

Landscape trees provide glint of fall color

Texas A&M AgriLife Extension Service — Galveston County Office



PHOTO BY Dr. William M. Johnson

Even though fall color in our urban trees has been a bit muted this year for the area, a few tree species such as Texas ash are providing residents with eye-catching displays of color.

Each fall, a glorious spectrum of colors blankets the hardwood forests in many areas of the United States.

In Colorado, it's the gold of aspen trees that catches the eye. In New England, it's the brilliant oranges and yellows of the sugar maples. And in the South, it's the deep scarlet of the red oaks, the reddish-orange of sumac and the multicolors of sweet gum.

Despite appearances, Mother Nature doesn't paint with broad brush strokes. Paint-by-numbers would be a better analogy because each tree has its own fall color bound up in the chemical composition of the sap, which provides the "instructions" on what color to turn.

Tree leaves change colors according to complex chemical formulas. Depending on

how much iron, magnesium, phosphorus or sodium is present in leaves and the acidity of tree sap, leaves might turn amber, gold, red, orange or just fade from green to brown.

Scarlet oaks, red maples and sumacs, for instance, have a slightly acidic sap that causes the leaves to turn bright red. The leaves of some varieties of ash, growing in areas where limestone is present, will turn a regal purplish-blue.

What prompts the change? Although many people believe that a mischievous Jack Frost is responsible for the color change, the weather conditions are just one factor at play. As the days grow shorter and the nights longer, a chemical clock inside the trees starts up, releasing a hormone which restricts the flow of sap to each leaf.

As the autumn season progresses, the sap flows more slowly and chlorophyll, which gives most leaves their basic green color over the spring and summer seasons, starts to disappear. The residual sap becomes more concentrated as it dries, creating the colors of fall.

In other words, the colors are always there, but as the predominant green fades, other colors become enhanced and begin to show through. Sunlight, nutrients and moisture enhance the process, and cool weather seems to slow things down to bring out the full effect.

A long, cool, sunny and moderately moist fall seems to provide the best color show in a given year. Well, we missed out on the cool part during the time needed for ideal color as the 2012 fall season has been a bit warm at times.

Obviously, this area is not a hot spot for fall color along the roadways as we don't have the aspens of Colorado nor the sugar maples of New England. Along the highways in Galveston County — well, it's basically the orange, yellow and red hues of the maligned Chinese tallow tree.

Even though fall color in our urban trees has been a bit muted this fall even for our area, I was pleasantly surprised to see one tree species providing unexpected burst of



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fall color. Last week while walking back to my office from the horticulture demonstration garden in Carbide Park in La Marque, I noticed a colorful layer of fallen leaves below the canopy of a Texas ash (*Fraxinus texensis*). The leaves from this tree were a striking yellow-gold in color but leaf colors in the fall also range from gold, orange and purple depending on local conditions.

Yes, fall colors in our urban forests along the Texas Gulf Coast do not hold a candle to those in many other areas of the nation. However, it seems that life is often about trade-offs — in this case, I find ample solace and much happiness in living in an area with very mild and pleasant winters.

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Greenhouse Management

Many gardeners dream of one day having a hobby greenhouse.

Even though our winter weather on the Gulf Coast is relatively mild, gardeners still can find that a greenhouse offers a variety of advantages.

If you have a large collection of containerized tropical plants, a greenhouse provides the ideal location to overwinter them. For gardeners who are into plant propagation, greenhouses can make starting plants from seeds or cuttings much more successful.

Area residents are invited to attend an upcoming seminar on “Greenhouse Management ... A Basic Guide for Home Gardeners” to be presented by Sid Kapner, a Certified Master Gardener with the Harris County AgriLife Extension Office.

This program will be 1 p.m. to 3:30 p.m. Saturday at the Galveston County AgriLife Extension Office in Carbide Park, 4102-B, Main St., La Marque. There is no registration fee but preregistration is required to ensure availability of handout material. Call 281-309-5065 or

email [galv3\(at\)wt.net](mailto:galv3(at)wt.net).

Topics covered include setup and management of hobby and commercial greenhouses, as well as cooling, heating, water management, water injection of fertilizers, and sanitation.

