

Submitting Good Samples To the Texas Plant Disease Diagnostic Lab

Master Gardener Specialist – First Detector Training
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TEXAS A&M
AGRI LIFE

System for
Timely,
Accurate &
Reliable
*D*iagnostics

Citrus Greening (HLB) and Citrus Canker Sampling and Submission



Understanding Citrus Greening

- Importance
- Vector of the bacterium
Candidatus Liberibacter asiaticus
- Citrus Greening Symptoms
- Sample Submission to TPDDL.



Taking a closer look

- Blotchy mottle symptoms may not be visible to just an exterior canopy.
- Examine the tree closer by parting branches to view older leaves within the canopy.
- Pay attention to bud breaks, new flush or re-growth after pruning.



Classic blotchy mottle
symptom

Collect sample

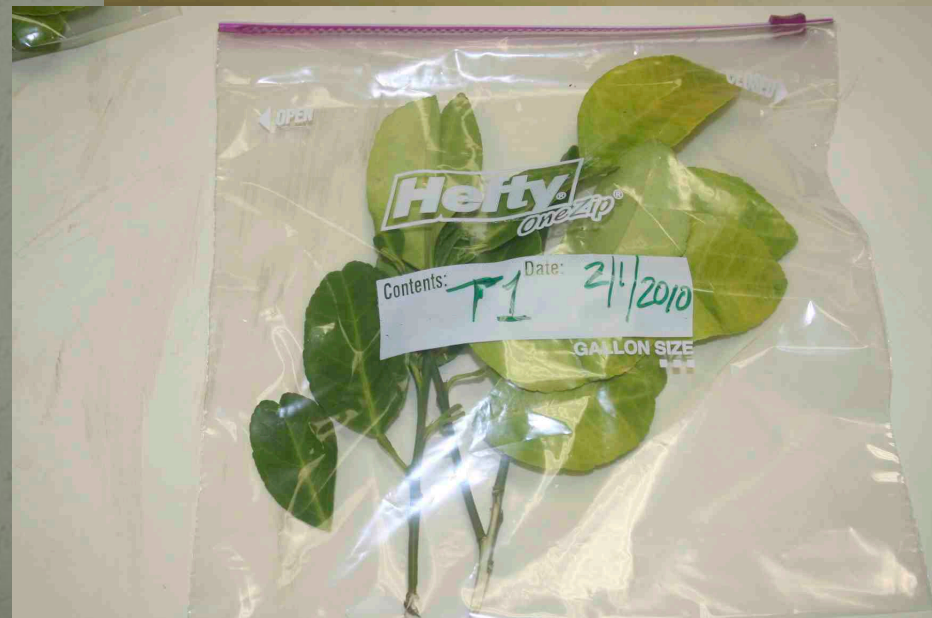
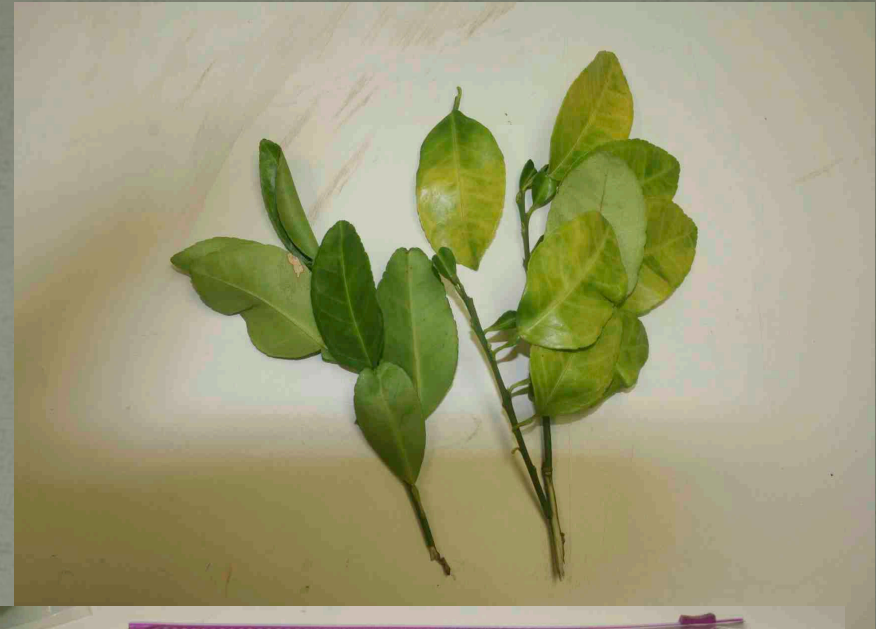


Before starting out remember to include all the materials you need to collect a sample:

- **Clippers, pocket knife.**
- **Reference material for help in identification.**
- **Labeled sample bags.**
- **Writing utensil to label bags.**
- **GPS device if available/ map.**

Collect Sample

- Scout tree (s) for symptoms.
- Keep your eyes open for the Asian Citrus Psyllid on new flush.
- Preferably collect more than 10-12 leaves still attached to branches.
- Place collected sample in a zipper bag or plastic bag, label and secure tightly.



HLB and Citrus Canker Sample Submission

When submitting multiple samples:

- Treat each submitted sample separately.
- Label bags clearly so that samples can be differentiated.




HLB and Citrus Canker Sample submission cont.

TPDDL use only:
Sample #:

Print type:
AINT:

Texas Plant Disease Diagnostic Laboratory
1500 Research Parkway, Suite A130
Texas A&M University Research Park
College Station, Texas 77845
Email: plantclinic@tamu.edu
Phone: 979.845.8052 Fax: 979.845.6499
http://plantclinic.tamu.edu



D-1178
6417

Plant Disease Diagnosis Form

Submitter contact information (Please print):
 Name: _____
 Company name (if commercial): MGS-First Detector
 Address: _____
 City: _____ State/Zip: _____
 County: _____
 Phone: _____
 Email: _____

Grower contact/sample location information (Complete if different from submitter):
 Name: _____
 Company name (if commercial): _____
 Address: _____
 City: _____ State/Zip: _____
 County: _____
 Phone: _____
 Email: _____

Submitter is: AgriLife personnel Homeowner Consultant
 Golf course Commercial Other: MGS-First Detector
 Grower is: AgriLife personnel Homeowner Consultant
 Golf course Commercial Other: _____

Send result via: Email Standard mail **Send results to:** Submitter Grower Third party

Complete form for diagnostic services. **PRINT** and mark all that apply.

Plant: _____ Variety/Cultivar: _____ Planting date: _____
 Date first noticed: _____ Problem developed: suddenly gradually

Watering practice: Sprinklers Hand water Drip system None
 Less than 3 times/week More than 3 times/week Variable/as needed Daily

Pesticide/chemical application in last 3 weeks? Yes No Product applied? _____
 have you consulted other labs? Yes No If yes, what was concluded? _____
 have you contacted an AgriLife Extension Agent about this problem? Yes No
 Would you like for us to send a copy of your results to your County Extension Agent? Yes No

Comments: _____

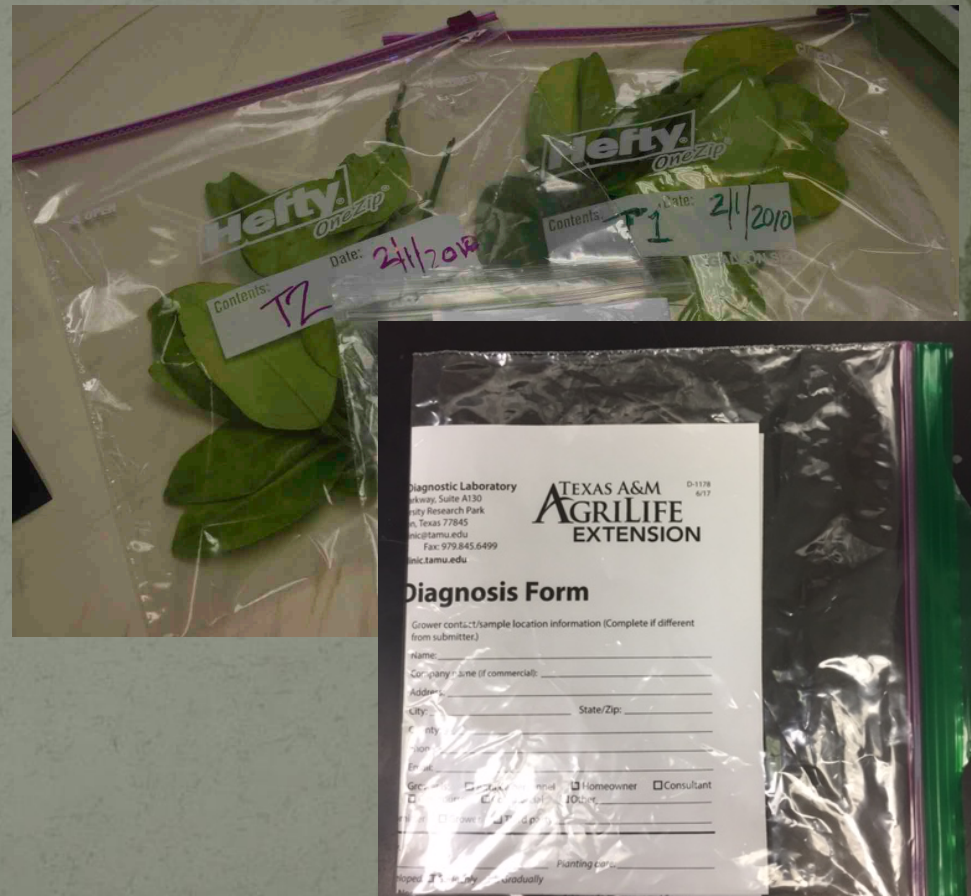
MASTER GARDENER SPECIALIST - FIRST DETECTOR PROGRAM

PEST/PATHOGEN OF CONCERN SAMPLE SUBMISSION
PRINT and mark all that apply.

Citrus Greening/HLB Citrus Canker Palm Fusarium Palm Phytoplasma

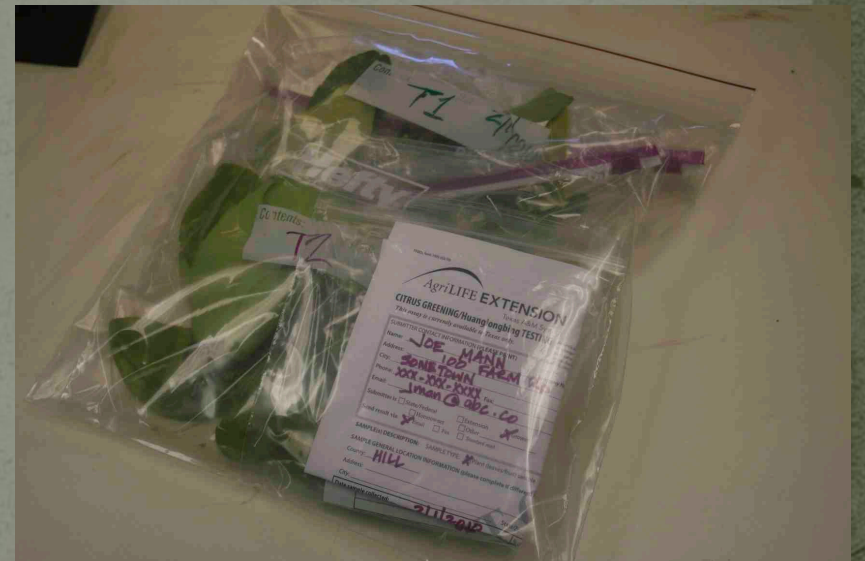
Date sample collected: _____
 GPS coordinates (Long, Lat.): _____
 Additional information (site description, etc): _____

Signature: _____ Printed name: _____ Date: _____



HLB and Citrus Canker Sample submission cont.

- Place completed form(s) in a separate zipper bag or plastic bag and secure tightly.
- Place all samples and form(s) into one (1) zipper or plastic bag and secure.
- Make sure basic information portion of the form is easily visible.



Shipping All Samples



Back at the lab.....



CSI—TPDDL

Back at the Lab



 Create Run
  Check Status
  Stop Run
  View Results
  Define Protocols
  Define Graphs
  Maintenance

Run Name:
SM 2013 HLB Panel Run 3

User: General User

Started: Jan 24, 2014 03:21 PM
Finished: Jan 24, 2014 04:01 PM

Status: Done

Notes:

Dye Set: FTTC25

Protocols:

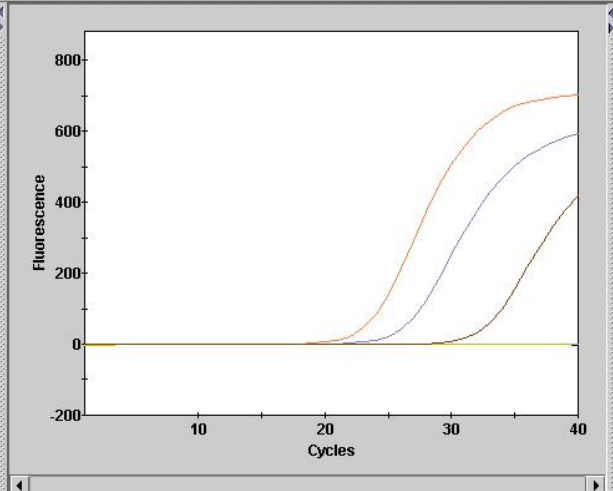
Protocol	Lot Number
HLB CG110309	

Number of Sites: 6

Views

- Results Table
- Analysis Settings
- Protocols
- CH3 - 2ndDERIVAT
- CH1 - 2ndDERIVAT
- Temperature - sampl
- SYBR Green
- Melt
- FAM
- Cy3
- Texas Red
- Cy5
- Standard
- TET

Site ID	Protocol	Sample ID	Sample Type	Notes	Status	FAM Std/Res	FAM Ct	TET Std/Res	TET Ct	TxR Std/Res	TxR Ct	Cy5 Std/Res	Cy5 Ct
A1	HLB CG...	DNA 3	UNKN		OK	NEG	0.00	POS	37.82	NEG	0.00	NEG	0.00
A2	HLB CG...	CTRL Las	UNKN		OK	POS	25.37	POS	19.61	NEG	0.00	NEG	0.00
A3	HLB CG...	CTRL Lam	UNKN		OK	POS	22.32	POS	23.11	NEG	0.00	NEG	0.00
A4	HLB CG...	NTC	UNKN		OK	NEG	0.00	NEG	0.00	NEG	0.00	NEG	0.00
A5	HLB CG...	CTRL Healthy	UNKN		OK	NEG	0.00	POS	24.42	NEG	0.00	NEG	0.00
A6	HLB CG...	T8	UNKN		OK	POS	31.89	POS	26.10	NEG	0.00	NEG	0.00



Site ID	Protocol	Sample ID
A1	HLB CG110309	DNA 3
A2	HLB CG110309	CTRL Las
A3	HLB CG110309	CTRL Lam
A4	HLB CG110309	NTC
A5	HLB CG110309	CTRL Healthy
A6	HLB CG110309	T8

Save Run Export Report Select Graphs View Another Run Delete Run(s) Update Analysis Import Std Curve Compare Run



Texas Plant Disease Diagnostic Lab



[Submission Forms](#)

[Services](#)

[Fees](#)

[People](#) ↓

[Master Gardeners](#) ↓

[Plant Disease Resources](#) ↓

The TX Plant Clinic



The TPDDL jumps for joy upon receiving STAR-D Lab Accreditation.

*****IMPORTANT MESSAGE*****

The Texas Plant Disease Diagnostic Laboratory will be closed Wednesday, March 14th thru Friday, March 16th for Spring Break. We will return to our normal business hours of Monday-Friday, 8am – 5pm, March 19th, 2018. If planning to submit samples please ensure they arrive before or on Friday, March 9th or wait until we return Monday, March 19th.

The Texas Plant Disease Diagnostic Laboratory, located in College Station, Texas, is a service lab of the [Department of Plant Pathology and Microbiology at Texas A&M University](#) in conjunction with [Texas A&M AgriLife Extension Service](#).

Our Mission:

To Provide accurate and timely plant disease diagnostic support to AgriLife Extension & Research personnel, Texas Department of Agriculture, the agriculture/green industry and the people of Texas to protect and secure our plant resources and to promote economic competitiveness.

EVENTS CALENDAR

« MAR 2018 »						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

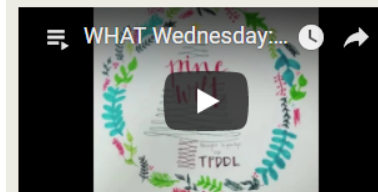
WED

Spring Break

14

March 14 @ 08:00 - March 16 @ 17:00

WHAT WEDNESDAY VLOG



▼ FORMS / INSTRUCTIONS

[D1178 – General Diagnostic Form and Instructions](#)

[D827 – Nematode Detection Assay and Instructions](#)

Questions???



....."We must be curious to see if what we see is what we seem to see. We must analyze it, open it up, turn it over, look underneath it, and look behind."

James G. Horsfall.