SAMPLE SUBMISSION PROCESS AND DIAGNOSIS

Whole plants, if possible, or plant parts may be submitted to the laboratory for plant or disease identification. The sample should include intact leaves, stems, flowers, and fruit. Sample submission forms are available at:

http://file.lacounty.gov/SDSInter/acwm/215683_InternetPlantsubform.pdf

- Complete all required sections of the form.
- Collect a fresh sample the day you plan to mail it.
- Try to collect a sample containing both healthy and diseased portions.
- Clean your cutting tool between each separate plant sampling to avoid any disease transmission while collecting samples.
- Put samples inside a zip-seal plastic bag, leaving enough air to puff the bag to help avoid any damage during shipment.
- Send via priority shipment on weekdays to have sample received the next day; the laboratory is closed on Fridays.
- For in-person visit, diagnosis will be done in the field or sample brought to the laboratory.
- Diagnosis will be done to the molecular level for genus or, in some cases, species identification of the pathogen on the sample for proper pest rating.
- Please make sure to provide a daytime call back number for faster results reporting.
- For plant or mushroom identification, digital images of intact and entire plant parts or mushroom should be submitted.

COUNTY OF LOS ANGELES





Department of Agricultural Commissioner / Weights & Measures

acwm.lacounty.gov

PLANT PATHOLOGY LABORATORY South Gate Office (562) 622-0433

> Headquarters Office 12300 Lower Azusa Road Arcadia, CA 91006 Voice: (626) 575-5471

> > Fax: (626) 350-3243

South Gate Office 11012 Garfield Avenue South Gate, CA 90280 Voice: (562) 622-0402

Fax: (562) 861-0278



This information is available in alternative formats.

For further assistance: TDD (626) 575-5520 Voice: (626) 575-5471

Fax: (626) 350-3243

December 2020

Department of Agricultural Commissioner/ Weights & Measures



PLANT PATHOLOGY

LABORATORY SERVICES



Dr. Dhiraj Gautam Senior Biologist/Plant Pathologist





COUNTY OF LOS ANGELES

LABORATORY MISSION

The primary mission of the Plant Pathology Laboratory is to prevent the introduction into Los Angeles County of exotic plant diseases, plant pathogenic nematodes, and invasive weeds through nursery stock and other agricultural shipments from other states. Plant Pathology Laboratory Services available to the public include:

- Plant disease and damage diagnosis
- Plant and mushroom identification
- Nematode identification
- Consultation on landscape maintenance

Symptomatic plant samples can be shipped to our South Gate office address or submitted as digital images through email. Please call first prior to such submission. In-person disease diagnosis can be done if needed, as well as treatment recommendations. Services provided by the laboratory are free.



Nursery plant sampling

Need more information? University of California, Riverside www.ipm.ucanr.edu/

University of Florida, Gainesville https://ipm.ifas.ufl.edu/

GUIDELINES TO GROWING HEALTHY PLANTS

- **Seed or plant material:** Buy certified disease-free seeds or plant material.
- Manage insects: Insects damage plants and transmit pathogens to healthy plants.
- Cultural practices: Good cultural practices, with optimum fertilizer application, timely planting, and irrigation, with regular plant monitoring will limit disease occurrence.

ROOT SAMPLE PROCESSING AND NEMATODE IDENTIFICATION



Root/soil samples



Nematode extraction in mist chamber





Nematode identification on microscope

LANDSCAPE CONSULTATION

Plants face biotic and abiotic stresses. Biotic stresses are caused by plant pathogens. Abiotic stresses involve cultural practices, weather, nutrition, soil type, and plant placement. Our plant pathologist can provide technical information that will assist the grower, landscape manager, or homeowner to determine if and what cultural changes are necessary to prevent further plant damage. The following technical information will be addressed:

- Irrigation: Timing and rate per season
- Suitability: Plant variety and location
- Fertilization: Dosage and timing of application
- Integrated Pest Management:

 IPM practices focus on all aspects of insect and disease control



Nutrient deficiency in citrus leaf



Bacterial leaf scorch disease of olive