Protecting Young Trees

We all know that fall is a great time to plant new trees in our landscapes because moderate temperatures allow tree roots to become acclimated and established while the tree canopy is dormant, right? (Most definitely!) But what happens when old man winter comes blowing down the South Plains? Our newly planted trees may need a little extra care!

Tree trunks of newly planted trees, especially deciduous trees, need protection from direct sunlight during all seasons. They are especially susceptible to sunscald during winter months when leaves are absent and no longer produce shade for the trunk. Sunscald is often referred to southwest winter injury because it happens during the cold weather months and is caused by sudden temperature changes of the bark. On a sunny, windy cold winter day, cold hardy tissues in the bark on the south to southwest side of the trunk are exposed to direct sunlight and warm up. The warmed bark de-acclimates, decreasing its ability to withstand freezing temperatures. When the sun goes down or behind a cloud, the temperature of the bark drops quickly to below freezing and the bark tissues are unable to regain cold hardiness quickly enough to withstand freezing. Living bark tissues are damaged by the freezing temperature, which leads to a sunken area on the trunk with dried, cracked, peeling bark or exposed dead wood.

Protect the trunk with a commercial tree wrap such as a polyurethane spiral wrap or craft paper wrap. The wrap should be applied in the fall but should be removed prior to trunk expansion each spring. Set a reminder to remove the wrap as it could suffocate the tree if left on too long! In most cases, a tree will only need to be wrapped the first season or two after planting. Tie the wrap firmly, but not tightly. Polyurethane wraps expand without binding the trunk. Start at the ground and wrap up to the first branch slightly overlapping as you go. Do not attach wraps with wire, nylon rope, plastic ties, or electrical tape.

Plant of the Month: Chinese Pistache

Chinese Pistache, also known as Chinese Pistachio, is a medium size deciduous shade tree that is well adapted for home and commercial landscapes. It has a full, spreading type canopy that can reach 40’ to 50’ wide. This tree provided a spectacular fall color display this year, shown left, and has one of the most reliable fall color shows annually. It has a perfect Firewise Index rating of 10 and makes the list of Earth-Kind landscape plants! If you are interested in learning more about Earth-Kind or Firewise, please visit: [http://ekps.tamu.edu/firewiseindexexplanation](http://ekps.tamu.edu/firewiseindexexplanation) and [http://ekps.tamu.edu/details?id=289](http://ekps.tamu.edu/details?id=289)
At first glance, you may think your Indian Hawtnors look pretty, almost as if the color change in the leaves is its attempt at a fall color display. However, after a closer inspection, you will find that the evergreen shrubs look red for a much more sinister reason. They have a disease called Entomosporium Leaf Spot (EntomosporiumLeafSpot). Entomosporium Leaf Spot is a widespread and destructive fungal disease affecting woody ornamentals in the rose family (Rosaceae) including photinia, loquat, flowering and fruiting pears, firethorn and quince.

Symptoms of Entomosporium Leaf Spot include a bright red leaf spot, almost like a certain childhood favorite reindeer’s nose, with a center that is typically brown to maroon in color. Unlike the splendor associated with Rudolph’s nose, this red spot is more like a warning of the bad things to come. Light infections of Entomosporium Leaf Spot can cause minor cosmetic damage, but more major infections of Entomosporium Leaf Spot can cause premature leaf drop and even death of the plant.

The disease is most damaging to plants in home landscapes following periods of frequent rainfall in the spring and fall when temperatures are between 60 and 80 degrees F and when the plant is actively growing. Spots on leaves, young shoots and fallen diseased leaves are important in the survival of the Entomosporium Leaf Spot fungus. Masses of spores are released from late winter through much of the growing season. The fungal spores are spread to healthy foliage by a combination of splashing water and wind. Under favorable conditions, spores germinate and infect young growth. Symptoms typically appear 10-14 days after infection.

Tips to control Entomosporium Leaf Spot

- Purchase only healthy plants that do not show any symptoms
- Space plants adequately to allow for good air movement; this helps the leaves dry faster and reduces chances of infection
- Remove fallen infected leaves, as this reduces a source of fungal spores

cont’d

- Surface or drip irrigation is preferable to minimize splashing of water on leaves
- Mulch the base of the plants
- Fungicides, such as thiophanate-methyl and myclobutanil, can prevent infections when conditions are favorable for developing the disease. Always refer to product labels for instructions on proper usage of the fungicides. Fungicide applications are not necessary during hot, dry periods

Have a question you would like to see answered in a future issue? Email christina.reid@ag.tamu.edu today!
A lack of adequate soil moisture coupled with strong winter winds is often the major cause of winter injury. All plants, but especially narrowleaf and broadleaf evergreens, use water during winter. When little or no soil moisture is present, plants can become desiccated and it is more likely permanent root damage will occur. A dry freeze is much worse than a wet freeze for plants.

When a dry cold front is predicted, water the landscape at least 24 hours in advance and apply about a 1/2 inch of water. A sunny day with moist soil helps warm the soil and root area thus reducing the amount of time the roots will be exposed to freezing temperatures.

When the soil freezes, if moisture is not present in soil pore spaces, moisture is pulled from plant roots resulting in desiccated roots, causing winter kill or injury.

Common sense needs to be practiced at this time of year. Do not turn on sprinklers during freezing temperatures. Avoid getting moisture on plant leaves and stems. Ice on walks and drives can create a hazardous situation for you, pedestrians, and even passing vehicles.

Too much water can also result in problems during the winter. Frequent wet soils can lead to rotting roots. Soils with more than ample moisture may also encourage winter weeds to germinate and flourish. Water only every three to four weeks and apply only enough water to moisten the top 6 inches of soil.

Remember to water plants in planters even more frequently as they lack the ground’s insulation.

Excessive moisture on leaves and stems will cause severe injuries to plants

For more information on any of the topics, or to ask questions please contact:

Christina Reid
County Extension Agent Horticulture
Texas A&M AgriLife Extension
Lubbock County
916 Main, Suite 401,
Lubbock, TX 79401
806.775.1740
Christina.reid@ag.tamu.edu

The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife.