

College of Agricultural, Consumer and Environmental Sciences

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"Texas Mountain Laurel" *Dermatophyllum secundiflorum*
Left and Right
Photos: Jeff Anderson

"Texas Mountain Laurel" **by Jeff Anderson**

***Dermatophyllum secundiflorum,* is the Latin name for one of the most beautiful trees in our desert southwest. As you can see in the pictures above, the large clusters of purple flowers cascading from the ends of branches in the spring are a sight not soon forgotten. But that is only the beginning.**





“Texas Mountain Laurel” *Dermatophyllum secundiflorum*

Texas Mountain Laurels' native range extends from southeastern New Mexico, Texas and deep into Mexico. This southwestern native puts on one of the most beautiful and fragrant floral displays in the spring as any other cherished plant in this world, and that is one of the primary reasons it is grown.

When a person takes the time to visit the southwest in March, whether that be in San Antonio, TX; Tucson, AZ; or Las Cruces, NM, they may wonder what the beautiful tree with deep green leaves and clusters of purple flowers is. It is hard to imagine that in our Chihuahuan Desert such a plant as this exists here.

The tree is composed of pinnate leathery evergreen leaves that are deep glossy green on the top. These evergreen leaves provide for year round beauty in the garden. However, it is the grape like clusters of fragrant purple flowers that keeps people spellbound when near this tree. The fragrance has been described as smelling like grape Kool Aid and it's powerful perfume permeates the air surrounding the plant. The first time I saw this plant was in San Antonio, TX. Just like I mentioned, I was spellbound. Then I noticed that there seemed to be one of these trees in everyone's yard as I toured around the city. It did not surprise me that I saw so many Texas Mountain Laurels in San Antonio. It was clearly evident that any plant with this much beauty would be so popular. I purchased my first plant of Texas Mountain Laurel in 1985 there in San Antonio and planted it in Las Cruces, NM upon my return home. Since that time I have planted many more trees at the residencies where I have lived and I have enjoyed their beauty and fragrance for over 35 years to date.

Texas Mountain Laurel can range from a large shrub up to 15 feet, or a tree up to 35 feet tall. This matter of height depends on local water and soil conditions.



“Texas Mountain Laurel” *Dermatophyllum secundiflorum*

Left and Right



“Texas Mountain Laurel” *Dermatophyllum secundiflorum*
Left and Right

Under water stress and in sandy soils, Texas Mountain Laurel may only reach 3 – 4 feet tall, however, with moderate amounts of water and in loamy soils the tree can grow 25 – 35 feet tall. TML is a very drought tolerant tree as you can see by its size range, however, the tree can perish if insufficient water is unavailable to sustain its life.



Some of the important items that I have noted over the years about Texas Mountain Laurel are:

- The amount of flowers per inflorescence are determined genetically, but you can assess this by the floral catkins that develop in the fall. They are the silvery strands at the ends of branches. These floral appendages demonstrate the length of next years floral show, so, if you want long full clusters of flowers, look for plants with long floral appendages.
- TML's are tap root oriented, however, when grown in containers these tap roots can become entangled and root bound. To fix this, you will need to find a way to gently straighten the roots out while not killing your TML, however, if you do not deconstrict the roots, your plant will probably die, or blow over in a wind event.
- The one main insect problem on TML is the Genista Caterpillar. <https://landscapeipm.tamu.edu/ipm-for-../genista-caterpillar-on-texas-mountain-laurel/> This caterpillar at times can consume every leaf and flower bud on your plant if left alone. The solutions are to either leave the plant alone and let it be defoliated because, the caterpillars will rarely attack it in successive years and the plant will recover, or you may resort to *Bacillus thuringiensis*, a natural bacterium derived from the soil. This bacterium has a natural ability to kill caterpillars. As a last measure, the insecticide 'Sevin' is very effective. Remember to read and follow all directions on the label, the label is the law and a legal document.



"Silver Peso" *Dermatophyllum secundiflorum*
Left and Right



“Texas Mountain Laurel” *Dermatophyllum secundiflorum*
Author, Jeff Anderson at Mesquite Valley Growers Nursery, Tucson, AZ

Finally, if you want to maintain a healthy Texas Mountain Laurel just remember to give it deep watering's once a week after establishment, (if the soil is too wet the tree will succumb to fungal root rot and die); watch out for those Genista Caterpillars and make a determination of how you want to deal with them; the seeds are poisonous so be cautious as to where you plant Texas Mountain Laurel if you have kids, or pets that chew, while the seeds are very hard and may not poison anyone, there is always a chance they could; but most of all, enjoy this southwestern evergreen, drought tolerant, fragrant, and beautiful tree all year long in your garden.

Southwest Yard & Garden by Dr. Marisa Thompson

Fertilizer for Thought: Caring for Your Pines

Question:

When and how should I fertilize the piñon and other pine trees in my landscape?

Silver City Resident via Grant County Extension Agent, Jessica Swapp

Answer:

Generally, native plants (including piñon, ponderosa, and some other pines) do not need fertilizer in our soils, especially if they have a nice fibrous mulch layer protecting the roots (more on that later).

Appropriate irrigation is the best “fertilizer” for them. Several experts I reached out to said that oftentimes plant water stress is incorrectly diagnosed as nutrient stress. If you rarely or never watered your native trees in the past, start irrigating this season! By lowering water stress, you also reduce many pest and disease pressures. Native or nonnative, all trees deserve deep irrigation (1-3 ft deep is best) out beyond the canopy of the tree where most of the absorbent roots are found (2-3 times as far from the base as the tree is high, or as far as you can). For older columns about irrigating trees properly in New Mexico, go to <https://nmsudedesertblooms.blogspot.com/> and enter “water” in the search prompt.

The huge Afghan pines (nonnative) outside my office in Los Lunas and at the Fabian Garcia Science Center in Las Cruces look great and are not fertilized (Fig. 1). Other nonnative pines may appreciate fertilizer, but it really depends on how old the trees are and which species you are growing. Fertilizer is not recommended for newly planted trees. During the first year or so after planting, trees are establishing their root systems, so fertilizer (especially nitrogen that stimulates above-ground growth) will not be appropriate.



Pine Needles



Figure 1. Afghan pine (*Pinus eldarica*) at the NMSU Agricultural Science Center at Los Lunas (photo credit M. Thompson).

Test, don't guess. Soil and needle tests will be good indicators of fertilizer needs, if any. Currently, nutrient testing services for plant and soil samples are limited in New Mexico. The good news is that Dr. Owen Burney, NMSU forestry professor at the John T. Harrington Forestry Research Center in Mora, is exploring the development of a plant and soil analysis lab in collaboration with the Highlands University Forestry Program in Las Vegas, NM. This facility will serve the public and researchers in our region, as well as offer educational opportunities to students. In the meantime, helpful resources on how to test your soil and where to send the samples can be found at the website listed above or by contacting your NMSU county Extension agent.

Faster growth can be encouraged with the application of a controlled-release fertilizer designed for trees and shrubs up to two times per year. Note: Faster growth does not necessarily mean a healthier plant in the long term. Slow and steady wins the race. If you decide to fertilize, a low-dose N-P-K ratio like 16-8-8 or 12-6-6 will be less likely to harm roots. Dr. Burney warned that you should not fertilize unless you are going to also apply adequate irrigation because the salts in fertilizers can damage active root tips.

Another thing to consider is the timing of application. One general rule is to fertilize when plants are actively growing or just before. Here's how to know in advance: 1) Monitor your pines for signs of new growth. You'll be able to tell because there will be a new flush of bright-green growth at the branch tips, typically in spring. 2) Then get out your calendar, subtract a few weeks, and mark the date *next* year to apply a controlled-release fertilizer. Nitrogen tends to be the most limiting nutrient in our soils, partially because plants require large amounts and it is easily lost by leaching or through microbial activity. The problem with fertilizing when plants are still dormant is that the nitrogen may just move down past the root zone and not get absorbed by the tree.



Right:
2 Pictures
of Afghan
Pines.

Aside from proper irrigation frequency and depth, the single best thing you can do for your plants is to apply mulch. Using 2-4 inches of natural mulch (like wood chips) has been proven to maintain moisture levels in the soil and to add organic material to the soil as it breaks down slowly; it also helps suppress weeds, which keeps lawn mowers and weed whackers away from the bark. Injury from weed whackers is a major cause of preventable tree death in our parks and residential landscapes. It is possible that signs of distress are from physical wounds and are not fertilizer-related. Before you apply any fertilizer, check the base of your tree trunks for evidence of damage. Let's get to the root of the problem – post pictures of your pine tree's pretty new growth (or sad trunk wounds) on social media: @Nmdesertblooms.

Send gardening questions to Southwest Yard and Garden - Attn: Dr. Marisa Thompson at desertblooms@nmsu.edu, or at the [Desert Blooms Facebook page](#) (@NMDesertBlooms)

Please copy your [County Extension Agent](#) and indicate your county of residence when you submit your question!

For more gardening information, visit the NMSU Extension Horticulture page at [Desert Blooms](#) and the NMSU Horticulture Publications page at <http://aces.nmsu.edu/pubs/h/>

Marisa Y. Thompson, PhD, is the Extension Horticulture Specialist, in the Department of Extension Plant Sciences at the New Mexico State University Los Lunas Agricultural Science Center, office: 505- 865-7340, ext. 113.

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Southwest Yard & Garden by Dr. Marisa Thompson

My Apple Trees are Trying, Very Trying

Question:

What am I doing wrong with my apple trees? I have two apple trees in my back yard that I planted a few years ago. They flowered each spring, but only produced a couple fruit per tree.

Sandra L., Las Cruces, NM

Answer:

Fruit production can be very tricky in New Mexico, so you are not alone in feeling like you're doing something wrong. In fact, there is an NMSU Extension publication entitled "Why Fruit Trees Fail to Bear" (http://aces.nmsu.edu/pubs/_h/H308/welcome.html). Let's click through the ways to encourage better apple yields from your trees, starting with flower pollination.

For most apple cultivars (varieties), flowers need to be cross-pollinated with pollen from another apple cultivar in order to have good-quality fruit and good quantity, too. Even pollen from ornamental crabapple blossoms can be a pollinizer for apple flowers. Are your apple trees two different cultivars? If you know the cultivars, you can look them up to see if they are a good match for each other as far as the expected flowering times. If you suspect your two trees are the same cultivar and you have the extra space, one way to encourage successful pollination might be to plant a cultivar that is known to be a powerful pollinator, like 'Jonathan'. For more information on cultivars that perform well in New Mexico, check out the NMSU Extension publications "Fruit Trees for the Home Orchard" (http://aces.nmsu.edu/pubs/_circulars/CR523.pdf) and "Fruits and Nuts for New Mexico Orchards" (http://aces.nmsu.edu/pubs/_h/H310/).

Even after successful flowering and pollination, fruit may not mature because of tissue damage if you get a late freeze. Planting late-blooming cultivars reduces the late frost threat, but even these will benefit from being covered with a blanket if temperatures are expected to drop below freezing in your area.

Other considerations: Do your trees have adequate space for healthy root growth? Trees planted in lawns require special attention because grass roots compete with young tree roots for water and nutrients. Additionally, lawns are usually irrigated frequently, but too shallowly for tree roots. If planted in late winter or early spring, water your fruit tree often enough to barely keep the soil moist in the root area. Once the tree starts to green up, irrigate approximately every 7 to 14 days, depending on soil type, during the first growing season. Watering intervals will be longer through the first winter and second growing season, but it is important to always irrigate deeply when irrigating trees. The majority of the roots doing all the absorptive work are in the top 3 feet of soil.

Mulch! Mulch! Mulch! Mulching with natural materials like wood chips or leaves is extremely important. Mulch helps soil hold moisture, encourages earthworms and beneficial fungi, and maintains steadier temperatures so tree roots do not get as cold in the winter or as hot in the summer. Plus, as natural mulches break down they slowly add nutrients back into the soil.

Apple trees respond well to proper annual pruning, may require fertilizer, and are susceptible to certain pests and diseases. For more information on all of these factors, visit http://aces.nmsu.edu/pubs/_h/#fruit.

For centuries, many New Mexicans have grown apple trees successfully, so do not give up!

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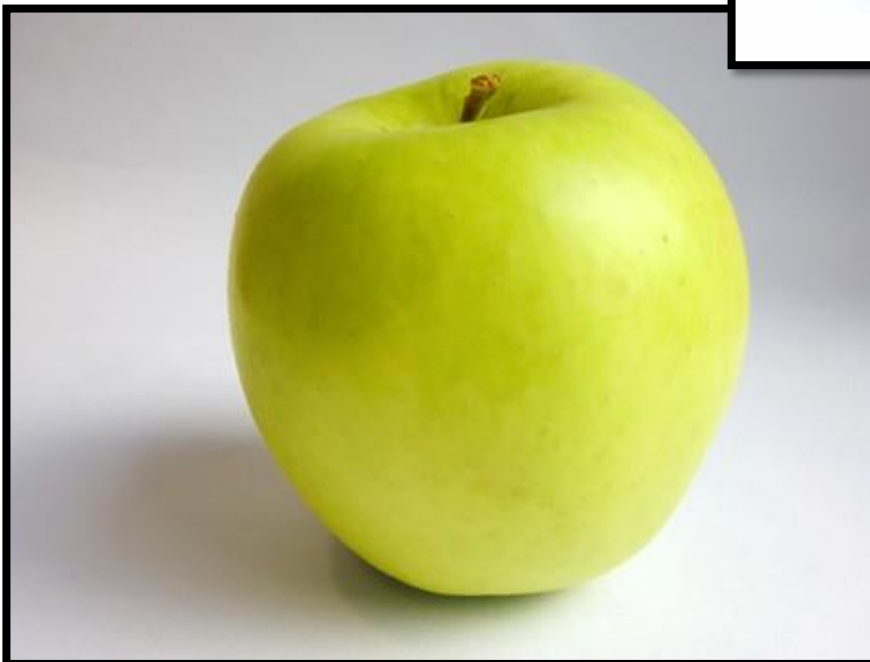
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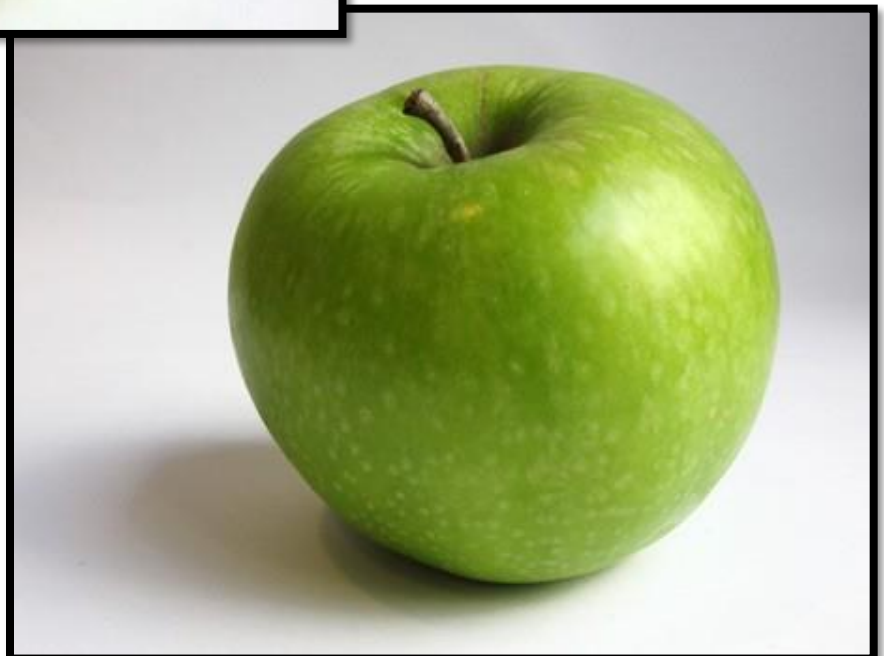
Red Delicious Apple



Golden Delicious Apple



Granny Smith Apple

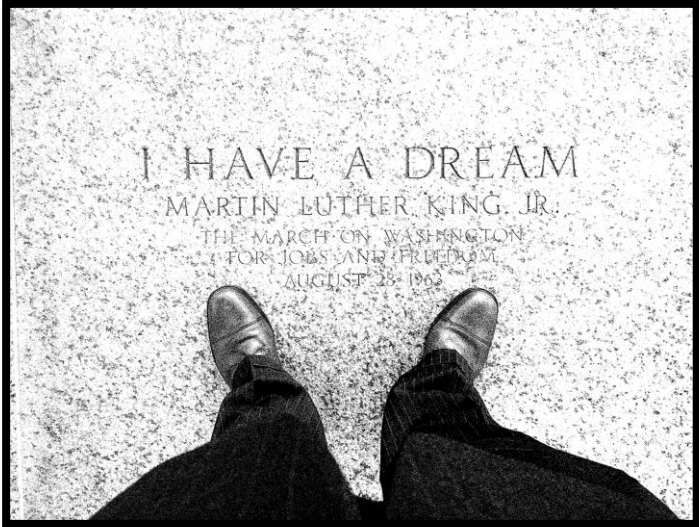


Next Meeting—March 14, 2018
Roadrunner Room, Branigan Library, 9:15-11:15 am.



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