Witch Hazels

Witch hazels (Hamamelis spp.) are large shrubs that have several desirable attributes, and offer year-round interest in the landscape. Three species have their origins in North America (H. virginiana, H. vernalis and H. ovalis), and one each in China (H. mollis) and in Japan (H. japonica). With regard to availability of these plants to gardeners, there are four species that are generally grown by the nursery trade, and an ever-increasing number of cultivars. These are the Chinese witch hazel, the interspecific hybrid Hamamelis x intermedia, and the two North American natives - the common (or American) witch hazel and the vernal witch hazel.

The botanical name, Hamamelis, translates to “together with fruit”, which refers to the fact that the fruit and flowers occur on the same plant at the same time. This is a very unique feature of native North American trees.

One can find H. virginiana, or common witch hazel, growing in the wild from Nova Scotia south to central Florida, and west to Minnesota in the north and Texas in the south. In South Carolina, its native range extends over three quarters of the counties throughout the state across all four physiographic regions (Mountains, Piedmont, Sandhills and Coastal Plain). Vernal witch hazel, or Ozark witch hazel, is more Midwest in its range, which extends from Missouri and Arkansas southwest into Oklahoma and Texas.

However, most gardeners have turned their attention to the use of Chinese species (H. mollis) or the hybrid between the Chinese and Japanese species (H. x intermedia) for their superior ornamental attributes such as durable summer foliage, beautiful fall color, pleasant fragrance and bright flowers in late winter to early spring. These plants make beautiful, relatively care-free additions to South Carolina landscapes, and deserve more attention.

In addition to its ornamental attributes, witch hazel has several medicinal properties including use as an astringent and an anti-inflammatory. In fact, it is one of the very few American medicinal plants approved as an ingredient in non-prescription drugs by the U.S. Food and Drug Administration.

Mature Height/Spread

Witch hazels are generally considered large shrubs, or in some instances small trees. The ultimate or mature size is largely dependent upon the species or cultivar selected, and the growing environment in which it is sited. Common witch hazel (H. virginiana) can reach heights of 25 feet in the wild. Vernal witch hazel (H. vernalis) is generally of smaller stature, maturing at a height of 6 to 10 feet. Hybrid witch hazels (H. x intermedia) are also generally smaller statured than common witch hazel, and can be reasonably expected to attain
heights of 8 to 15 feet with a nearly equal spread. Plants are typically upright-spreading and rather loosely branched. The somewhat zigzagging branches offer interesting form, and its upright nature lends itself to an opportunity for underplanting with bulbs or small perennials.

**Growth Rate**
Witch hazels are generally considered to be slow growing. However, the hybrid witch hazel does display greater vigor than that of either parent species. One could reasonably expect annual growth of 4-12 inches under suitable environmental conditions.

**Ornamental Features & Landscape Uses**
As mentioned previously, witch hazels make beautiful, relatively problem-free additions to South Carolina landscapes. They also offer the gardener an interesting and unique plant that truly adds to a four-season landscape. Witch hazels, depending upon the species and/or cultivar, flower during the time of year when most plants are dormant and waiting for warmer weather.

The common witch hazel (\textit{H. virginiana}) is noted for good fall color which is usually bright yellow. The flowers form from groups of three or four stalked buds which open from October to December. The perfect flowers are yellow, slightly fragrant and consist of four narrow, strap-like petals up to 5/8 inch long that resemble the flowers of Loropetalum (\textit{Loropetalum chinense}), which is also a member of the witch hazel family (Hamamelidaceae). It is a valuable shrub for the naturalized border, under the tall canopy of mature shade trees, although it will tolerate full sun in moist soils. There have been some garden-worthy selections made, but they may be more difficult to find in the trade as opposed to the Asian species and hybrids. It is cold hardy to Zone 3. Common witch hazel is the preferred rootstock for grafted cultivars of Asian origin.

The vernal witch hazel (\textit{H. vernalis}) is similar to the common witch hazel except that its features are generally smaller. The most significant difference between these native species is flowering time, which is usually late winter/early spring. In South Carolina, it would be reasonable to expect flowering in January. New growth is bronze to reddish purple, and changes to medium-dark green in summer. The fall color is somewhat variable, but is described in literature as being an outstanding clear yellow that develops late. The flowers consist of four yellow strap-like petals with a darker orange to red calyx at the base. There is some variability in the coloration of the petals, which has led to a few selections being made, such as ‘Red Imp’, with petals ranging from copper-red to maroon. Another interesting cultivar worth mentioning is ‘Tim’s Purple’, with purple-red flower petals. While vernal witch hazel offers more variety for the garden than the common witch hazel, it is also more difficult to find in the trade than the Asian species and hybrids. It is recommended for light shade, but will tolerate full sun if sited in moist, rich soil. It will tolerate soils of higher pH than the other species and is hardy to Zone 4.
The Chinese witch hazel (\textit{H. mollis}) is a garden standout, noted for its larger yellow flowers and stronger fragrance. It tends to flower later than the vernal species, typically in February-March for Zone 7 of Upstate South Carolina. This species can be used in a shrub border or as a specimen in the woodland garden. It would make a nice substitute for the ubiquitous forsythia. The cultivar ‘Goldcrest’ is one of the best selections available. It is noted for its consistently spectacular flowers of rich golden yellow with wider, more prominent petals than the species. The sweet fragrance in February is very desirable. The growth habit is wide-spreading with an ultimate height of 8 to 10 feet. Other cultivars that deserve attention are ‘Princeton Gold’ and ‘Superba’, which is suspected to be a hybrid between \textit{H. mollis} and \textit{H. vernalis}. ‘Superba’ is noted for flowering in December, with petals that are orange at the tips and red at the base. Ultimate height is reported to be 9 to 10 feet with equal or larger spread. This species is hardy to Zone 5.

The hybrid witch hazels, \textit{Hamamelis x intermedia}, are interspecific crosses between \textit{H. mollis} and \textit{H. japonica}, and they exhibit intermediate attributes of each parent species. They display hybrid vigor, and may reach a mature height of 15 feet. They can be expected to flower from January through March, and offer the gardener color and fragrance in the dreariest of seasons. The flower colors range from yellows and oranges to red. It should be noted that in general, the red-flowered cultivars typically exhibit more red fall coloration, and the yellow-flowered cultivars exhibit yellowish fall coloration. There are many reported cultivars of this hybrid, and a handful of them have become somewhat common in the nursery trade and therefore available to gardeners. One of the best yellow-flowered cultivars is ‘Arnold Promise’ which was developed at the Arnold Arboretum. It is known for its clear yellow flowers and red calyces. The petals are long at almost an inch, and it provides good fragrance in the late winter garden. The flowering time tends to be late winter, usually in the mid-February through March range. Perhaps one drawback of this cultivar is that it is reportedly subject to leaf anthracnose, but proper siting and good cultural practices should keep the disease occurrence to a minimum. Another great cultivar is ‘Jelena’ or ‘Copper Beauty’ as it is sometimes listed. This cultivar has outstanding flowers that are yellow at the tips, orange in the middle and dark red to maroon at the base. The petals appear crimped and twisted. The scent is very pleasant, but not over-powering. These cultivars make a fantastic display when grouped together for larger effect. This is a reliable choice for Zone 7 gardens, but should also be given consideration by gardeners throughout the state. They are most adaptable in Zones 5 through 8.

Witch hazels, regardless of species or cultivar, thrive in moist, rich, well-drained, slightly acidic soils. These shrubs can tolerate shade, but flower displays improve with increasing sunlight. Most prefer light shade to full sun. They are moderately resistant to drought once established. Due to their spreading growth habit, they may need to be occasionally pruned to maintain an upright form, or to allow for clearance beneath the canopy.

The common witch hazel (\textit{H. virginiana}) is especially prone to suckering as it colonizes, and these suckers should be removed to maintain a tidy appearance if so desired. It should also be noted that cultivars of hybrid witch hazel (\textit{H. x intermedia}), which are grafted onto common witch hazel rootstock, can sucker from the base below the graft union, so it is important to remove these suckers as they emerge to avoid losing the desirable scion selection. With a little bit of care following these tips, witch hazel can surely fill the “missing link” of a four-season garden in South Carolina, and deliver color and fragrance to the winter landscape.
Propagation

Propagation of witch hazels is usually accomplished by seed for the species, while named cultivars are typically rooted from stem cuttings or grafted. Propagation by cuttings is possible using firm wood in late summer. The cuttings should be treated with 1.0% IBA and stuck in a well-drained peat:perlite mix under mist. Keep root disturbance to a minimum. The advantage of rooting cultivars from cuttings is that one does not have to worry about the rootstock’s tendency to sucker and possibly overtake the scion. The seeds are found in two-valved dehiscent capsules that ripen in mid to late fall. Seed should be collected in late summer or early fall before the capsules turn brown, ripen and eject the seed. The seed can actually ejert from the capsule up to 30 feet, so it is advised to place the collected seed in a closed container. Refrigerated seed that is kept dry can be stored up to one year. Because seeds have physiological dormancy, they must be given alternating warm and cold treatments. This can be done naturally by harvesting seed in late summer and planting in an outdoor seedbed. Germination (sprouting) occurs the second spring if not given a pre-treatment of 3 months cold followed by 3 months of warm stratification.

Problems

Witch hazels are relatively problem-free additions to the landscape. There are a couple of insects associated with the witch hazel, but none are serious. There is a cone gall aphid (Hormaphis hamamelidis) that can cause unsightly galls on the leaves, but are usually not a significant problem. There is also a spiny leaf gall aphid (Hamamelistes spinosus), that can cause some unsightly spiny galls on the foliage. For more information on this insect see http://www.clemson.edu/cafls/departments/esps/factsheets/turforn/river_birch_aphid_to17.html.

The most prevalent disease associated with vernal witch hazel is powdery mildew, but is not a significant problem in most instances.

Prepared by George M. Dickert, Horticulture Extension Agent, Spartanburg County, Clemson University, 04/12.

This information is supplied with the understanding that no discrimination is intended and no endorsement by the Clemson University Cooperative Extension Service is implied. All recommendations are for South Carolina conditions and may not apply to other areas. Use pesticides only according to the directions on the label. All recommendations for pesticide use are for South Carolina only and were legal at the time of publication, but the status of registration and use patterns are subject to change by action of state and federal regulatory agencies. Follow all directions, precautions and restrictions that are listed.