



HOMEOWNER PLANT DISEASE CLINIC REPORT

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Happy New Year folks! As we begin 2008, I hope this monthly newsletter finds everyone healthy and happy. Hopefully, this year will be more environmentally friendly to us than the last. It has been slow in the Homeowner IPM Plant Disease Clinic in terms of plant disease samples, but this has worked out well for me as I am busy working on the many presentations that I will give this winter/spring to many of your landscapers and Master Gardeners.

If Mother Nature surprises us by bringing rain, then we can expect a number of plant diseases this year. So let's keep our fingers crossed and continue praying for rain.

Below you will find the list of plant disease samples submitted to the clinic over the last month. For January, I will discuss winter injury to evergreens. ENJOY!

County	Plant	Common Name of Disease (Pathogen)	Type of Sample – DDDI or Physical
Bibb	Coleus (houseplant)	Powdery Mildew (<i>Oidium</i> sp.)	DDDI
Coweta	Juniper	Pestalotia Twig Blight (<i>Pestalotia</i> sp.)	Physical
Elbert	Juniper	No disease found (possible drought-related stress)	Both
Echols	Azalea	No disease (possible cultural/nutritional issues)	DDDI
Fayette	Knockout Rose	No disease found	Physical
Grady	Mushroom	Bolete (Suillus decipiens)	DDDI
Harris	Boxwood	Branch dieback (<i>Phomopsis</i> sp.) and Black twig Borer	Both
Liberty	Mushroom	Possibly Jack-o-Lantern fungus (Omphalotus olearius)	DDDI
Monroe	Pecan	Unable to determine	DDDI
Total samples (late-December to late-January): 9			

JANUARY 2008 Homeowner Samples

Winter Injury to Evergreens

Winter injury will most likely be a common diagnosis in the upcoming months for samples arriving at the Plant Disease Clinic in Athens. Although winter injury does not occur as regularly in Georgia as in colder parts of the country, we do see a fair amount of cold damage to plants, especially young, succulent tissues or newly transplanted plants. Both narrow- and broad-leafed evergreens, such as pines, junipers, Leyland cypress, arborvitae, azaleas, rhododendrons, hollies, boxwoods, nandinas, and photinias, are also subject to winter injury and desiccation. Winter burn occurs when there is low soil moisture, freezing temperatures, and/or strong blowing winds. Because evergreens retain foliage throughout the winter, they are continually transpiring water, although to a lesser extent than in warmer weather. If there is low soil moisture or temperatures below freezing along with heavy winds, the roots cannot readily replace the water that is lost through transpiration. This, in turn, causes winter burn with symptoms expressed as browned or bleached foliage and new blooms (see below). This can sometimes be confused with plant disease symptoms and therefore proper diagnosis is important for implementation of management strategies.

Winter injury is expressed as browned foliage as shown below on the two evergreens.





Winter injury can also damage flower blooms as shown on the Azalea below. If an entire plant is affected (all the blooms), then the damage is likely due to environmental causes or an 'event' rather than plant disease organisms.





The new foliage on this oak tree was damaged by a late spring freeze.

MANAGEMENT:

Regardless of the type of winter injury seen (discolored, burned evergreen needles or leaves, dead branch tips and branches, or necrotic blooms), often it is beneficial to wait until spring to assess the extent of the damage. Prune dead twigs and branches back to about an inch from live tissue or to the branch collar of the next live branch. Depending on the extent of the damage, the plant will likely drop the dead/damaged leaves and produce new green foliage. Removing the dead and damaged leaves and blooms will help stimulate new plant growth and reduce the chance of infection from secondary plant disease organisms.

Once the weather warms up, it is important to fertilize the injured plants early and irrigate the plants well throughout the season, if possible. Many times, plants injured by cold temperatures are more susceptible to drought stress later in the summer.