THE UNIVERSITY OF GEORGIA
COOPERATIVE EXTENSION
Colleges of Agricultural and Environmental Sciences & Family and Consumer Sciences

APRIL 2008

HOMEOWNER PLANT DISEASE CLINIC REPORT

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Oh my goodness, it was a great year for Morel hunting! I hope some of you got out and scoured the forest floors for those tasty delights. Although most of the ones we found were smaller than average, we were able to get a basket-full. I am not sure what I like better the excitement of the hunt or actually cooking and eating them. I actually discovered them in my own front yard!!! The rains have really helped this year, not only with edible fungi but also with the health of our landscape plants.

Plant sample numbers have increased dramatically over the last month and I expect this to continue as the weather warms and the rain continues. Below you will find the monthly table of homeowner samples submitted to the diagnostic clinic followed by their individual diagnosis. The 'disease of the month' is a well-known nuisance to homeowners, the Artillery Fungus. ENJOY!

APRIL 2008 Homeowner Samples

County	Plant	Common Name of Disease (Pathogen)	Type of Sample – DDDI or Physical
Berrien	Centipede	Possible Fairy ring (clamp connection mycelia present) & minor Take all root rot (*Gaeumannomyces graminis*)	Physical
Bibb	Centipede	Minor Take all root rot (*G. graminis*) and cultural issues	Both
Brantley	St. Augustine	Take all root rot (*G. graminis*)	Physical
Catoosa	English Ivy	Possible Anthracnose (*Colletotrichum* sp.)	DDDI
Chatham	Gardenia	No disease – cultural (girdling root system)	Physical
Clarke	Lemon	No disease – scale & spider mites	Physical
Cobb	Emerald Zoysia	Minor ETRI fungi	Both
Cobb	Magnolia	Artillery fungus (*Sphaerobolus*	Physical

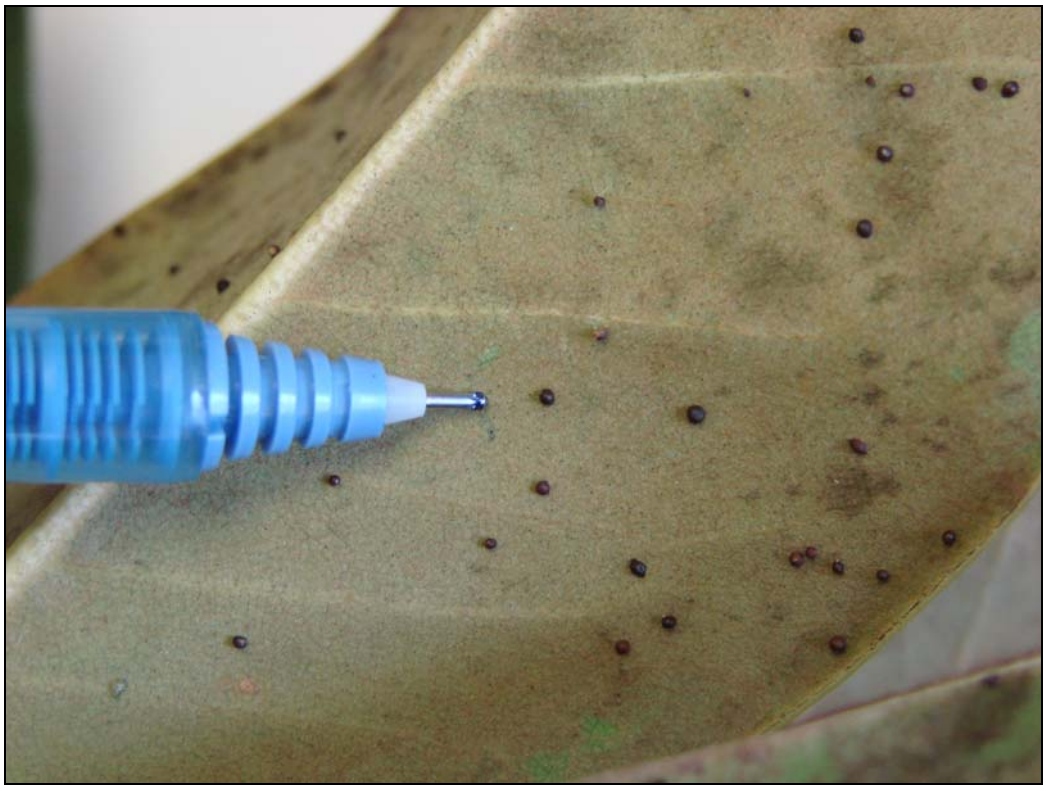
County	Plant	Common Name of Disease (Pathogen)	Type of Sample – DDDI or Physical
		sp.)	
Coffee	Daylily	Possible Daylily rust (*Puccinia hemerocallidis*)	DDDI
Coweta	Gingko tree	Unable to determine	DDDI
Crisp	St. Augustine	Smut (*Ustilago* sp.)	DDDI
Dougherty	Hollyhock	Rust (*Puccinia malvacearum*)	DDDI
Elbert	Camellia	No disease – scale insects	DDDI
Fayette	Creeping Gardenias	Unable to determine	DDDI
Jenkins	Boxwood	Insect damage – borers	Both
Jenkins	Centipede	Take all root rot (*G. graminis*)	Both
Jones	Orchid	No disease – wood composters	DDDI
Lanier	Centipede	Take all root rot (*G. graminis*)	Physical
Pierce	Azalea	No disease	Physical
Pierce	Centipede	Take all root rot (*G. graminis*)	Physical
Paulding	Tomato	No disease	Both
Rabun	Dwarf Yaupon Holly	Unable to determine	DDDI
Schley	Boxwood	Powdery mildew	DDDI
Thomas	Emerald Zoysia	Possible fairy ring	DDDI
Ware	Centipede	TDTD (too deteriorated to diagnose)	Physical
Ware	Centipede	Take all root rot (*G. graminis*)	Physical
Worth	Centipede & Azalea	Take all root rot (*G. graminis*) & insect damage	Physical
Worth	Multiple plants (azalea, crape myrtle, boxwood)	Lichens	DDDI
Worth	Iris	Likely Bacterial soft/crown rot	DDDI
Whitfield	Fescue sod	Unable to determine – possible Brown patch	DDDI
Total samples (late-March to mid-April) = 30 DDDI = 14 Physical = 11 Both = 5			

ARTILLERY FUNGUS

The artillery fungus, *Sphaerobolus* spp., is found most often in the spring and fall during cool, wet days. This fungal organism ejects its' spores forcibly to nearby plants, cars, houses, animals, or any object in the near vicinity. Most times the fungus shoots its spores toward reflective or light-colored surfaces. Thus, its common name is the 'cannonball' fungus. This is a very pesky organism to homeowners because the minute spores (~2.5 mm) have a tendency to stick like super glue to whatever they land on. Removal and control is very difficult. Even when they are picked off, they may leave a dark residue behind. Fortunately, they can be painted over. This organism is a white wood-rotting Basidiomycete, so various types of mulch and decaying wood are suitable habitats for this flying fungus. Homeowners who mulch every year are less likely to continue to see problems because the old decaying mulch is either removed or buried under a new layer.

In 2004, scientists from Penn State University conducted a study to evaluate 27 different mulches for their ability to support the growth and sporulation of the artillery fungus. This was a very interesting study and I have included the reference and link at the end of the report. Overall, large, hard, dry bark pieces of mulch are less likely to support the growth of the fungus (such as pine bark nuggets) as well as cypress mulches (Davis et al. 2004). Eventually, though, all mulches can become colonized with this fungal organism. Of course, plastic mulches do not support the colonization and growth of the artillery fungus and may want to be considered near houses, parking lots, and other important areas!

Below you will see the spore masses stuck to the surface of Magnolia leaves. The structures from which these spores are shot are tiny (1/10 of an inch in diameter and resemble minute cups) and very hard to see unless the mulch is closely examined – not shown.



REFERENCES:

- http://www.ppath.cas.psu.edu/EXTENSION/PLANT_DISEASE/mulchfun.html
- Davis, D. et al. 2004 Artillery Fungus Sporulation on 27 Different Mulches – a Field Study. J. Environ. Hort. 22(3):117-123.
  Article online:
  http://www.personal.psu.edu/faculty/d/d/ddd2/images/artfungus_fullpaper.pdf.