





Arkansas Plant Health Clinic Newsletter

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Loropetalum

Several years ago, the Plant Health Clinic began to receive samples of Loropetalum with galls on the branches and twigs. The causal agent has been identified as the bacterium Pseudomonas savastanoi. This pathogen causes similar galls on ash, forsythia, oleander, olive, and privet. Symptoms are dead shoots, dead stems, and plant death. Dark-colored, rough-textured galls or knots may be found During wet weather, below the dieback. bacteria may ooze from the galls. The bacterium is believed to enter plant tissue through wounds caused by pruning, as well as through weather events such as hail and freeze injury. Bacterial Gall is a very difficult disease to control. Removal of all galled branches may help slow the disease. Remove galls several inches below the damage, dipping pruners in 10% bleach solution between cuts. Prune only during dry weather. The application of copper fungicides/bactericides after pruning may also be beneficial. Alternatively, remove the plant entirely.

Loropetalum Bacterial Gall-Pseudomonas savastanoi



Photos by Sherrie Smith, University of Arkansas Cooperative Extension

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Iris

Bearded irises are beginning to send up bloom stalks in preparation for spring bloom. Ideally, bearded iris should be grown in full sun in welldrained soils with a pH of 6.0-7.0. They have very few disease problems when growing conditions are favorable. That said, prolonged periods of warm, wet weather are advantageous for the development of Iris Leaf Spot, caused by the fungus Didymellina macrospora, synonym Heterosporium iridis. Symptoms on the leaves begin as very small, green to yellow, watersoaked spots, which become oval brown lesions with water-soaked yellow margins. After bloom, the spots may enlarge to form large, irregular, necrotic areas. Older lesions become gray with reddish-brown to dark-brown borders. Severely affected leaves often display tip dieback and leaf curl. Severely affected leaves may die completely. This can weaken the plant and reduce bloom quality. Good cultural practices can help significantly in reducing Iris Leaf Spot. All iris debris should be cleaned up in the fall, or before new leaves appear in the spring. During the growing season, diseased portions of the leaf should be removed from the plant and from the planting. Overly crowded clumps should be divided and replanted in the fall. Sprinkler irrigation should be avoided, and plants should be watered at ground level. Fungicide sprays may be applied when the new leaves are four to six inches (10-15cm) long and repeated four or five times at 7-to-10-day intervals. Products containing chlorothalonil, or myclobutanil, or thiophanate-methyl, mancozeb, or or trifloxystrobin are effective. A spreader sticker should be added to enable the fungicide to stick to the waxy iris leaves.

Iris Leaf Spot-Didymellina macrospora, synonym Heterosporium iridis



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Turf

by Ricky Corder

Billbugs are major pests of turf across the US. The four pest species found in the US are the Bluegrass billbug, Hunting billbug, Denver billbug, and Phoenician billbug, all belonging to the Genus Sphenophorus. The Hunting Billbug, S. venatus vestitus Chittenden, is the most common in the southern US. Adult Billbugs are reddish-brown to black weevils that are 1/2" to 3/4" (13-19mm) long and are characterized by having a "snout" or "bill". The adult Hunting Billbug can be identified by markings on the pronotum that appear to be a "Y" surrounded by parentheses. Billbug larvae are C-shaped grubs that are white with a brown head capsule. Unlike true white grubs, Billbug larvae don't have legs. Young larvae burrow into grass stems and feed on the internal contents. While doing so, they leave sawdust-like frass. Often this frass can be seen during a "tug" test. Damaged grass will easily be pulled from the thatch, and the sawdust-like frass will fall from the damaged end or otherwise be visible. Billbugs overwinter as larvae and emerge in the In the South, there may be two spring. generations per year, with second the generation emerging in early fall. Billbug damage appears worse with improper fertilization and irrigation; however, light damage can be masked by proper fertilization and irrigation. Early infestations can appear like dollar spot disease, but heavy infestations can lead to large dead patches. For long-term

cultural control, choose resistant cultivars. Resistant cultivars have been identified in some Bermuda and Zoysia varieties. Entomopathogenic nematodes, Steinernema carpocapsae and Heterorhabditis bacteriophora, can be applied at 1 billion juveniles per acre immediately followed by irrigation. Chemical control options include surface residual sprays for adults and white grub treatments for larvae. Effective white grub insecticides registered for homeowners in Arkansas are carbaryl (various brands), chlorantraniliprole (Acelepryn, GrubEx1), clothianidin (Arena), clothianidin + bifenthrin (Aloft), halofenozide (Mach 2), imidacloprid Lawn Grub (Merit, Advanced Control), thiamethoxam (Meridian), and trichlorfon (Bio Advanced).

Hunting Billbug larva-Sphenophorus venatus vestitus



Photo by David Shetlar, The Ohio State University, Bugwood.org







Hunting Billbug-Sphenophorus

venatus vestitus



Photo by David Shetlar, The Ohio State University, Bugwood.org

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.

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