Friday’s Feature
By
Theresa Friday
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What’s brewing in the garden this Halloween?

Lurking just around the corner is Halloween. While thoughts of candy and scary costumes may be on your mind, let’s take a look at some “be-witching” horticulture curiosities.

Witch Hazel
Within the vast plant world, the *Hamamelidaceae* is known as the witch-hazel family. The horticultural name means "together with fruit" because its fruit, flowers, and next year’s leaf buds all appear on the branch simultaneously, a rarity among woody plants.

Witch hazel’s name upholds mysterious connotations. In colonial America, the shrub’s flexible forked branches were a favorite "witching stick" of dowsers used for searching out hidden waters or precious metals. This has nothing to do with witches, but rather originates from the old English word for pliable branches "wych." In England dowsers call an elm (*Ulmus glabra*) the "witch hazel tree." When early British settlers arrived in the Americas, they fancied our witch hazel as the logical replacement for dowsing chores, given its pliable, crooked branches.

There are several landscape ornamentals in this family including the Chinese witch hazel (*Hamamelis mollis*), witch hazel (*Hamamelis virginiana*) and the very popular Chinese fringe bush (*Loropetalum chinensis*).

Witches’ Broom
At this time of year hearing someone mention a witch’s broom may not seem that out of the ordinary, but have you ever heard it mentioned any other time of the year?

Occasionally, plants will form unusual and alarming growths. When a plant exhibits a dense mass of shoots growing from a single point that resembles a broom or a bird’s nest we call it “witches’ broom”.

In medieval times, mysterious and unexplainable occurrences were often blamed on witchcraft. Brooms during this time were made of bundles of twigs. The term witches’ broom comes from the German word *hexenbesen*, which means to bewitch (hex) a bundle of twigs (besom).

A number of stresses, both biological and environmental, can lead to the formation of brooms. They can be
caused by a number of organisms including fungi, mites, insects, viruses, bacteria and mistletoes. Additionally, some brooms appear to be caused by genetic mutations in the buds of the branches. Unlike brooms caused by living organisms, there is usually just one broom per tree when the cause is a genetic mutation.

Witches' brooms occur on many different woody plant species, including deciduous trees such as hackberry, maple, willow and conifers such as pine and spruce.

Pinpointing the cause of a witches' broom can be difficult, especially if the formation is related to an environmental factor. Analyzing the plant tissue for infectious agents such as phytoplasmas requires specialized testing that can be costly.

Extensive brooming may cause branches to break more easily and can reduce tree vigor. Pruning out the affected twigs, if feasible, can help improve the tree's appearance.

Lime shoot from a healthy tree (right); shoots from a tree affected by lime witches’ broom phytoplasma; from right to left: shoots with early symptoms (leaves are still large), witches’ broom before and after leaf drying.

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Welwitchia (Well-witch-ee-a)

*Welwitschia mirabilis* is a very unusual plant native to a strip of land about 50 miles wide and about 500 miles in length along the coast of the Namib Desert. Known to be one of the world’s oldest deserts, part of it is located in Namibia, Africa. On a recent trip there, I had the opportunity to see this rare plant and hear some of its history.

Welwitchia is a plant of remarkably bizarre habits and survives in very harsh localities where the annual rainfall is almost non-existent. The welwitchia’s oldest living specimens are estimated at 1500 to 2000 years.

It is comprised of only two leaves, a stem base and a taproot. From seedlings the first leaves continue to grow horizontally from the stem base for the lifespan of the plant, a most unusual, if not unique, characteristic. Weathering eventually causes the leaves to become frayed and split. The torn and twisted leaves of the adult plant give the impression that there are multiple leaves, hence the description 'octopus-like'.

*Welwitschia mirabilis* among petrified wood in Namibia, Africa

*Photo credits: Theresa Friday*

Theresa Friday is the Residential Horticulture Extension Agent for Santa Rosa County. The use of trade names, if used in this article, is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others.

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