



This bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic) is an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.

Bermuda

Spring Dead Spot, caused by *Ophiosphaerella* spp., is a disease found exclusively on Bermuda grass. It is the most important disease of Bermuda grass in North America. It occurs typically on Bermuda plantings three or more years old. The first symptoms are circular depressed areas prior to spring green-up. When the turf greens up, circular patches from 6 inches to 3 feet in diameter of dead, bleached grass appears. After several years, the centers of active patches may contain weeds or live Bermuda grass, with the patches taking the form of rings that can run together to form serpentine arcs. The roots and stolons will be severely rotted in these areas. Re-growth is extremely slow, and Bermuda that re-colonizes the dead areas remains stunted due to toxins produced by the fungi. Adequate control of Spring Dead Spot is mainly through cultural practices. Core aeration done in August or September, and practices that reduce soil compaction and improve drainage are recommended. Ammonium sulfate and potassium applications have been found to be helpful when applied in summer. Apply at least 1.0 lbs. of Potassium (K₂O) per 1000 sq. ft. to turfgrass during June, July or August. Maintain pH in the range of 5.5-6.5. Fungicide treatments are not always effective. A fungicide such as Heritage 50WG, or Eagle 40WSP, or Rubigan, or Disarm 480SC, or ProPensity 1.3ME, used in the fall about 30 days before dormancy gives best results when paired with good cultural practices. Cultivars with good winter hardiness are less affected by Spring Dead Spot.

Dead patches in Bermudagrass and Zoysia occur usually in the spring as grass is breaking dormancy, or in the autumn as fall approaches. Rhizoctonia species are responsible for both Large Patch and Brown Patch in warm season grasses. Irregular circular patches may be several feet or more in diameter. Frequently, a smoke colored halo may be observed early in the morning at the margins of the patch. Water soaked black to reddish

brown lesions usually can be found on stolons and at the bases of leaf sheaths. Affected shoots may be easily pulled from their points of attachment. In Zoysia, the patches occur a little later in the spring, two to eight weeks after green up, or in the autumn. Roots are discolored but not rotted. Orange rings or patches up to 6 feet in diameter may appear. In worse case scenarios, patches can enlarge to more than 25 feet in diameter. Sometimes symptoms slowly disappear during the growing season as surviving tillers start filling in the killed spots. Night irrigation and too much nitrogen increase both severity and incidence of patch diseases. Complete fertilizers with time release nitrogen should be used instead of quick release nitrogen. The soil test should be tested to see where fertility levels are. Good drainage is essential for a healthy lawn. The turf should be de-thatched if thatch accumulates to more than 0.5" thick. De-thatching should be done while grass is actively growing. Fungicides may be applied once in the spring between March 15 and April 15, and again in the fall between September 20 and October 10. Heritage, Prostar, Eagle, and Bayleton are labeled for Large Patch. Spectricide Immunox and Green Light Fung-Away Systemic fungicide are available for homeowners.

Spring Dead Spot-*Ophiosphaerella* spp.



Howard F. Schwartz, Colorado State University, Bugwood.org



Spring Dead Spot-*Ophiosphaerella* spp.



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Bermuda grass-Mycelial plaques of *Ophiosphaerella*



Sherrie Smith University of Arkansas Cooperative Extension

the viburnum group. They prefer moist, well-drained soil with a pH of 6.0-7.5. They are large handsome shrubs that do very well in shaded locations. During cool periods in the spring, plants with poor air circulation and prolonged periods of leaf wetness, can get Bacterial leaf blight, caused by *Pseudomonas syringae* pv. *viburnum*. The first symptoms are small, dark, angular, water soaked spots that rapidly expand to large blighted areas of the leaf. The bacterial exudates often give the affected lesions a wet, shiny appearance. The bacterium overwinters in infected twigs and buds. Control begins with good cultural practices. Viburnum should be spaced to promote good air circulation. Avoid excessive amount of nitrogen fertilizers as this makes tender new foliage more susceptible. Prune out all diseased twigs and leaves and dispose of them. Place pruners in a 10% bleach solution, (one cup bleach to nine cups water), between cuts. Copper fungicides may be used protectively on plants in which the disease is an annual problem. There are resistant cultivars available such as *Viburnum burkwoodii* 'Mohawk', *Viburnum carlcephalum* 'Cayuga', *Viburnum lantana* 'Mohican', and *Viburnum rhytidophyllum* 'Alleghany'.

Leatherleaf Viburnum -*Viburnum rhytidophyllum*



The Dow Gardens Archive, Dow Gardens, Bugwood.org

Viburnum

Viburnums are easy to grow, versatile plants, offering showy blossoms, decorative berries, and interesting foliage. Leatherleaf viburnum is among the hardiest of



Viburnum bacterial blight- *Pseudomonas syringae* pv. *viburnum*



Sherrie Smith University of Arkansas Cooperative Extension

Camellia Monochaetia leaf spot-*Monochaetia* spp.



Sherrie Smith University of Arkansas Cooperative Extension

Camellia

Several species of fungi can cause leaf spots on Camellia. *Monochaetia* species often colonize tissue that has been damaged by winter weather or by other pathogens. Oval grayish-whitish lesions appear on the upper surface of the leaves. Tiny black fruiting bodies of the fungus may be seen under magnification. Prune out leaves with lesions and use an ornamental fungicide containing chlorothalonil or propiconazole,

Camellia scab, caused by *Sphaceloma* is a minor disease of camellia. The first symptoms of White scab are small, light brown lesions that enlarge and coalesce to cover most of the upper leaf surface. The spots, which are slightly raised, eventually become snowy white in color except for small dark erumpent fruiting bodies of the fungus. Good sanitation and the application of an ornamental fungicide containing chlorothalonil or Thiophanate-methyl give good control.



Camellia Scab- *Sphaceloma* spp.



Sherrie Smith University of Arkansas Cooperative Extension