

Guide to Tree and Shrub Identification: Part III

Last week I discussed the main features of woody plant leaves that one uses to identify different species, and today we will begin using those characteristics to help identify some plants.

For those using the Tree ID Key on my website, we will begin using the key today, slide 5. Identification “keys” are used in many books on various biological topics including those dealing with woody plants (trees, shrubs and vines). Depending on how large a collection of plants is covered, keys can be many hundreds of pages long and extremely detailed. The one I have written only covers 60 or so of the more common Hill Country species and is less than 6 pages long.

Keys are written in the form of a series of paired questions (*e.g.* Is it black? If so go to xx. Is it not black? If so then go to yy). You proceed through a series of questions until you eliminate everything else a plant could be and you come to a matching description of the plant in question.

I will skip over the first two categories in my key (those plants with needles or minute scaly leaves—cypress and junipers respectively) and also those with parallel veins that are yucca-like—sotol and twist-leaf yucca.

The next category consists of plants with a vine-like growth habit. It is important here not to think of only things that climb up the house or a tree. While the five species we will consider can all do that, one most often sees them growing along the ground or over small bushes. In my list of common Hill Country vines I have five species of vines. Here are the descriptions of each of those vines using primarily the leaf characteristics discussed last week of leaf size, type, arrangement, margin and shape.

Greenbrier is a vine with simple leathery leaves arranged in an alternate pattern and with entire margins. The leaves are usually 2 to 4 inches long, triangular- or heart- or egg-shaped. The stems have sharp spines (thorns) and the leaves sometimes have spines along the midrib or margins as well. In spite of the spines, it is a favorite deer food.

Grapes have simple, alternate, roundish 2 to 6 inch leaves that can either be toothed and/or palmately lobed. (Lobes are protuberances along the margin of the leaf which can be either rounded or pointed—the grape leaf in the accompanying picture has 3 lobes and is also toothed). There are at least 60 species of grapes in Texas. The above description will fit most of them. Mustang grape leaves have a white underside and a cupped leaf shape which distinguishes them from most others.

This is a good time to point out that Mother Nature is never uniform. The leaves on a single plant can have slightly different shapes, and smaller, newer leaves can be different from older leaves. Native grape vines may show several different leaf shapes on the same plant.

Poison ivy has compound trifoliolate leaves (three leaflets attached to the end of a petiole) arranged in an alternate pattern along the stem. Leaves are 1 to 4 inches long usually with a single lobe on the side of each leaflet. If box elder trees are in the vicinity, small shoots of that look very much like poison ivy, except the leaf arrangement for box elder is opposite.

Virginia creeper is a vine with 2 to 6 inch alternately arranged palmately compound leaves (five leaflets attached to the end of the petiole) with the longest leaflet in the center. The leaflets are coarsely toothed. The leaves turn bright red in the fall.

Trumpet creeper is unusual in that its leaves are pinnately compound and attached in an opposite arrangement. The photo shows 13 coarsely toothed leaflets on the single compound leaf. It produces orange to red trumpet-shaped flowers in the summer.

For those using the website, the "Tree ID Key Photos" document contains photos in the order they appear in the tree key, and the "Names of Trees Shown in the Tree Keys Photos" has the names listed in that order also.

It is important to note that leaf characteristics are not the only clues to help identify woody plant species. Bark color or texture can sometimes be helpful, the texture of the leaves can be useful, flowers, fruit, the environment, and many other things can also aid in identification.

Until next time...

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