

Sample submission instructions

A few pistachio orchards and nurseries in California and Arizona have observed disease symptoms including shortened and swollen internodes, bushy top and twisted roots. A bacterial pathogen, *Rhodococcus fascians* is associated with this disease. This bacteria usually colonizes plant surfaces. Sometimes bacteria can penetrate the tissue and start causing the diseases. CSP Labs offers a PCR test for detection of this bacteria. The test has been validated on known isolates of *Rhodococcus fascians*.

Leaf sample collection.

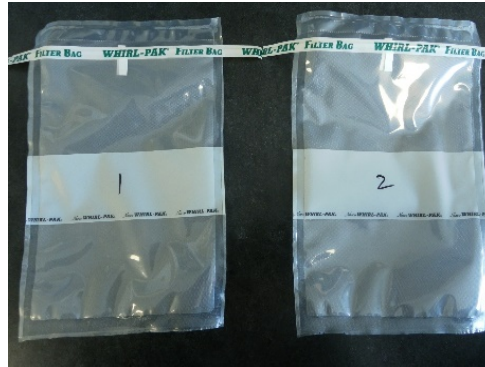
Leaf samples during the growing season should be tested. Symptomatic tissue (leaves from trees showing bunched top symptoms) are preferred. Leaves from multiple trees can be pooled into a sample but sample should not exceed 10 leaves per bag.

Twig or root samples

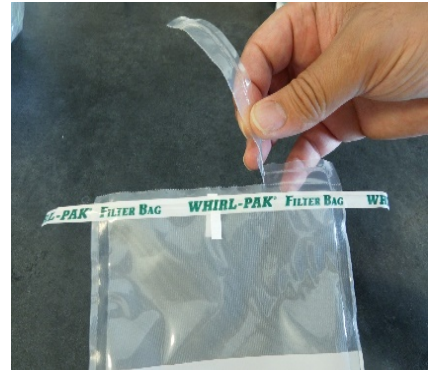
These samples can be tested during the dormant season. Symptomatic tissue (swollen buds, twisted roots etc) is preferred. Cut 4-5 inch sections of stem or roots, place into a plastic bag (provided by lab) and ship by overnight mail to lab

Label bags appropriately. Tear the upper portion to open the bag. Place the sample in the plastic bag provided and seal the bag.

Store at a cool place (at 4C or in a room) until shipped. Samples should be packed and mailed to lab by express mail. Sample collected in bags should not be exposed to sun.



Label bags accordingly



Remove upper portion to open the bag

Type of tissue



Place samples in the bag and seal the bag



Ship the samples overnight using FedEx or UPS. There is no need to put wet paper towels in the bags or include ice packs while shipping the samples.

Ship samples to:

CSP Labs
3556 Sankey Road
Pleasant Grove, CA 95668
Phone: 916-655-1581



Collected sample ready to ship

Sample submission form

Crop:	
Test(s) requested:	

#	Lab use only	Variety	Lot#, Batch# etc.	Qty shipped	Qty to be tested	Treatment if any	RUSH
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							

Any other info:

By submitting these samples, I understand that my samples will be tested by the methods currently available at Cal-SPL and results will be kept confidential. I also understand that due to technical uncertainties of biological materials and limits of detection methods, the results may not be absolute. Cal-SPL will not be liable in any way for acts or omissions in connection with testing, indirect, consequential, or punitive damages or any damages in the nature of lost profits or for injury or harm to any person. Cal-SPL liability, in any case, will not exceed than the amount paid for the analysis.

Submitted by:	Date:
Phone:	
Company:	
Address:	