment: Proper irrigation and fertilization are

the main ways to prevent this

disease.

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<u>Pythium Bliaht</u>

Symptom: Cotton-like substance on a slimy,

matted turf

Time: Summer

Damage: Mats down the grass and could

eventually kill it

Cause: Excessive fertilization and excessive

moisture. It is also commonly seen when daytime temperatures are between 80 – 95° F and when nighttime temperatures are above

70∘ F for three consecutive nights. Treatment: Can be prevented by implementing a

sound fertilization program and by

proper irrigation



Pythium Blight
Department of Plant
Pathology
at the University of
Wisconsin - Madison

Affecting Kentucky Bluegrass



Dollar Spot:

Symptom: Shows itself as a spot in the lawn

about the size of a silver dollar in late

May to early June. With closer inspection of the grass blade, a

reddish-brown hourglass-shaped spot

can be seen.

Damage: Will eventually kill the affected area

of turf

Cause: Often the result of excessive thatch

and poor fertility

Treatment: Excessive thatch and poor fertility can

be prevented by proper fertilization, which involves applying enough nitrogen to give the lawn a green vigorous appearance, without

applying too much.



Dollar Spot
Department of Plant
Pathology
at the University of
Wisconsin - Madison

Rust (also affects other types of lawns)

Symptom: Can be identified by its rust colored

spots that easily rub off

Time: It often shows itself in the late

summer in dry conditions

Damage: Not really seen as a major problem

other than the inconvenience of

turning a home owner's shoes orange

when walking through the lawn

Cause: Warm days, cool nights and slow

drying of the lawn

Treatment: For prevention, mow frequently and

properly. If the rust is severe, implement a systematic fungicide, as

well as catch and discard grass

clippings when you mow.



Rust
Plant Disease Diagnostic
Lab at Kansas State



Lawn Pests

Identifying common lawn pests is just as important as identifying common lawn diseases. Pests fall into two major groups: Insects and Weeds.

Insects

The five major insects that effect lawn turf are Japanese Beetles, the Northern Masked Chafer, May Beetles, Sod Webworms and Army Worms.



Northern Masked Chafer Center for Urban Ecology & Sustainability at the University of Minnesota

Japanese Beetles, Masked Chafers and May Beetles. The larvae or grubs of these insects eat through the root crown of the grass. Dead patches of grass will appear, and patches can easily be pulled up in chunks. The grubs are usually visible under the removed turf. Often skunks and raccoons will damage lawn turf searching for grubs as a food source. Damage from May beetles is commonly seen in mid-summer whereas Japanese Beetle and Masked Chafer damage is commonly seen in late summer into fall.



Grub
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Purdue University
http://www.ppdl.purdu
e.edu/
ppdl/images/grub.jpeg

Sod Webworm (larva of lawn moths)

Symptom: Roughly three-quarters of an inch

long and having stiff hairs running along its body. This insect typically

affects Bluegrass species.

Time: Mid-May and at the end of August Damage: Chews through the root crown of



Sod Webworm The University of



grass and spins silk-like webs in the thatch, possibly resulting in death of large sections of the lawn

Minnesota Extension Service

Army Worm

Symptom: Roughly 1.5 inches long, green and

has several strips on its side. Skeletonized grass blades

Time: Spring

Damage: Unlike the other insects, this worm

actually eats the blade of the grass instead of its root system. Although

it's not usually a major problem, if severe enough, it can cause death of patches of the lawn.



Army Worm Damage Copyright © 2005 Purdue University http://ppdl.org/dd/images/ armyworm-lawn.jpeg

Weeds

Weeds are the second lawn pest. Did you know that a weed is defined as any plant that is unwanted in a certain area? For example, a corn stalk would be considered a weed if it were growing in the middle of your lawn and turf grass would be considered a weed if it were growing in a corn field. Weeds in lawn fall into three main groups: Grassy weeds, Annual Broadleaf weeds and Perennial Broadleaf weeds

<u>Grassy weeds</u> include Crabgrass and Annual Bluegrass. Crabgrass can be identified by its flat crab-like appearance whereas Annual Bluegrass can be identified by its boat-shaped tip and its ability to produce seed heads even when mowed



at heights less than one inch. Both of these grassy weeds are annuals, meaning that they complete their lifecycle within one growing season. The best control for these weeds is an application of a granular pre-emergent herbicide in late-winter or early spring



Crabgrass
University of Florida
Environmental
Horticulture Department

Annual broadleaf weeds are another common group of lawn weeds. This group includes Black Medic, Yellow Woodsorrel and Common Chickweed. Black Medic can be identified by its trifoliate leaves (containing three leaves), its clover-like appearance and its small yellow flowers. Yellow Woodsorrel is also trifoliate, but the leaflets are heart-shaped and have yellow trumpet-like flowers. Finally, the Common Chickweed can be identified by its shiny leaves, hairy stem and its small, white five-petal flowers. These weeds can be controlled easily by using any common selective Broadleaf Herbicide or by hand pulling



Common Chickweed
Plant Pathology
Extension
of Iowa State University

<u>Perennial Broadleaf weeds</u> include Mouse Ear Chickweed, Canada Thistle, Plantains and Dandelions. These weeds are considered perennials because they live longer than one growing season and can reproduce multiple types.



Mouse Ear Chickweed is a low-growing weed that reproduces by creeping roots. It can be identified by its hairy stem and leaves as well as by its small, white flowers. This weed can be easily controlled by hand pulling because of its shallow root system, but chemical means are preferred.

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Canada Thistle is a very common weed in the lawn and landscape. It can be identified by its light-green, notched and slightly spiny leaves. This weed is one of the most difficult to eliminate due to its large horizontal root system. It is recommended that you use only chemical means to control this weed, because hand pulling usually does not remove the whole root system, which results in the growth of two weeds in the same location as the previous weed.

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Plantains can be identified by their low growing habit (form) and strongly ribbed leaves. The greatest characteristic by which they can be identified, however, is their flower that is borne on a long flower stalk in mid-summer.

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The Dandelion is probably the most common weed found in the residential lawn. It can be identified by its low growing habit, large tap root and, of course, its bright yellow flower seen typically in the spring. This weed seems to be the most hated weed by most homeowners due to its ability to reproduce quickly and abundantly. The best way to control this weed is to apply a selective Broadleaf Herbicide in the fall; hand

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pulling is not recommended due to the Dandelion's large tap root.