urban forestry DIVISION

City of Los Angeles Department of Public Works

BUREAU OF STREET SERVICES

PRUNING OAK TREES IN THE CITY OF LOS ANGELES

Managing the Urban Forest of the City of Los Angeles

Southern California native tree species comprise a significant part of the City of Los Angeles' urban forest. In recognition of native tree species contribution to the natural environment, the citizens and City government enacted an ordinance to protect them against removal or damage.

The protected native tree species are all Oak species, California Sycamore (Platanus racemosa), Southern California Black Walnut (Juglans californica), and Bay Laurel (Umbellularia californica) trees. These species are very sensitive to environmental changes such as: changing of original grade within the dripline of the tree, over watering particularly in the summer months, loss of roots,and over pruning.

For the most part, native specie requires little or no pruning other than periodic removal of dry wood. In fact, the pruning of green tissue increases the probability of disease organisms gaining entrance into a tree. Pruning should be limited to the removal of dead or diseased limbs in fall and winter months with no heavy pruning at any time. Occasionally, a mature tree may benefit from a light thinning (removal of 10 to 20 percent of live green foliage) to reduce the weight of branches and to open foliage for light penetration and reduced wind resistance. Pruning may also be required to provide vehicular and pedestrian clearance and/or to provide clearance from buildings and other infrastructure such as traffic control devices, streetlights, and energized lines.

Native trees should never be severely pruned. Severely pruned trees are unsightly and respond with vigorous, weakly attached growth that is susceptible to powder mildew. Large pruning wounds are also more subject to decay. To prevent the spread of disease, climbing "gaffs" shall not be used at any time when pruning Oak trees.

All native tree pruning shall comply with the International Society of Arboriculture "Tree Pruning Guidelines"; The American National Standards Institute "Trees, Shrubs and Other Woody Plants Maintenance Standard Practices" (ANSI A300*);* and the City of Los Angeles' "Tree Trimming Standards" to ensure proper pruning practices.

This information sheet is provided as a public service. Hopefully, it answers the important questions regarding native tree pruning. If you have any further questions, please refer to the Urban Forestry Division Inspector or contact the Division at (213) 847-3077. For the hearing-impaired, the TDD number is (213) 473-3231. This and other information sheets may be obtained at the Urban Forestry Division office at 1149 S. Broadway, 4th Floor, Los Angeles, CA 90015.

TT/HB:mt
S:Guidelines and Info for UFD Spindle 2014\Pruning Native Trees in LA
Rev. 01/2019

WATERING NATIVE OAKS PROPERLY

The roots of our native oaks (Valley oak, Coast Live oak and Blue oak) share soil space with the Armillaria fungus (oak root fungus) that specializes in eating oak roots. Under natural California conditions, the Armillaria is dormant during the hot, dry summer, and comes to life only with the rains.

Should I water my native oak in the summer?
Yes, but not more than once a month and not around the trunk. If we water near the trunk during the dry season, the Armillaria will grow through the combination of warmth and moisture. Eventually as the tree matures, continued watering around the trunk maintains the fungus infestation which in turn will cause the tree to fall over or simply die. This is why it is important to keep the area within 10 feet of the trunk of a native oak undisturbed and clear of any vegetation and irrigation. If you want a lawn near a native oak, keep the lawn 10 feet away from the dripline of the tree.

CANOPY

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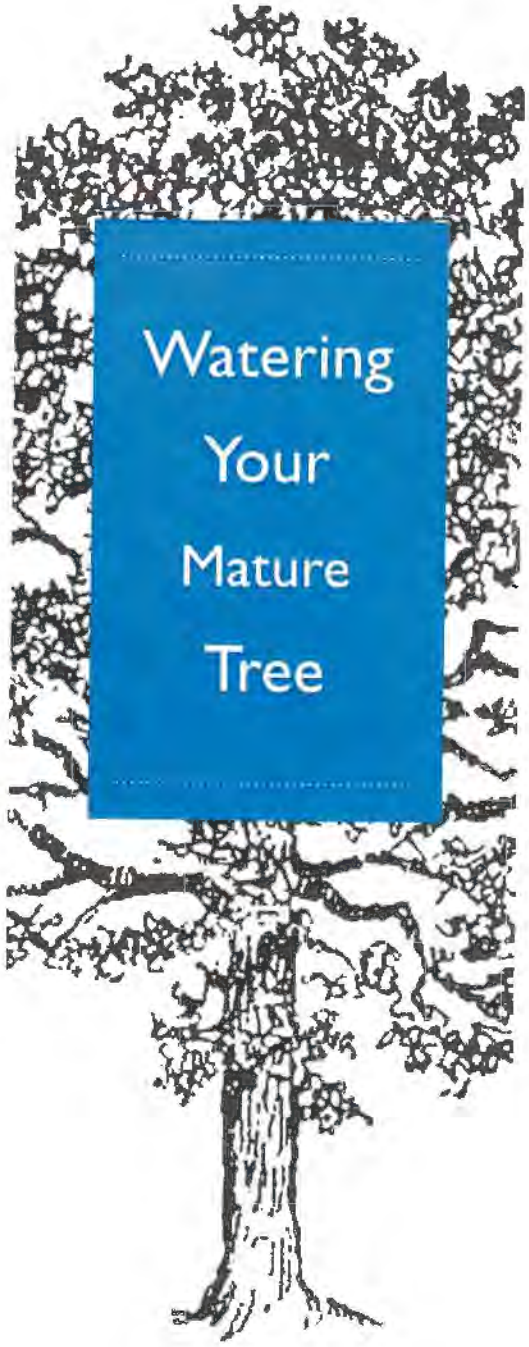


WATERING YOUR MATURE TREE

Is watering my mature tree really important?

Yes. Most tree problems in our area relate to water—either too much or too little. We live in an unusual and extreme climate zone with little or no rainfall during the hottest months of the year. A mature tree can lose hundreds of gallons of water a day through its leaves, especially in hot or windy weather. This creates a lot of stress for trees, especially those brought from places where summer rains are common.

The rule of thumb is that most trees in our area will benefit from a thoughtful summer watering regimen. This includes all trees, from native oaks to Japanese maples.

What are my tree's watering needs?

Because we grow trees native to many different climate zones, it's a good idea to know what trees you have and what their watering needs are. If you don't know, ask long-term neighbors, check the CANOPY website, attend tree walks, hire a knowledgeable, certified arborist and/or refer to the *Sunset Western Garden Book*.

What are some signs of water-related stress?

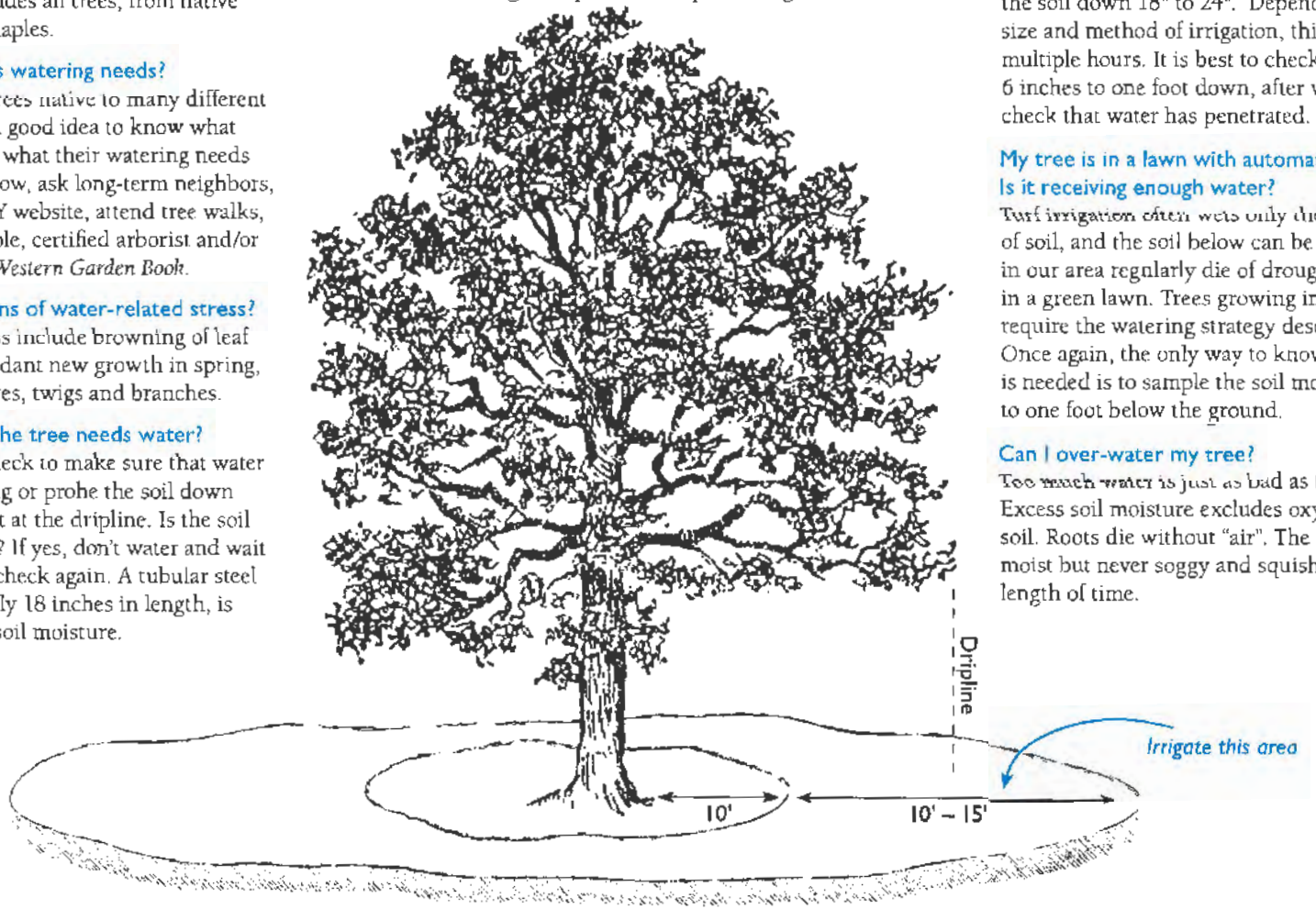
Signs of water stress include browning of leaf edges, lack of abundant new growth in spring, and dieback of leaves, twigs and branches.

How do I know if the tree needs water?

Before watering, check to make sure that water is really needed. Dig or probe the soil down 6 inches to one foot at the dripline. Is the soil moist at this depth? If yes, don't water and wait a week or more to check again. A tubular steel soil sampler, roughly 18 inches in length, is ideal for checking soil moisture.

How frequently should I water?

- Watering mature trees deeply every month or two during the dry season (typically May through October) can be tremendously beneficial, especially for stressed trees, and may be necessary to keep trees alive during times of drought. Water-loving trees need more frequent watering.
- If possible, avoid frequent, light applications of water which encourage shallow roots that are more susceptible to summer heat stress. If you choose to water lightly and frequently anyway, please supplement this light watering with periodic deep watering.



Where do I water for maximum benefit?

Don't bother watering near the trunk—there are few feeder roots there. Irrigate the soil from halfway between the trunk and the dripline to 10 or 15 feet beyond the dripline (see illustration).

Note: If you have a native oak do not irrigate within 10 feet of the trunk (see reverse).

How do I water the tree?

Watering can be done with permanent soaker hoses (ideally covered with mulch), temporary soaker hoses, or by using a sprinkler that is moved sequentially within the watering area described above. Apply enough water to moisten the soil down 18" to 24". Depending on the tree size and method of irrigation, this may take multiple hours. It is best to check the soil again, 6 inches to one foot down, after watering, to check that water has penetrated.

My tree is in a lawn with automatic sprinklers. Is it receiving enough water?

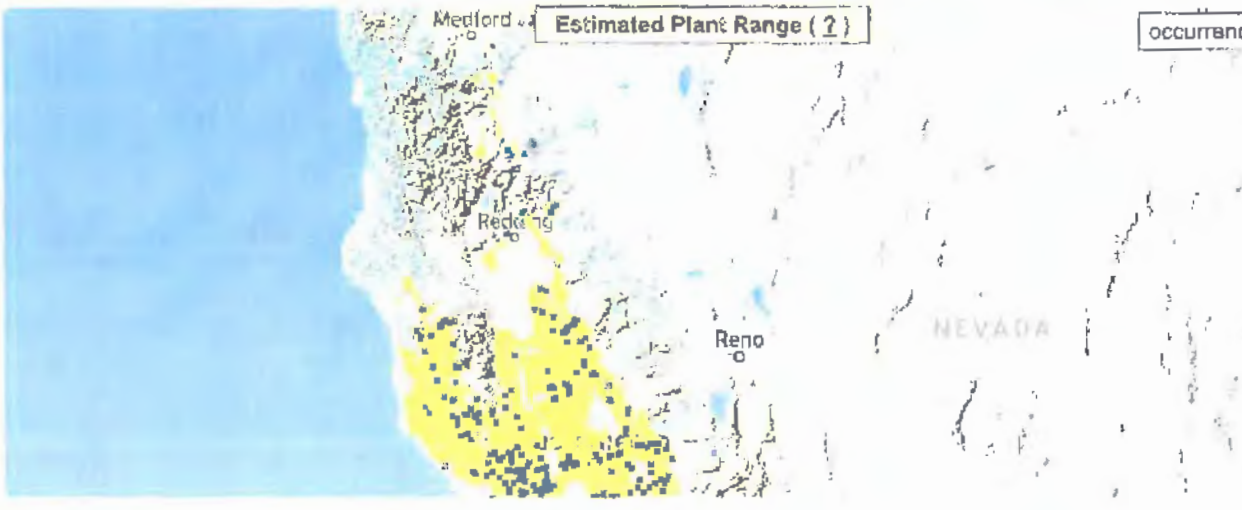
Turf irrigation often wets only the top few inches of soil, and the soil below can be bone dry. Trees in our area regularly die of drought while sitting in a green lawn. Trees growing in lawns may require the watering strategy described above. Once again, the only way to know if more water is needed is to sample the soil moisture 6 inches to one foot below the ground.

Can I over-water my tree?

Too much water is just as bad as too little. Excess soil moisture excludes oxygen from the soil. Roots die without "air". The soil should be moist but never soggy and squishy for any length of time.

Valley Oak
Quercus lobata

Show All Photos



Add to My Plant List 57 Nurseries Carry This Plant

About Valley Oak (Quercus lobata)

The Valley Oak grows into the largest of North American oaks. It ranges over the hot interior valleys of California where there is a water table within reach of the roots. Valley Oaks grow quickly, reaching 20 feet in 5 years, and 40 feet in 10 years, and up to 60 feet in 20 years. Mature specimens may attain an age of up to 600 years. Its thick, ridged bark is characteristic and evokes alligator hide. The sturdy trunk of the Valley oak may exceed two to three meters in diameter and its stature may approach 100 feet in height.

The branches have an irregular, spreading and arching appearance that produce a profound leafless silhouette in the clear winter sky. During Autumn leaves turn a yellow to light orange color but become brown during mid to late fall. In advancing age the branches assume a drooping characteristic. Its pewter-colored rippled bark adds to the attractive aesthetic of this species. Typically, leaves are five to ten centimeters in length and are roundly and deeply lobed. The leaf width is approximately one half its length. Each leaf is matte green with an underneath pale green appearance; moreover, the leaf is covered with abundant soft fuzz, yielding an almost velvety feeling. When a fresh leaf is rubbed or broken, an aromatic scent is exuded, evoking a forest odor. The wood is a dull brown approaching yellow. Over most of the range, acorns fall in October. A variety of mammals and birds eat them, including the Acorn Woodpecker, Western Scrub Jay, Yellow-billed Magpie, and California ground squirrel. Like many oaks, Valley Oaks can tolerate wild fires. Although smaller individuals may be top-killed, most resprout from the root crown. Valley oak tolerates cool wet winters and hot dry summers, but requires abundant water. It is most abundant in rich deep soils of valley floors below 600 meters in elevation but can also be found at elevations up to 5,600 ft.. Valley oak is found in dense riparian forests, open foothill woodlands and valley savannas. Commonly associated trees are Coast live oak, Interior live oak, Blue oak, Black walnut, California Sycamore and Ghost pine. The Valley oak is widely distributed in the California Central Valley and many smaller valleys such as the San Fernando Valley.

Because of its eventual size, it may not be appropriate for the average residential garden. Best not to provide irrigation within 30 feet of established valley oaks. They'll often absorb too much water, causing limbs to break off.

They are messy but beautiful. Best to plant near a water source.

Plant Description

Plant Type
Tree

Size
60 - 100 ft tall
50 ft wide

Form
Rounded, Upright
Columnar

Growth Rate
Fast, Moderate

Dormancy
Winter Deciduous

Fragrenca
Fragrant - Pleasant

Flower Color
Yellow, Cream, Green

Flowering Season
Spring, Winter

Wildlife Supported

Oaks generally are very important to wildlife including birds, mammals, reptiles, amphibians, and invertebrates. Many insects are attracted to Oaks generally, including the following butterflies which use Oaks as host plant: California Sister, Propertius Duskywing, Mournful Duskywing, Golden Hairstreak, and Gold-Hunter's Hairstreak.

Butterflies & moths hosted (17 confirmed ✓, 151 likely *) SHOW ALL

Mournful Duskywing
Erynnis tristis

Gold Hunter's Hairstreak
Satyrium auretorum

Elegant Sheepmoth
Hemileuca eglanterina

Landscaping Information

Sun
Full Sun

Moisture
Low

Summer Irrigation
Max 2x / month once established

Nurseries
Carried by 57

Ease of Care
Very Easy

Soil Drainage
Medium

Soil Description
Prefers deep, rich soil but can utilize other soils if moisture is sufficient. Soil PH: 6.0 - 8.0

Common uses
Deer Resistant, Bird Gardens, Butterfly Gardens

Companion Plants
Other oaks (Quercus species), Black Walnut (Juglans species), Gray Pine (Pinus sabiniana), Oregon Ash (Fraxinus latifolia), Boxelder (Acer negundo), California Wild Rose (Rosa californica), Blackberry (Rubus species), Willow (Salix species), and native grasses.

Propagation?
For propagating by seed: Fresh seeds sow in fall outdoors or stratify to hold for spring sowing. (USDA Forest Service 1974).

Sunset Zones?
1, 2, 3, 4*, 5*, 6*, 7*, 8*, 9*, 14*, 15*, 16*, 17, 18*, 19*, 20*, 21*, 22, 23, 24

Natural Setting

Site Type
Inland valley floors, shallow slopes throughout most of the state; it is one of the key species of foothill woodland

Climate
Annual Precipitation: 6.6" - 90.7", Summer Precipitation: 0.13" - 4.11", Coldest Month: 9.0" - 56.0", Hottest Month: 32.7" - 79.3", Humidity: 0.10" - 27.72", Elevation: -3" - 13218"

Alternative Names

Common Names: California White Oak

Links: Jepson eFlora Taxon Page, CalPhotos, Wikipedia, Calflora

Oak Root Fungus

By Mary Bernard, *Master Gardener*

Armillaria root rot, also known as oak root fungus, is one of the most widespread diseases in California. It is most prevalent in landscapes established in areas wl or other native trees once grew. Oak root fungus thrives under moist conditions, example when turf is planted around the roots of California native oaks. Plants t infected through root contact with infected plants or rhizomorphs attached to infe roots.

Armillaria can develop slowly, and symptoms may not appear until the fungus is established. Affected trees usually show a general decline in vigor over many ye Sometimes trees that look healthy will suddenly wilt and die in a matter of weeks above ground symptoms are similar to other root problems, including too much v Phytopthora root rot, or gopher damage.

The key symptom to look for is trees that are declining in patches and the patche to get larger each year. Roots infected with oak root fungus have white to yellow shaped mycelium between the bark and the wood. Dark brown to black structur resemble shoestrings sometimes can be seen on the root surface. Sometimes, densely packed, honey-colored mushrooms form at the base of infected trees in fall/early winter after rains.

To confirm the presence of Armillaria, dig around the crown of the tree and scrap bark on small sections of the crown and main roots. It should be easy to see the felty tissue between the bark and the wood. Infected wood will have a strong mu smell and feel slightly spongy. Sometimes it may be difficult to locate the myceli earlier stages if the infection has not yet moved up to the crown.

There are no effective fungicide treatments for the control of the disease in living The fungus can survive for many years in the dead or living tree roots. Remove roots from infected soil as possible before replanting.

Armillaria is sensitive to drying and grows most rapidly under wet conditions. Fo reason, heavy watering should be avoided. Air-dry the soil before replanting. Pl barriers such as root collars can contain infection centers. Prepare a new landsc well before planting and provide proper cultural care. Prevent healthy roots from in contact with diseased ones, thus avoiding spread of the disease. Plant only A resistant species in locations where oak root fungus has been a problem. Call th Cooperative Extension office for information on plants resistant or susceptible to Armillaria.

(Note: Although another oak killer - Sudden Oak Death - has received a lot of pu attention this year, it has not yet been detected in San Luis Obispo County.)

University of California Cooperative Extension Master Gardener Volunteers can additional gardening information upon request .Call the San Luis Obispo office a 5939 on Mondays and Thursdays from 1 to 5 PM. You may also call the Paso R office at 237-3100 on Wednesdays from 9 AM to 12 PM. The San Luis Obispo M Gardeners website is at http://groups.ucanr.org/slomg/. Questions can be e-mai mgsanluisobispo@ucdavis.edu.

STEPS FOR ANALYSIS

Sample Collection

Sample Inspection

Disease Diagnosis

COUNTY OF LOS ANGELES

Department of Agricultural Commissioner / Weights & Measures

acwm.lacounty.gov

PLANT PATHOLOGY LABORATORY

(562) 622-0433

Headquarters Office
12300 Lower Azusa Road
Arcadia, CA 91006
Voice: (626) 575-5471
Fax: (626) 442-2847

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) 442-2847

May 2014

Department of Agricultural Commissioner/ Weights & Measures

PLANT PATHOLOGY

LABORATORY SERVICES

Dr. Jerrold Turney
Senior Biologist/Plant Pathologist

COUNTY OF LOS ANGELES

ABOUT THE LABORATORY

The primary mission of the Plant Pathology Laboratory is to prevent the introduction of exotic plant diseases, plant pathogenic nematodes, and invasive weeds into Los Angeles County 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

Services provided by the laboratory are free.

Oak root rot mushrooms

Oak root rot fungus under bark

PLANT DISEASE AND DAMAGE DIAGNOSIS

Many plant diseases occur in nurseries, landscapes and on farms. Growing conditions and cultural care can cause plant damage. Samples of plant parts containing symptomatic tissue that are submitted to the Plant Pathology Laboratory may be cultured to isolate potential pathogens. Well known diseases can be diagnosed based on symptoms.

PLANT AND MUSHROOM IDENTIFICATION

Whole plants or plant parts can be submitted to the Plant Pathology Laboratory for plant identification. Plant parts needed for plant identification include:

- Leaves
- Stems
- Flowers
- Fruit

Digital images of plants may also be submitted for identification. When submitting mushrooms it is critical to collect the entire mushroom and quickly submit the sample to the laboratory. Please visit our website for sample submission instructions and a printable submission form (http://acwm.lacounty.gov).

Need more information?

University of California, Davis
www.ipm.ucdavis.edu

LANDSCAPE CONSULTATION

Damage to plants may involve the action of a pathogenic organism or be caused by adverse cultural conditions. It is often necessary to determine the cultural conditions that exist where a plant is being grown in order to correctly diagnosis the damage. The plant pathologist can provide technical information that will assist the grower, landscape manager, or homeowner to determine what cultural changes are necessary to prevent further damage. Technical information can include:

- Proper irrigation rates and timing
- Plant placement and location suitability
- Fertilization
- Integrated pest management

Olive Leaf Scorch

Oleander Leaf Scorch

Print Form

Agricultural Commissioner/Weights and Measures Department
County of Los Angeles

Specimen Submission Form
Plant Disease Diagnosis or Plant/Mushroom Identification

To diagnose plant disease(s) we need a sample of the plant parts that are infected or symptomatic. In many cases a root sample may also be needed. Cut a 6 to 12-inch piece of the infected foliage off of the plant and place in a zip-lock bag. Fold the stem in half to fit in the bag.

When submitting roots, collect a small handful of fine feeder roots from 3 to 6 inches below the surface of the soil. Shake the soil from the roots and place in a zip-lock bag.

When submitting mushrooms, collect the entire mushroom by using a trowel to lift the mushroom from the soil (the stem that may extend into the soil). Wrap the mushroom in wax paper and place in a paper bag. Do not place the mushroom in a plastic bag. Do not place a wet paper towel in the sample bag, as this will cause the sample to rot quickly. It is best to mail the sample early in the week so that it does not sit over the weekend.

For questions regarding packaging and submitting specimens, please contact the Plant Pathology Laboratory at (562) 622-0433.

Please fill out the form below, print it, and mail the sample with the form to:

Plant Pathology Laboratory
Los Angeles County Department of
Agricultural Commissioner/Weights & Measures
11012 S. Garfield Ave., South Gate, CA 90280

Owner or Collector (* Required)

Street Address, City, ZIP Code (* Required)

Daytime Phone Number (* Required)

Date Collected

Date Sent/Mailed

Host (Plant Name)

Plant Damage or Symptoms Observed

For quick turnaround, identification results will be reported by phone.