

Keep your Eyes Open to Plant Disease



'Tis the New Year 2010

Howdy Ags! I've got a story for you. Did you Know?

There are many mythological stories and folklore behind the parasitic plant—mistletoe. Mistletoe was sacred to the Nordic goddess of love, Frigga. She decreed that anyone standing under mistletoe was protected from harm, and a kiss was a token of peace and love. In England, a couple in love that kissed under the mistletoe was equivalent to promising to marry and a prediction of long life and happiness together. Today, standing under the mistletoe at Christmas time is an invitation to be kissed as a sign of friendship and goodwill.

The holidays and the traditions of mistletoe have come and gone but mistletoe is something plant and forest pathologists need to be aware of year round. There are two different mistletoes, leafy and dwarf mistletoe. The following table and photos compare the differences.

	Leafy Mistletoe	Dwarf Mistletoe
Host	Infects deciduous trees	Infects conifers
Symptoms	Mainly puts stress on	Causes considerable dam-
Dispersal	Spread by birds Green and leafy	Spread by discharge Deforming abnormal yellow shoots/growths of infected area
Signs	Does not remove photosynthates	Removes photosynthates
Control	Florel® kills the plant but does not kill the haustoria (root) and must be re-applied to be most effective during tree dormancy	Scorched Earth policy of cutting and burning the surrounding trees



*Dwarf mistletoe on western conifer
Photos courtesy of David N. Appel*



Leafy mistletoe on elm tree.

More information on mistletoe visit <http://aggie-horticulture.tamu.edu/ornamentals/>

I'm Not here Yet!!

Submitted by Carlos Bogran, College Station Texas AgriLife Extension Specialist Plant Pathology and Entomology

Thousand cankers disease is a newly recognized disease of various species of walnut (*Juglans*). Eastern black walnut (*Juglans nigra*) is particularly susceptible to thousand cankers and during the past decade it has devastated plantings of black walnut in most western states. At present, the known eastern range of the disease is along the Front Range of Colorado.

The combination of a dark canker with the beetle tunneling is almost certain confirmation of thousand cankers disease. However, dark cankers occur un-



der the bark following wounding and other injuries. Culturing the *Geosmithia* fungus from the canker will allow positive confirmation of thousand cankers.



Walnut twig beetle, side view. Photograph by Jim LaBonte, Oregon Department of Agriculture



Crown thinning and leaf yellowing associated with Thousand Cankers Disease

For more information concerning thousand cankers disease of walnut, visit: www.ext.colostate.edu/pubs/

Grapes, Grapes and More Grapes



The Texas Plant Disease Diagnostic Lab in conjunction with David Appel, Texas AgriLife Extension Plant Pathologist, re-

search efforts have detected Pierce's disease (PD) in the following counties: Lubbock, Terry, Hockley, and Hale in the High Plains of Texas. Efforts to isolate the bacterium continues to be a challenge.



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Vineyard with sticky traps to monitor glassy-winged sharpshooters, the insect vector for PD. Photos from David Appel

18th annual Gulf Coast Grape Grower Field Day Friday February 12, 2010

"We hold this field day annually to inform and benefit both the novice and experienced grower, and to introduce them to the latest in vineyard research, practices and products," said Fritz Westover, AgriLife Extension program specialist, viticulture.

This year's meeting will focus on the Blanc du Bois wine grape. Presentations will address grape pest management, irrigation management and an update on Pierce's disease research.

Additional information on the field day can be found at: www.winegrapes.tamu.edu

Texas Plant Disease Diagnostic Laboratory Goes Main Stream



The Texas Plant Disease Diagnostic Laboratory (TPDDL) is going high tech in the information world. In the era of "fast" information, the Plant Clinic has a page on Facebook, posting interesting happenings, news and photos seen at the

TPDDL. Check us out and become a fan on Facebook.

Kevin Ong, director of the TPDDL, has just begun tweeting. Micro-blogging is one avenue to get quick blurbs out about interesting plant disease/plant health issues quickly. Follow TPDDL tweet at <http://tweeter.com/txplantclinic>



Future Newsletter Suggestions Needed

If you would like to see your events, announcements, or more information concerning issues in your area, please feel free to contact me via email at:

eyesopen@sickplants.org
KEEP YOUR EYES OPEN TO PLANT DISEASE!!

Did You Eat Your Servings of Veggies Today?

Submitted by Mark Black, Uvalde Texas AgriLife Extension Specialist Plant Pathology

Root knot Nematode on Snap Green beans in Frio and Medina County

Root knot nematodes in the Texas Winter Garden (parts of Districts 10 and 12 in SW TX) are not uncommon, but vegetable losses were unusually severe in the fall of 2009. Symptoms include galling of roots and stunted, weak, or dying plants. One fresh market green bean variety had a severe reaction. Dr. James Starr, Professor in Plant Pathology and Microbiology at Texas A&M University, identified the root knot species as *Meloidogyne incognita*, the southern root knot nematode. This pathogen has a wide host plant range including homegrown vegetables, field crops, weeds, and ornamentals. Some *M. incognita* reproduction can occur even on modern cultivars of corn and sorghum, rota-



tion crops without noticeable losses. Stressed plants have more yield loss than non-stressed plants. Losses are often more severe in soils with high sand content where soil holds less water before draining below crop root zones.

This nematode is sensitive to soil temperature. Crops that grow and mature at soil temperatures <65 F have much less yield loss than crops grown at higher soil temperatures. The gradual climate warming trend may be

aggravating the problem in the long term, and the unusually hot weather for most of 2009 apparently allowed extraordinary reproduction on fall crops. There is some resistance to *M. incognita* available in cultivars of some crops (e.g. tomato), and resistance becomes ineffective at very high temperatures.

Management involves, host plant resistance, crop rotation with non-/poor-hosts, trap crops, dry clean fallow, soil solarization, site selection, planting date, pesticides.



Could You Recognize Citrus Greening in Your Own Backyard?

Photos submitted by Ron French, Amarillo Texas AgriLife Extension Specialist and Greta Schuster, Kingsville Texas AgriLife Extension Specialist Plant Pathology

Huanglongbing (HLB), meaning Yellow Dragon, commonly referred to as Citrus Greening, is causing major damage to the Florida citrus industry. The causal agent is a bacterium vectored by the Asian citrus psyllid (ACP). All citrus varieties are susceptible.

Citrus greening has been confirmed in FL, LA, SC, GA, and areas in: Brazil, Mexico, Jamaica, Asia, Africa. The vector has been detected in AL, AZ, CA, MS and TX. with no detection of citrus greening.

Be on the look out for the symptoms : blotchy mottling, limb dieback, leaf/fruit drop, misshapen/lopsided fruit, presence of the vector on new flush leaves.

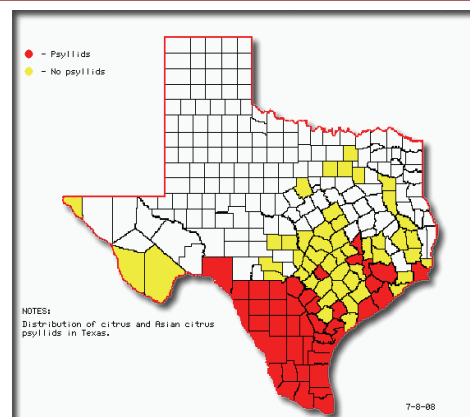
For updates visit : www.saveourcitrus.org



Asian Citrus Psyllids/nymphs waxy exudates on citrus leaf



Classic symptoms of blotchy mottling of citrus leaves infected with HLB




Yellow Counties no psyllid detected

Red Counties psyllids detected

The colored counties are the only counties to date, that have been surveyed for the Asian Citrus Psyllids. (July '08)



Visit the website: www.sickcitrus.org for more information on citrus health



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A.



B.



C.

*Predominate Diseases we have seen since the last news-
letter:*

- *Brown Patch of grasses*
- *Powdery Mildew of Squash*
- *Pierce's Disease of Grapes*
- *Oleander Bacterial Leaf Scorch*
- *Sclerotinia on Ornamentals*

Answers to Quiz #1

- A. Nematode damage to golf course turf**
- B. Hypoxylon**
- C. Cotton Root Rot of Apple Tree**

Only one agent submitted his answers to the first quiz:

Congrats to Gideon Jennings from Hill County for being the winner of the very first "How Well Do You Know Your Diseases" Quiz.

Let's give him some completion!!!! Submit your answers to eyesopen@sickplants.org

How well do you know your plant diseases?

Quiz #2:

Match the above pictures with the plant diseases listed below them.

Answers in the next issue of "Keeping Your Eyes Open to Plant Disease"

Please submit new ideas for future newsletters to eyesopen@sickplants.org

Up and Coming Events

Mark your Calendars!

- **Texas AgriLife Extension Ag Conference January 11-15 2010**
- **18th annual Gulf Coast Grape Grower Field Day Friday February 12, 2010**
- **Texas A&M University classes begin January 19, 2010**