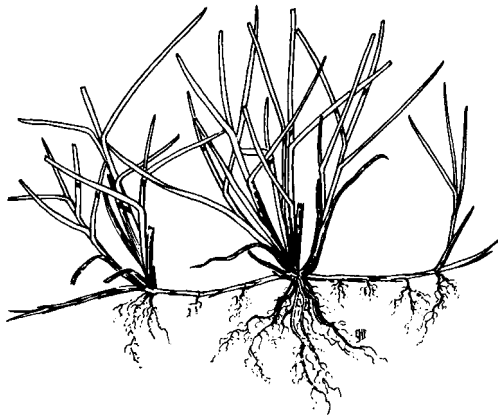


PLANT & PEST ADVISORY

LANDSCAPE, NURSERY & TURF EDITION \$1.50

MAY 31, 2001



Diseases of Turfgrass

Bruce B. Clarke, Ph.D., Turfgrass Pathology

General

Take-all patch is still apparent on bentgrass turf. **Anthracnose**, **dollar spot** and **red thread** are also prevalent on golf and landscape turf at this time. Since all three diseases are stimulated by environmental and cultural stress, maintain optimum turf vigor (i.e, provide adequate soil moisture and fertility) to reduce disease severity. **Leaf spot/melting-out** is present on Kentucky bluegrass and bentgrass turf. Refer to recent issues of this newsletter for complete disease control recommendations.

Brown Patch

Begin preventive control measures now to suppress this destructive summertime disease caused by the fungus *Rhizoctonia solani*. For best results, avoid heavy applications of nitrogen fertilizers during hot, humid weather, water in the early morning hours (12 midnight to 8 AM), and apply Banner, Chipco 26GT, Chlorostar, Cleary 3336, Compass, ConSyst, Curalan, Daconil, Eagle, Fungo, Heritage, mancozeb, Manicure, Medalion, Prostar, Spectro, Thalonil, Touche, or Vorlan on a preventive basis in areas with a previous history of **brown patch**.

Dollar Spot

This disease, caused by the fungus *Sclerotinia homoeocarpa*, has been very active recently on greens and tees. To prevent **dollar spot** from causing damage on susceptible turf again this year, maintain adequate nitrogen fertility, water in the early morning hours, reduce thatch, avoid the sole use of any fungicide for prolonged periods of time (to reduce the possibility of fungicide resistance), and apply Banner, Bayleton, Chipco 26GT, ConSyst, Curalan, Daconil, Eagle, mancozeb, Manicure, Rubigan, Spectro, Thalonil, Touche, or Vorlan per manufacturer's recommendations. Repeat fungicide applications as needed through mid-October.

Fairy Ring

This disease, caused by a group of fungi known as *basidiomycetes*, is starting to show up on golf greens and home lawns at this time. Symptoms typically appear as continuous or interrupted rings of dark-green turf. Mushrooms, which are often associated with fairy ring, usually develop in the spring and the fall. Although chemicals have been relatively ineffective against these fungi in the past, Prostar and Heritage

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have shown promise in university tests. For best results, maintain adequate soil moisture and fertility to mask symptom expression. Spike affected turf prior to irrigation or the application of fungicides to enhance water movement into the soil profile. The use of surfactants may enhance fungicide efficacy and aid in symptom suppression.

New Fungicides

Syngenta recently received EPA approval to market Medallion, a new contact fungicide for the control of selected foliar, stem, and root diseases of turfgrasses and ornamentals. Tests conducted at Rutgers have shown that Medallion 50W (fludioxonil) provides good to excellent control of **bentgrass dead spot, brown patch, leaf spot and melting-out, snow mold, summer patch and yellow patch**. Cleary Chemical Co. has also received a label for polyoxin D. This is a streptomycin class antibiotic marketed under the trade name Endorse 2.5W. Endorse is a systemic fungicide used for the control of **brown patch** on golf and landscape turf.

Red Thread

This disease, caused by the fungus *Laetisaria fuciformis*, is prevalent on sensitive turf at this time. Infections are characterized by the appearance of short red threads (1/16-1/4" long) emerging from tan-colored leaf blades. Affected patches are typically pink in color and range from 1 to 6 inches in diameter. Although perennial ryegrass and fine fescue are most susceptible, bluegrass, velvet bentgrass, bermudagrass, and tall fescue may also be affected. Red thread is most severe on low fertility turf during cool, wet weather. Well-fertilized turf, however, may also be attacked. To obtain optimum disease control, maintain adequate fertility levels, avoid drought stress and excessive thatch, and apply Banner, Bayleton, Chipco 26GT, Compass, Curalan, Eagle, Heritage, Prostar, Rubigan, Touche, or Vorlan per manufacturer's recommendations.

Turf Field Day

Mark your calendars now for this year's Rutgers Turfgrass Research Field Days. The **Landscape Turf Research Field Day** has been set for August 1, 2001 at the Plant Science Research Farm in Adelphia, NJ. Registration will begin at 8:00 AM. Guided tours will commence at 9:00 AM and will conclude at 3:30 PM, "rain or shine". The **Golf Turf Research Field Day** will be held on August 2, 2001 at the Turf Research Farm (Ryders Lane) in North Brunswick, NJ. This event starts at 9:30 AM (registration); field tours will run from 10 AM to 3:00 PM. The cost of registration is \$20 (\$30 with lunch) for the August 1 field day and \$25 (no formal lunch, but a food vendor will be on site) for the August 2 event. Recertification credits will be available at the conclusion of each program. Call Marlene @ (732) 932-9400 Ext. 339 for further information or directions. □

Diseases of Ornamentals

Ann Brooks Gould, Ph.D., Plant Pathology

Dutch elm disease

In New Jersey, **Dutch elm disease** appears on affected American elms in June through August. Affected branches throughout the crown will rapidly turn yellow and wilt (or flag). Black streaking may be evident in the vascular tissue just beneath the bark. The most effective means of saving infected trees includes prompt removal of diseased limbs up to 10 feet behind yellowed foliage. For best results in the future, control **bark beetles** (vectors of the disease) with dormant applications of methoxychlor, remove dead or dying elms as soon as they are noticed, and debark or burn dead wood prior to beetle emergence next spring. To prevent root graft transmission of this disease, dig a trench (3 feet deep) midway between diseased and healthy elms, or apply Vapam per manufacturer's recommendations. In addition, valuable trees may be injected on a preventive basis with Alamo, Arbotech, or Phytan 27 as per manufacturer's recommendations. When trees exhibit more than 5% crown symptoms, fungicide injection may be ineffective.

Fusarium wilt of mimosa

In southern counties, mimosa trees that have not broken bud may exhibit symptoms of **Fusarium wilt**. This disease is characterized by a dark brown to purple-colored streaking in the sapwood. Fungicides are not effective against this disease. In the future, prune dead wood during dry weather and increase tree vigor through proper fertilization and irrigation. □

Soil Survey Web Site

Joseph R. Heckman, Ph.D., Soil Science

Soil survey maps are available from the Natural Resource Conservation Service (NRCS). They provide a wealth of information about local soil conditions such as drainage, texture, and crop yield potential. The NRCS is now coming out with county soil survey maps on cd-rom. Somerset and Burlington Counties are currently available. Eventually you will be able to access soil survey maps from the web. For further information, the NRCS web site for New Jersey-specific information is: www.nj.nrcs.usda.gov. □

Plant Diagnostic Laboratory Highlights

Richard Buckley, Plant Diagnostic Laboratory Coordinator

General Interest

Me and my big mouth! In the last newsletter I wrote, "Evaluate your irrigation needs and get going!" Since then it seems like it has done nothing but rain. At any rate, a little heat stress, a little rain, sure gets things kicking in a plant diagnostic lab especially for the turf crowd.

Turfgrass

Cool wet weather brought many samples into the laboratory over the last two weeks. Samples were about evenly split between residential and golf turf. In golf turf the most common submission was **yellow patch** (a.k.a. **cool season brown patch**). Samples of this disease were submitted from golf courses in New York and Pennsylvania, as well as from courses in Cape May and Somerset Counties in New Jersey. **Pink snow mold** was also diagnosed on a sample from a golf course in Morris County. **Anthracnose** (our perennial favorite) was identified on golf turf from Atlantic, Bergen (Sr. Open), and Cape May County courses. We also had **anthracnose** samples from Delaware and Pennsylvania. The Atlantic County golf green with **anthracnose** also had **take-all**. The **take-all patch** was the primary problem with that site. In taller cut turf from the lawn and landscape, the most active fungi were those in the genus *Drechslera*. **Leaf spot and melting out**, caused by *Drechslera poae*, was identified in five samples of Kentucky bluegrass from Somerset County. We also had samples of **brown blight**, caused by *Drechslera siccanis*, on perennial ryegrass samples from Passaic, Somerset, and Middlesex Counties.

Landscape

Besides our normal complement of environmental and cultural issues on samples from the landscape, it was insect week in the laboratory for our landscape samples. **Oak leaf blotch leaf minor** was identified on red oak samples from Cumberland County. **Pine oyster shell scale** was found on black pine from Cape May County and **brown soft scale** was diagnosed on jade from a Bergen County home. A sample of hickory leaves from a Middlesex County landscape was covered with the galls of the **hickory leaf gall aphid**. **Snowball aphid** and **hemlock wooly adelgid** were found on samples of viburnum and hemlock, respectively, from another Middlesex County resident. We also had some disease activity. **Juniper tip blight** was doing a nice job of causing tip blight in a planting of juniper and false cypress in Atlantic County. A Morris County landscaper brought in several new boxwoods with **phytophthora root and crown rot**. The plants were set on the site last spring and were dying one by one down the hedgerow. On rhododendron, we were seeing **phyllosticta leaf spot** and **cercospora leaf spot**.

Greenhouse

Another (we had one last time too) South Jersey grower submitted samples of impatiens with **Pseudomonas leaf spot**. The sample also had considerable **alternaria leaf spot** activity. At first glance, it is very difficult to tell these two leaf spot diseases apart. Laboratory evaluation is almost essential for a correct diagnosis. The grower thought they had **impatiens necrotic spot virus**. □

Attn: Fax Subscribers

The fax broadcast system is currently under repair. Fax subscribers will temporarily receive the newsletter by mail.

To receive the newsletter on issue day, you can call our fax back system at 732-932-4535 and request fax document 8002. The updated newsletters are placed on the system around 5:00 pm every other Thursday.

If you are a fax subscriber and have not been receiving previous weeks' issues, please contact Cindy Rovins at 732-932-4539 or by fax at 732-932-9838, or e-mail rovins@aesop.rutgers.edu. We can send you back issues of the newsletter.

We apologize for the inconvenience and hope to reinstate the fax broadcasts shortly. Thank you for your patience. □

Deadline to Install Reflective Tape on Trailers

Trailer owners are reminded that June 1, 2001, is the deadline for the installation of red and white conspicuity tape to improve nighttime visibility on old and new trailers with a gross vehicle weight of 10,000 lbs. and 80" (or wider) overall width. This high-visibility reflective tape will greatly increase visibility of trailer boarders in low light and darkness. Using the tape on box trailers, flatbeds, livestock/grain trailers and tankers can help prevent serious accidents and cargo damage. For information on where to apply the tape on the trailer, refer to Section 393.11 of the Federal Motor Carrier Safety Regulations. This retrofit rule represents the first time federal safety standards applicable to new vehicles were made applicable to old ones. □

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