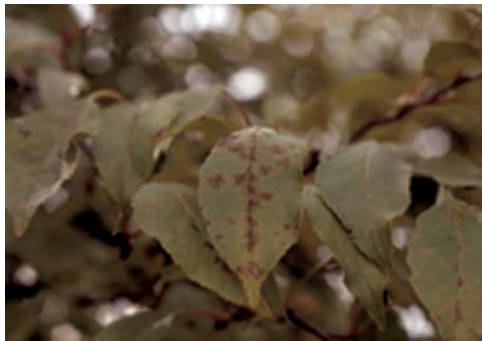


PLANT & PEST ADVISORY

A RUTGERS COOPERATIVE EXTENSION PUBLICATION

Foliar Diseases in the Landscape

Ann B. Gould, Ph.D., Specialist in Plant Pathology



Apple scab lesion on crabapple leaf.

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Recent rains and the promise of more to come is ideal for the foliar diseases in the landscape. The most common diseases on trees and shrubs affect the foliage as spots, blotches, and blisters. Although unsightly, most foliar diseases do not greatly impact the health of the plant, and chemical inputs are rarely necessary.

The development of the diseases described below, as well as many others, is favored by abundant moisture and cooler temperatures. These conditions in the spring months can vary significantly, which is why we see more disease in some years than in others. Management of springtime foliar diseases benefits from a few basic strategies: reduce leaf wetness and humidity in plantings (e.g., improve air-flow through proper spacing and weed management, irrigate during early morning hours, and avoid overhead watering); remove leaf litter to reduce fungal inoculum; and improve plant vigor to help reduce disease severity. Remember, however, that the environment drives the foliar disease process, so expect to see more of these following wet springs. Although spring-time diseases require chemical inputs only when troublesome, there are pesticides labeled for management of each of these diseases. When using a fungicide, always check the label for host, timing, and rates.

Apple Scab

Scab, caused by the fungus *Venturia inaequalis*, is one of the most common diseases of apple, crabapple, and other rosaceous ornamentals such as cotoneaster, hawthorn, mountain ash, and pyracantha. Symptoms of this disease include olive-colored spots (1/4 inch in diameter) with fuzzy borders on leaves and petals. Corky-looking lesions (hence the name “scab”) may appear on twigs and fruit. Severely infected leaves, petals, and fruit may turn brown and drop prematurely.

The best way to manage this disease in the landscape is to use resistant crabapple varieties. These include Anne E, Bob White, Molten Lava, Ormiston Roy, Prairifire, Red Jewel, Sargent, Sentinel, Strawberry Parfait, and Sugar Tyme. Contact your county Cooperative Extension office for more information (<http://njaes.rutgers.edu/county>).

Chemical controls include (see label for hosts and rates): Armada, azoxystrobin (see list of tolerant varieties on label), Consyst, chlorothalonil, copper (sulfate), fenarimol, kresoxim-methyl, mancozeb, myclobutanil, phosphate (trunk injection), propiconazole, Quali-Pro TM/C WDG, Spectro, SysStar, tebuconazole (trunk injection), thiophanate-methyl, trifloxystrobin, triflumizole, TwoSome (no commercial uses), Zyban.

SEE FOLIAR DISEASES ON PAGE 2

Leaf Spot and Blotch

Leaf diseases are caused by many different species of fungi, and most ornamental plants are susceptible to one type of leaf spot or another. Fungal spores, produced in fruiting structures in leaf litter on the ground, are splashed to developing tissue after budbreak. Typical leaf spotting occurs soon after the infection process begins.

Leaf spot diseases are caused by a wide variety of fungal and (some) bacterial pathogens. Leaf blotches, which encompass a larger portion of the leaf surface, are rarer but still prevalent. A very common leaf blotch in New Jersey landscapes is horsechestnut leaf blotch caused by the fungus *Guignardia aesculi*.

Chemical controls include (see label for hosts and rates) Armada, azoxystrobin, *Bacillus subtilis* (Japanese maple), chlorothalonil, Concert, copper, (Badge, hydroxide, metallic, oxychloride, salts, sulfate), ferbam, iprodione, Junction, kresoxim-methyl, mancozeb, propiconazole, Spectro, Stature, SysStar, sulfur (dusting, flowable, wettable), thiophanate-methyl, triadimefon, trifloxystrobin, TwoSome (no commercial uses), Zyban.

Anthracnose of Shade Trees

Anthracnose is a common disease of many shade tree species, particularly sycamore, ash, oak, maple, and walnut. This disease affects foliage as a scorch along leaf margins and veins, and also causes dieback and cankers to form on twigs.

Anthracnose begins its annual cycle in the spring. Small fruiting structures situated on small twigs infected the previous year produce spores. Spores are splashed and carried by wind to infect developing leaves. These diseased leaves develop lesions along veins and leaf margins, causing the tissue to appear "scorched." In severe cases, leaves soon completely blight and fall from the tree. In some species such as sycamore, trees promptly refoliate in the drier, early summer months. These new leaves are not usually affected by the disease; anthracnose is more severe when temperatures during leaf expansion remain between 55 and 60 F, and when moisture remains on leaf surfaces for long periods of time.

In the twig blight phase of the disease, infected twigs may die back 6 to 8 inches from the tips, and larger cankers may form if infection is severe or if the tree is in poor health. Repeated tip dieback results in clusters of dead twigs called "witches' brooms," which are readily apparent as you look at the silhouette of the tree.

To manage anthracnose, improve plant vigor, prune cankers and dead branches, and avoid planting highly sensitive plants. Irrigate in the early morning hours and avoid over-head watering to prevent excessive moisture from remaining on foliage.

Since anthracnose does not usually cause serious damage to healthy trees, application of fungicides is recommended only when it is necessary to keep trees as blemish-free as possible. If desired, some control of this

disease can be obtained with foliar applications of fungicides which include Armada, *Bacillus subtilis*, chlorothalonil, ConSyst, copper, (Badge, hydroxide, oxychloride, salts, sulfate), Junction, mancozeb, neem oil, phosphate (trunk injection), Quali-Pro TM/C WDG, Spectro, SysStar, thiabendazole (trunk injection), thiophanate-methyl, TwoSome (no commercial uses), trifloxystroban, or Zyban.

Sphaeropsis shoot blight and canker

This disease, also known as tip blight (or in the older literature Diplodia tip blight), is one of those diseases that is so common on susceptible 2- and 3-needle pines that I often don't even notice it. The disease is caused by a fungus called *Sphaeropsis* that infects and kills developing needles, resulting in short, dead candles. Sunken cankers may form on branches and stems, killing the tissue further from the trunk. The lower branches of pine are usually affected first, where tiny, black, "fruiting bodies" can be seen with the aid of a hand lens at the base of dead needles and on cones. Spores are released from these fruiting bodies in cool, rainy weather and are transmitted to susceptible tissue.

Management practices for tip blight include the pruning and removal of dead or dying branches during dry weather, watering during times of drought, and maintenance of plant vigor. Thorough coverage of new growth with azoxystrobin, Concert, copper (salts), Junction, propiconazole, Spectro, SysStar, or thiophanate-methyl is essential for optimum control. Apply fungicides with a compatible spreader-sticker to entire trees at budbreak and repeat at intervals specified on label.

Juniper tip blight

Although tip blight on junipers has the same name as the tip blight on 2- and 3-needle pines, it's caused by different fungi and has a slightly different disease cycle. Tip blight on juniper is caused by two fungi, *Phomopsis* and *Kabatina*.

Phomopsis attacks new growth all season long, especially on the lower branches. Affected shoots die from the tip toward the main stem. *Kabatina* attacks wood older than 1 year through wounds at any rainy time during the growing season. This fungus is more troublesome on plants that are weakened by soil moisture extremes, winter injury, or mechanical injury. Sometimes I notice this disease in beds beside parking lots where plows deposit piles of snow during winter.

The tip blight fungi produce small, black fruiting bodies in cankered regions at the base of killed twigs. The disease cycle begins in spring, when spores of the fungi are released in wet weather. Infections can continue throughout the growing season as long as wet weather prevails. Expect to see both diseases when junipers are crowded closely together or the humidity is high.

To manage tip blight, improve plant vigor, avoid mechanical injury, prune affected tissue, control insect pests when present, and space plants adequately to ensure

SEE JUNIPER TIP BLIGHT ON PAGE 3

good air circulation. To control *Phomopsis*, apply azoxystrobin, copper (Badge, hydroxide, salts, sulfate), Junction, mancozeb, propiconazole, Spectro, thiophanate methyl, or Zyban. For tip blight caused by *Kabatina*, apply mancozeb, Spectro, SysStar, or thiophanate-methyl. Add a spreader-sticker for best results.

Oak Leaf Blister

Look for symptoms of this disease, little “pockets” on the leaves of susceptible oaks, later this spring. The fungus that causes this disease, *Taphrina deformans*, overwinters in bud scales and twigs. Leaves become infected as they develop in spring, and symptoms begin to appear within several weeks. As the blisters age, they become dry, brown leaf spots, and heavily affected trees may defoliate. As with most diseases that development in the spring, oak leaf blister is favored by wet weather. This disease does not seriously harm healthy trees and control with fungicides is not usually recommended.

Chemical controls include chlorothalonil (red group only), Junction (laurel oak), mancozeb, Spectro, TwoSome (no commercial uses), ziram (dormant spray before budswell).

Volutella Blight of Pachysandra

Volutella blight (also called Pachysandra leaf and stem blight) is easy to spot. Plants infected with the fungus *Volutella* exhibit wonderfully large, “bull’s-eye” leaf spots and elongate cankers on petioles and stems. Within several weeks, highly diagnostic, pink-colored fruiting bodies form on affected tissue. This disease can be very destructive in beds, causing circular patches of dying plants to form and enlarge rapidly.

Like many diseases in the landscape, Volutella blight cannot be sufficiently managed by only using fungicides. There are cultural factors that contribute to disease severity. First, water is essential in the disease infection process, so “managing the moisture” helps to manage the disease. Avoid practices that encourage excessive moisture (such as including heavy mulching and over watering). Periodically thin the beds to increase light and air circulation. Avoid watering during times of the day, such as late afternoon, when the beds are apt to remain wet for long periods. Consider that heavy shade may also contribute to longer periods of leaf wetness. Winter injury and wounding predispose pachysandra to this disease. Common things to watch out for include mechanical injury (foot traffic, pets, or children playing in beds), scale insects, and poor nutrition.

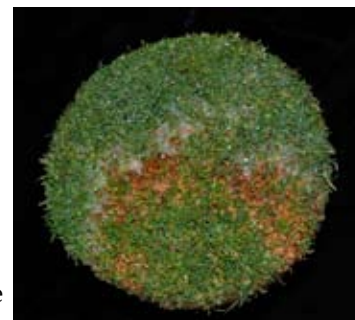
Chemical controls include chlorothalonil, copper, (Badge, hydroxide, metallic, oxychloride, salts, sulfate), Junction, mancozeb, Spectro, Zyban. □

Plant Diagnostic Laboratory Update

Richard J. Buckley, Laboratory Coordinator

Turfgrass

As we pass through spring, grass samples are coming into the laboratory with increasing frequency. We have documented the unusually high number of **anthracnose basal crown rot** samples from golf courses in recent days and can add a couple more of them to our growing list of samples. Even as the weather warms, the real fun came because



Active pink snow mold on putting green sample.

of the cold rain last week. The cool and wet weather completed the disease triangle and drove cold weather turf diseases into the lab. Turf samples submitted from local golf courses were diagnosed with **pink snow mold**, which is caused by the fungus *Microdochium nivale*. This disease also is known as fusarium patch. Small bronze patches and slight rings suddenly appear in the turf during the wet weather. It is not uncommon at this time of year for the fungus to spread on mowers and rollers and cause bronze streaks of disease. **Yellow patch**, which has its own alias – cool season brown patch, and is caused by *Rhizoctonia cerealis* was also diagnosed on a sample from Long Island. Be aware that these diseases will continue to pop up during cool and wet periods into late May or even early June. The most interesting sample; however, may have been the sample from a home lawn in north-west Warren County. This grass was loaded with the characteristic sclerotia of the fungus *Typhula incarnata*, the cause of **gray snow mold**. Unlike the pink snow mold, gray needs substantial snow cover to cause disease. After a couple 90°F days, I don’t think we will be seeing any more snow cover or gray snow mold.

Ornamentals

Ornamental plants are also coming in with increasing frequency. We have documented the impact of the winter on ornamental plantings in the last two newsletters and still continue to receive broad-leaved evergreens and conifers with **winter injury**. Winter damage aside, we had a couple interesting samples from the landscape. **Phyllosticta leaf spot** was identified on English ivy from a Middlesex County landscape. **Cottony camellia scale** nymphs were found on a holly from Morris County. And **Volutella leaf and stem blight** was diagnosed on a boxwood from a Sussex County landscape.

Nursery and greenhouse

In last year’s late April newsletter, we wrote of rose with **downy mildew**. Interestingly enough, we have a couple from a central Jersey grower right now with symptoms that are very suspicious. The diagnosis is not complete, but I smell the downy mildew (I’ll let you know how it turns out). Downy mildew of rose is a disease that will rapidly infect a rose crop during cool (50°F, overcast, and damp weather). Timely fungicide treatments will prevent the disease. □

Diseases of Turfgrass

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

Brown Ring Patch

We continue to receive samples of turf infested with **brown ring patch**, a relatively new disease of annual bluegrass putting greens caused by the fungus *Rhizoctonia circinata* var *circinata* (= *Waitea circinata* var *circinata*). Bentgrass can also be affected, however, annual bluegrass is typically much more susceptible. This disease is similar in appearance to yellow patch, but it can occur at much higher air temperatures (50 to 85°F for brown ring patch, compared to 50 to 65°F for yellow patch). Infested patches become chlorotic and range in size from several inches to three feet in diameter. The centers of patches are frequently green, resulting in a “frog-eye” or “donut-shaped” effect. The outer ring turns necrotic during warm, wet weather and may become depressed as the thatch is decomposed. Since the leaves, crowns and thatch are often infested, **brown ring patch** can be difficult to control with one fungicide application. Banner (propiconazole), Daconil (chlorothalonil), Chipco 26GT (iprodione), Endorse (polyoxin-D), Heritage (azoxystrobin), Insignia (pyraclostrobin), Medallion (fludioxonil) and ProStar (flutolanil) have provided good control when used on a curative basis at brown patch rates, but this disease is most effectively suppressed when fungicides are applied on a preventive basis (mid-to late-April in the tri-state area). Multiple applications may be needed and fungicides must be applied in sufficient water to ensure good penetration into the crown and thatch (e.g., at least 2 gal water / 1,000 sq ft at 40 to 60 psi). Once controlled with fungicides, symptoms may take 14 to 28 days or more to recover. It is important to note that brown ring patch is not controlled with benzimidazole fungicides.

Leaf Spot and Melting-Out

This disease, caused by the fungus *Drechslera poae*, is apparent on susceptible Kentucky bluegrass lawns throughout the State. To prevent severe damage from the melting-out phase of this disease during the next six weeks, avoid heavy applications of nitrogen in the spring (especially quick-release formulations such as urea or ammonium nitrate), maintain the cutting height at or above 2 to 2-1/2 inches, remove excess thatch, and apply Armada, Compass, Headway, Heritage, Insignia, mancozeb, Medallion, or Tartan, now per manufacturer's recommendations. Avoid the use of certain acropetal penetrant fungicides (e.g., benzimidazoles) this spring in areas with a history of **leaf spot** and **melting-out**, since these fungicides may intensify symptom expression.

Red Thread

We are starting to see the development of **Red Thread**, caused by the fungus *Laetisaria fuciformis*, on

susceptible turf at this time. Outbreaks were delayed due to the usually cool weather in March and April, but the disease should become more prevalent in early-May because of the recent heavy rainfall. Infections are characterized by the appearance of short red threads (1/16-1/4 inch 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, Kentucky bluegrass, velvet bentgrass and tall fescue may also be affected. **Red thread** is typically found on “hungry” (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 Armada, Banner, Bayleton, Chipco 26GT*, Compass, Curalan*, Eagle, Endorse, Headway, Heritage, Insignia, ProStar, Rubigan, Tartan, Trinity or Touche* per manufacturer's recommendations (*not for use on residential properties).

Stripe Smut

This disease, caused by the fungus *Ustilago striiformis*, is starting to appear in susceptible Kentucky bluegrass plantings. To identify **stripe smut** in the field, look for thick masses of black spores protruding through “shredded” leaf blades. Although fungicides are most effective when applied once in mid-October, present infections can be controlled with two applications (14 days apart) of a penetrant fungicide such as Armada, Banner, Bayleton, Eagle, Rubigan, Tartan, or thiophanate-methyl. Follow label directions carefully for best results.

Take-All Patch

Take-all patch, caused by the root and crown infecting fungus *Gaeumannomyces graminis* var. *avenae*, has started to develop on golf course turf. Although infection takes place during cool, wet weather in the fall, winter and spring, symptoms are most striking in April and May after periods of stress. Infected grass first appears bronzed to reddish-brown and then fades to a dull brown color. Patches are usually circular, range in size from several inches to two feet or more in diameter, and may exhibit a bronzed colored outer ring when active. The centers of patches are frequently colonized by bluegrass (*Poa* spp.), fescue (*Festuca* spp.) or weeds. Upon close examination, decaying roots and leaf sheaths appear black and dark strands of mycelium often develop parallel to the root axes. The disease is enhanced by poorly drained, light textured soils and high soil pH. For best results, use acidifying fertilizers during cool-weather to lower soil pH (e.g., between 5.5 and 6.0) and apply Banner, Bayleton, Headway, Heritage, Insignia, Trinity, or Rubigan now and repeat in 4 weeks. Apply manganese (2 Lb Mn/A as a “foliar spray”), if soils are deficient in this nutrient, to reduce disease severity.

SEE TURF DISEASES ON PAGE 7

Sample Monitoring Calendar for Landscape Plants

For the Months of May & June

Steven K. Rettke, Ornamentals IPM Program Associate

MAY

PEST/STAGE	COMMON HOSTS	"TIMING"GDD	COMMENTS/PLANT INDICATORS (PPI)
Aphids (eggs) (active stages)	Hawthorn, Euonymus, Cotoneaster, Birch, others	7-120 (Dormant Oils) 250-2800	Petal fall of flowering dogwood (=PPI) Honeydew or sooty mold Deformed leaf terminals Yellow foliage
Southern Red Mite (egg hatch)	Japanese Holly Blue Hollies Pyracantha	69-157	Norway maple flower bud break = PPI Fine stippling discolors leaf surface Dark red eggs on undersides of leaves Use beating tray & hand-lens to determine population levels – Treat ASAP!
Birch Leaf Miner (larvae)	Paper Birch, Gray Birch, European White Birch	123-290	Redbud bloom = PPI Adults appear when leaves half expanded Larvae inside leaves ~ 10 days, then drop to ground 2 nd generation in early June
Native Holly Leaf Miner (adults)	American Holly	147-265	Pin Oak leaf bud break = PPI Larvae produce serpentine mines in leaf Larvae overwinter within mines (handpick) Adult feeding causes leaf punctures
Cankerworms Spring & Fall (larvae)	Maple, Oak, Lin- den, Fruit trees	148-290	Pin Oak leaf bud break = PPI Up to 1" long, green or brown "inchworms" "inchworms" may hang on threads Shothole damage on leaves in light infestations --- Defoliation when heavy
Rhododendron Tip Midge (adults)	Rhododendron	192-363	Flowering dogwood bloom = PPI Adults emerge when new leaves first form Young infested leaves (two inches or less) develop inwardly rolled margins Developed swollen greenish yellow tissue stunted, distorted leaves may turn brown
Taxus Mealybug	Yew, Maple, Dog- wood, Rhododen- dron	246-618	End of crabapple bloom = PPI Honeydew & sooty mold, sparse foliage Insect covered with white powdery wax with four stripes

MAY & JUNE

PEST/STAGE	COMMON HOSTS	"TIMING"GDD	COMMENTS/PLANT INDICATORS (PPI)
Pine Needle Scale (crawlers) (1st generation)	Pines Douglas Fir	298-448	Begin bloom of Kousa Dogwood = PPI Reddish brown crawlers in May & July Many white scales per needle Check scale covers for parasitic wasp emergence holes Feed in clusters at branch crotches
Hemlock Woolly Adelgid (50% egg hatch)	Hemlock -Canadian -Carolina	350	Full bloom of Weigela, Leucothoe species = PPI Reddish eggs within tufts of white wax at base needles Dark colored crawlers moving about Infestations cause premature leaf-drop & dieback

SEE MAY & JUNE MONITORING CALENDAR ON PAGE 6

MAY & JUNE MONITORING CALENDAR FROM PAGE 5

Elongate Hemlock Scale (crawlers) (1st Generation)	Hemlock	360-700	Full bloom Weigela, Leucothoe species = PPI Yellow blotchy needles Premature needle drop "Scurfy" appearance to underside of leaves Crawlers can be transported by wind and birds to other hemlocks
Elm Leaf Beetle (larvae & adults)	Many Elms Japanese Zelkova	363-530	Full bloom of Weigela = PPI Pointed yellow eggs laid on undersides Adults skeletonize leaves Rasping mouthparts of larvae cause leaves to turn bronze color
Azalea Lacebug (nymphs)	Azaleas	372-618	Begin bloom of the Japanese tree lilac Yellow to white stippling damage visible on upper leaf surfaces Black "varnish" spots on undersides of leaves (excrement) Overwinters as eggs near leaf mid-vein
Bronze Birch Borer (adults)	White-barked Birches	400-880	Begin bloom of the mountain laurel = PPI Dead leader-raised ridges in bark Winding galleries under bark Adults chew "D" shaped exit holes in bark No pheromone traps available
Black Vine Weevil	Yew, Hemlock, Rhododendron, Azalea (broadleaf evergreens)	400-900	Full bloom of American Holly Small crescent shaped notches along leaf margins Look for first notching of new growth before treating Check for bark feeding at root crown
Boxwood Leaf Miner (larvae)	Boxwood	448-700	Begin bloom of the Japanese tree lilac Yellow blisters or mines most noticeable on undersides of leaves Most mining damage done in the fall and early spring

JUNE

PEST/STAGE	COMMON HOSTS	TIMING GDD	COMMENTS/PLANT INDICATORS
Azalea Whitefly (immatures)	Azaleas	448-700	Begin bloom of the Japanese tree lilac Cloud of tiny white insects fly when plant is shaken Honeydew & sooty mold Mottled discoloration of foliage Treat only high populations
Rhododendron Borer (adults) (1st generation)	Rhododendron Mt. Laurel Azalea (deciduous)	509-696	Weigela full bloom = PPI Plant appears drought stressed Holes in bark/check limb crotches Only one limb may be dead Monitor adults with pheromone traps
Birch Leaf Miner (adults) (2nd generation)	Paper, Gray, European White Birches	530-700	Begin bloom of Catalpa tree = PPI Adults only lay eggs in new, soft leaves Treat only if 1st generation damage was severe A third generation in July is usually insignificant
Euonymus Scale (crawlers) (1st generation)	Euonymus (not E. alatus) Pachysandra, Bittersweet	533-820	Begin bloom of Catalpa tree = PPI White male scales mostly on leaves Brown female scales mostly on stems Prune out severely infested branches!

SEE JUNE MONITORING CALENDAR ON PAGE 7

JUNE MONITORING CALENDAR FROM PAGE 6

Peach Tree Borer (adults-emerge)	Cherry Peach Plum	600-1800	Begin bloom of common Smoketree = PPI "Gummosis" present on main trunk Extended adult flight & egg laying period At least 2 bark spray treatments required
Bagworm (egg hatch)	Arborvitae, Spruce, Juniper, Pine, etc.	600-900	Full bloom of Kousa dogwood = PPI Brown, sparse foliage Spindle-shaped bags up to 2 inches long composed of twigs & foliage Early June, check for very small larva & bags moving within foliage Eggs overwinter within bags from early fall to late spring
White Prunicola Scale (crawlers) (1st generation)	J. Flowering Cherry Privet, Lilac	707-1151	Begin Bloom of Clematis spp. = PPI Dead twigs and branches Branches coated with white fluffy wax Female scale cover circular; white with yellow center Male scale cover white & elongated Check for predators & parasitoid exit holes
Juniper Scale (crawlers)	Junipers -red cedar -'Pfitzer' -'Savin' Chamaecyparis	707-1260	Begin bloom of Clematis spp. = PPI Yellow foliage initially; then brown Yellow crawlers Female scale covers are white & circular Prune out severely infested branches
Oak Spider Mite (warm season mite)	Oak	802-1265	Begin bloom of (Golden Rain Tree)=PPI Upper surface of leaves have bronze stippling Oak mites feed on upper surfaces

TURF DISEASES FROM PAGE 4

Rutgers Turfgrass Research Golf Classic on May 4, 2009

Come out and support turfgrass research by attending/sponsoring the 14th Annual Rutgers Turfgrass Golf Classic at Fiddler's Elbow Country Club on Monday, May 4, 2009. This is a major fundraising event that has raised more \$830,000 over the past thirteen years. A

morning educational session with NJ, NY and PA pesticide recertification credits and GCSAA CEUs has been added to the program this year. Proceeds will be used to support practical, problem-solving research, student scholarships, and new facilities for the Rutgers Turfgrass Program. Registration information, a program brochure and directions to the event can be obtained at <http://www.njturfgrass.org>. □

Weather Summary for the Week Ending 8 am Monday 4/27/ 9

WEATHER STATIONS	RAINFALL			TEMPERATURE				GDD BASE50		MON %FC
	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	
BELVIDERE BRIDGE	.58	3.75	-3.65	91	31	55.	1	84	62	89
CANOE BROOK	1.56	5.43	-2.73	93	32	56.	3	102	87	94
CHARLOTTEBURG	.72	5.24	-2.77	92	31	55.	4	81	80	90
FLEMINGTON	.73	4.67	-3.15	93	30	57.	4	121	103	92
NEWTON	.61	3.46	-3.66	90	32	55.	3	87	82	91
FREEHOLD	1.42	6.97	-.79	91	36	59.	4	130	95	89
LONG BRANCH	1.52	7.20	-.83	84	36	55.	1	83	57	84
NEW BRUNSWICK	1.39	5.64	-1.79	93	34	57.	1	112	62	93
TOMS RIVER	1.60	7.87	.03	92	33	58.	3	123	94	80
TRENTON	.75	4.50	-2.54	91	36	58.	2	142	79	78
CAPE MAY COURT HOUSE	1.40	7.40	.56	91	37	59.	4	140	89	79
DOWNSTOWN	.77	6.26	-.79	92	33	59.	3	124	57	82
GLASSBORO	1.18	8.15	.73	92	39	59.	3	144	81	80
HAMMONTON	.77	5.50	-1.70	94	35	60.	4	162	103	78
POMONA	1.70	8.01	1.09	92	34	61.	6	174	135	78
SEABROOK	1.09	6.15	-.12	91	35	59.	2	160	90	79
SOUTH HARRISON	missing									
WES KLINE -- GDD BASE 40 PINEY HOLLOW	LAST WEEK missing (Ending 4/20/09) THIS WEEK 132 (Ending 4/27/09)									
TOTAL UNITS BASE 40 FOR FEBRUARY=55										

RUTGERS

New Jersey Agricultural
Experiment Station

Plant & Pest Advisory
Rutgers School of Environmental
and Biological Sciences
ASB II, 57 US Hwy. 1
New Brunswick, N.J. 08901

FIRST CLASS
POSTAGE PAID
PERMIT #576
MILLTOWN, NJ 08850

PLANT & PEST ADVISORY

Landscape, Nursery & Turf Edition Contributors

Rutgers NJAES-CE Specialists and Staff

Bruce B. Clarke, Ph.D., Turf Pathology
Ann B. Gould, Ph.D., Ornamentals Plant Pathology
Steven Hart, Ph.D., Weed Science
Joseph R. Heckman, Ph.D., Soil Fertility
Albrecht Koppenhofer, Ph.D., Turfgrass Entomology
James A. Murphy, Ph.D., Turf Management
Gladis Zinati, Ph.D., Nursery Management
Richard J. Buckley, Coordinator, Plant Diagnostic Laboratory

RCE County Agricultural Agents and Program Associates

Bergen, Joel Flagler (201-336-6780)
Burlington, Raymond J. Samulis (609-265-5050)
Camden, Steven Rettke, Program Associate IPM (856-566-2900)
Cape May, Jenny Carleo (609-465-5115)
Cumberland, James R. Johnson (856-451-2800)
Essex, Jan Zienteck, Program Coordinator (973-353-5958)
Gloucester, Jerome L. Frecon (856-307-6450, ext. 1)
Hunterdon, Winfred P. Cowgill, Jr. (908-788-1338)
Middlesex, William T. Hlubik (732-398-5260)
Monmouth, Richard G. Obal (732-431-7261)
Morris, Peter Nitzsche (973-285-8307)
Passaic, Elaine F. Barbour, Agric. Assistant (973-305-5740)
Somerset, Nick Polanin (908-526-6293)
Sussex, Brian Oleksak, Program Associate (973-948-3040)
Union, Madeline Flahive-DiNardo (908-654-9854)
Warren, William H. Tietjen (908-475-6505)

Newsletter Production

Jack Rabin, Associate Director for Farm Services, NJAES
Cindy Rovins, Agricultural Communications Editor

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels. The pesticide user is responsible for proper use, storage and disposal, residues on crops, and damage caused by drift. For specific labels, special local-needs label 24(c) registration, or section 18 exemption, contact RCE in your County.

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