

Sure They Will Grow Here: Evaluating *Hebe*, *Cistus*, and *Ceanothus* in Western Oregon®

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For the last several years I have been growing and evaluating *Hebe*, *Ceanothus*, *Cistus*, and *Halimium* species and cultivars in field trials in the Willamette Valley. In each of these evaluations the goals were quite straightforward. Obtain as many selections of each group as possible, plant them out side-by-side, and evaluate them for growth, flowering, and cold hardiness, as well as general landscape performance. Many of the plants being evaluated would be considered “new” to cultivation in our region, although representatives from each of these genera are used in western Oregon landscapes, as well as elsewhere on the west coast. The results we obtain would be pretty much applicable to all of these regions. None of these genera, though, are suitable in general for landscape use east of the Cascade Mountains.

The *Hebe* evaluation has been going on since 2000 at the Oregon State University (OSU) North Willamette Research and Extension Center (NWREC) in Aurora, Oregon. That evaluation is likely to continue through 2008. The *Cistus* and *Halimium* were evaluated in a joint planting at NWREC from 2004 through 2007. The *Ceanothus* is located at the Oregon Garden, and that evaluation was conducted from 2001 through 2005. The work has been supported by modest grants and assistance from several organizations. Monetary assistance was obtained from the Hardy Plant Society of Oregon, The Agricultural Research Foundation at OSU, and the Washington State Department of Agriculture. Staff at NWREC, the Oregon Garden, and OSU Master Gardeners have been generous with their time and without this help these evaluations would not be possible at the current funding level.

With the *Ceanothus* and *Cistus* trials now over, and the *Hebe* evaluation nearly over, it seems like a good time to review the performance of individual cultivars within each of these groups of plants and share which of the new ones have distinguished themselves.

The *Hebe* evaluation was undertaken primarily to study hardiness of this large and extremely diverse genus of evergreen New Zealand shrubs. There are approximately 80 *Hebe* species, but these have produced hundreds of cultivars and hybrids. Because hebes range over almost all of New Zealand, from sea level to alpine areas, hardiness varies dramatically. Some hebes tolerate only modest freezes, while others seem impervious to cold damage in western Oregon. It depends on the origin of the plant: those native to regions that experience significant winter cold are, not surprisingly, more hardy. There is an old saying that hardiness of hebes can be gauged by the size of the leaf and this is generally correct. As one goes from sea level to alpine regions in New Zealand, the plants you would find as you go into higher and colder regions tend to have smaller and smaller leaves. So the rule is, generally, that the smaller the leaf, the hardier the *Hebe*.

The evaluations at NWREC are located adjacent to a Bureau of Reclamation weather station which is used for climate data (<http://www.usbr.gov/pn/agrimet/>). Winters during the trials have been relatively mild, but with several unexpected

freezes. The most damaging of these were the "Halloween" freezes of 2002 and 2003 in which low temperatures at NWREC dropped suddenly to 22 and 25 °F, respectively. An early freeze in mid-November, 2000, and a late freeze in February, 2006 also caused some damage, at least to the hebes. Similar cold temperatures in December and January, when the plants are most dormant, have not caused noticeable damage.

In addition to cold hardiness, another criteria that became increasingly important as the evaluation continued was overall form and foliage quality. Because of cold damage, or foliar disease, or damage from snow or wind, some hebes have a very unkempt appearance. Others maintain a well-shaped canopy and attractive foliage and it is these plants that I think deserve use in Northwest landscapes. In order to maintain that canopy it's worth noting that hebes prefer a well-drained soil and good fertility. Although this is often said about most plants, hebes are susceptible to *Phytophthora* root rot and a little extra care with soil preparation will likely pay dividends. Hebes are also overwhelmingly sensitive to drought and will perform, and look, far better with regular summer water.

Some hebes are commonly available locally, including 'Autumn Glory', 'Alicia Amherst', and 'Patty's Purple'. All of these are showy plants in bloom, although both 'Alicia Amherst' and 'Patty's Purple' are among the more tender hebes. They were heavily damaged by the cold weather in 2002 and 2003 and eliminated from the evaluation. Unfortunately, there are many other tender hebes that suffered the same fate and, like 'Alicia Amherst', they are some of the showiest hebes in both foliage and flower. One which is particularly attractive is *H. ×andersonii* 'Andersonii Variegata', which, as the convoluted name suggests, has large, variegated leaves. It produces lilac-colored flowers from late-summer through fall. If a protected spot can be found for this and other tender cultivars, they are very much worth growing for their foliage and late bloom.

'Autumn Glory' is quite hardy by comparison to these and is in general a tough, attractive landscape plant. Another locally available cultivar which has consistently looked good is 'Emerald Gem', which forms a low-growing dome of green foliage. This plant is often sold as 'Emerald Green' or 'McKeanii', but both of these names are incorrect. Unfortunately re-naming of *Hebe* cultivars is fairly common and in our evaluation I have quite a few cultivars I was given under more than one name. Sorting these errors out can be difficult unless good information is available on the correct name.

'Watson's Pink' is a rounded shrub 4 ft tall and wide. The foliage is an attractive mid-green, and in July it produces spikes of pink flowers. The flowers at the bottom of the spike open first and slowly fade to white as others open further up, so that the inflorescence has both pink and white flowers on it at one time. The overall effect is to have both pink and white flowers on the plant at the same time. Though it showed slight damage in November 2002, it has consistently looked good year-round and flowered well each summer. 'Denise' grows to 3 ft tall and spreads to 5 ft wide. It will produce the same bi-colored, pink-and-white flowers as 'Watson's Pink' in June, and it will re-bloom in October less intensely. 'Bicolor Wand' is a dense, rounded shrub to 5 ft tall and wide or more, and also produces long, 3- to 4-inch spikes of pink and white flowers in July.

Among the smaller-growing hebes is 'Sapphire'. This is an upright-growing shrub to 3 ft, which has narrow green leaves and produces blue flowers in abun-

dance in June. In addition to this, the foliage at the tips of the shoots turns bright red in winter in response to cold temperatures. A few other hebes share this characteristic, the best known of which is 'Caledonia'. 'Pewter Dome' has small blue leaves and grows to 18 inches tall and 2 ft wide. It makes a low-growing mound of blue foliage which is fully hardy and produces white flowers in June. Several other blue-leaved cultivars are even lower growing and can be used as small-scale groundcovers or to trail over retaining walls. These include 'Wingletye', 'Inverey', and 'Bracken Hill', all of which are less than 12 inches tall and about 2 ft wide, and have white flowers in June.

The foliage on most hebes is attractive which is a major ornamental asset, but in some cases it is the principal ornamental characteristic, as some hebes, oddly enough, do not flower at all in cultivation, or flower very sparsely. Although it sounds like an odd thing to say about a flowering plant, in some cases, the flowering is so sparse that it actually is more of a distraction from the appeal of the foliage. Generally these are smaller-leaved plants with the most distinctive of which are the so-called "whipcord" hebes. They are very cold hardy plants which have very small leaves pressed close to the stem and which resemble dwarf conifers.

Probably the best known of these are *H. cupressoides* and *H. ochracea*, especially the form 'James Stirling'. With its very tiny leaves and dense branching habit, *H. cupressoides* was actually thought to be a conifer when it was first discovered by botanists, at least until it flowered. *Hebe cupressoides* 'Boughton Dome' is a popular dwarf form which is well-shaped, grows to about 2 ft tall and 18 inches wide, and is amongst the hardiest of all *Hebes*. It has not bloomed in 7 years in our evaluation. As the species name suggests, *H. ochracea* has ochre-colored, wiry stems. 'James Stirling', reputedly a dwarf form, is also a very hardy attractive plant, which does produce a few white blooms each year, but the plant is better after flowering is finished. 'Christenseni' is another whipcord, a well-shaped, dense plant to about 18 inches tall and wide with bright green stems which also has yet to flower. Finally, 'Hinerua' is a dense, upright-growing green-leaved shrub to about 3 ft. Unlike some of the other cultivars mentioned, which have very tight, rounded habits, 'Hinerua' has a much more informal look to it, and is an excellent garden plant. It, too, produces a few sparse white blooms in spring.

There is more information, as well as data on flowering and hardiness of all the plants in this trial, on the NWREC website <<http://oregonstate.edu/dept/NWREC/>>.

Ceanothus is primarily a western U.S.A. genus of plants, though they are best known by the species and selections native to California. However, there are *Ceanothus* found through the Midwest to the east coast, principally *C. americanus*, which is a deciduous species that figures prominently in some of the desirable hybrid *Ceanothus*.

Ceanothus is probably known to most Northwest gardeners as one of two fairly common evergreen shrubs. 'Victoria', as it is commonly sold, is an 8 ft by 8 ft shrub with blue flowers in May and June. *Ceanothus gloriosus* is a low-growing plant with light blue flowers used as a groundcover. Both of these are good plants that proved quite hardy. There is a vast array of sizes and shapes of shrubs between these, however. For the sake of discussion, they can be roughly divided into four broad groups based on growth habit: upright-growing shrubs such as 'Ray Hartman' and 'Blue Jeans'; large, rounded shrubs such as 'El Dorado', 'Dark Star' or 'Victoria'; mounding, wide-spreading shrubs such as 'Joan Mirov', 'Joyce Coulter', and

'Kurt Zadnik'; and low, spreading groundcovers such as *gloriosus*, *hearstiorum*, and 'Centennial'. Many of these are scarcely grown in the Pacific Northwest, although they can be found in specialty nurseries. Many of these are also quite large, so it behooves the gardener considering their use to keep this in mind!

To begin with, some of the plants were not very hardy. The freeze in early November 2002 did serious damage to several cultivars, including most forms of *C. griseus* (syn. *C. thyrsiflorus* var. *griseus*). Some of these plants were in fact killed. A striking exception to this was 'Kurt Zadnik', which suffered relatively little damage. *C. hearstiorum* was also heavily damaged, as was *C. 'Snowflurry'*. Both of these partly recovered. Others that suffered lesser damage, and recovered more or less fully included 'Centennial', 'Joan Mirov', and *C. maritimus* 'Popcorn'. Most other plants in this evaluation may have had some damage but recovered well. Those plants which exhibited significant damage in this trial can be grown in the Pacific Northwest, but will require a more protected site.

In looking for *Ceanothus* of diverse size and habit for your garden, there are quite a few that looked very good in this evaluation. Of the upright-growing plants, 'Ray Hartman' was one of the best. It has a vase-shaped habit, and will easily grow to 10 ft tall. It produces light-blue flowers from early April to mid-May. 'Blue Jeans' is an exceptional plant, forming a dense shrub to about 5 ft tall and as wide. The small leaves give it an unusual texture, and the light blue flowers are among the first of any *Ceanothus*, appearing in early March.

Among the large, rounded shrubs, 'Dark Star' and 'Julia Phelps' are both 8 ft × 8 ft shrubs and are very striking with deep blue flowers from late March to late April. If you are looking for a tall, drought-tolerant ground cover, there are several good choices. 'Wheeler Canyon' grows to about 6 ft tall and 10 ft wide, and produces a profusion of blue flowers late April into May. 'Joyce Coulter' is of similar size and bloom time. 'Joan Mirov' grows to 5 ft tall and 12 ft across and produces deep blue flowers throughout May. Finally, 'Kurt Zadnik' is a very large and striking ground-cover, to 6 ft tall and 15 ft across and produces large clusters of deep blue flowers from late April through May.

If these are simply too large, there are smaller options. As mentioned, *C. gloriosus* is readily available and low growing. A really nice, dwarf selection of this species, 'Heart's Desire' grows to only a few inches tall and 4 ft across. Both *C. hearstiorum* and 'Centennial', though a bit tender, are excellent small-scale ground covers (about 1 ft tall and 4 ft across), and look great trailing over a wall. *C. cuneatus* var. *rigidus* 'Snowball' forms a well-shaped bun only 2 ft tall and 4 ft across. Finally, some of the hybrid *Ceanothus* are very adaptable garden plants. The best and showiest of these was *C. ×delileanus* 'Henri Desfossé', which has very striking deep blue flowers, and apparently grows to about 4 ft tall and wide. In our trial, it was grazed enthusiastically by deer, which reduced its size dramatically. Most other *Ceanothus*, by the way, seem pretty resistant to deer.

Cistus and *Halimium* (and the hybrid between them: \times *Halimiocistus*) are Mediterranean in origin, ranging from the Canary Islands through the Mediterranean basin to the Caucasus Mountains. The most familiar and commonly used by far are *C. ×hybridus* and *C. ×purpureus*, both of which form dense, aromatic shrubs (most *Cistus* are distinctly and pleasantly aromatic) to 4 ft tall and perhaps 5 ft wide. Both of these are good plants, although *C. ×purpureus* is a showier plant in bloom, but the foliage quality of *C. ×hybridus* is superior. Actually, in the absence of any

significant cold damage, it was plant form and foliage quality that really separated good selections of these plants from poor ones. Some cultivars which were very showy in bloom, such as 'Victor Reiter', 'Peggy Sammons' (*C. ×argenteus* 'Peggy Sammons'), and *C.* 'Grayswood Pink' (syn. 'Silver Pink'), became very sparse, leggy plants as the trial went on and make poor specimens in the landscape after only 3 years. The following suggestions are all plants which retained excellent form and foliage throughout the evaluation and flowered well.

Many of the *Cistus* have a sort of mounded habit which makes them good, tall groundcovers for sunny sites with dry, poor soil, situations in which they thrive. Several cultivars fit this description. 'Snowfire' grows to 4 ft × 6 ft and has white flowers with a red blotch at the base of each petal over a long period from mid-May through June. *Cistus ×dansereaui* 'Decumbens' is somewhat smaller plant than 'Snowfire', but has similar flowers and flowers later, starting in late May and continuing through early July. *Cistus inflatus* (syn. *C. hirsutus*) and *C. ×laxus* form nicely shaped domes about 4 ft tall and 6 ft wide and have single, un-blotched flowers.

Unlike the many dome-shaped or low-growing *Cistus*, *C. ×aguilarii* has an upright habit. It can easily reach 7 ft tall after 4–5 years and will typically be about 5 ft across. It produces large, pure-white flowers in May. It is often sold as 'Blanche', though this is not correct; 'Blanche' is a cultivar of *C. ladanifer* and a very different plant. Some of the *Halimium* also have an upright habit, and of these *H. ×pauanum* is probably the best for a combination of bloom and foliage. It grows to 6 ft tall and features grey-green foliage and a profusion of unblotched yellow flowers from late May through early July.

For the smaller garden or even for large containers, there are several plants that make good small-scale groundcovers. The best known on these is *C. ×pulverulentus* 'Sunset', which is widely available and forms a mound of grey-green foliage 2 ft tall and 4 ft wide. 'Sunset' begins producing its brilliant magenta flowers in late May and, virtually alone among the *Cistus*, can still be found with a few blooms as late as October. 'Grayswood Pink' is of similar habit to 'Sunset', although it seems to maintain a tighter form and not open up the way 'Sunset' can do. 'Grayswood Pink', as the name suggests, features pink flowers starting in early May. *C. ×florentinus* 'Tramontane' is a recently named prostrate form of *C. ×florentinus*. It makes a dense green shrub 2 ft tall and 5 ft across with white, unblotched flowers from late May to early June. Finally, of the *×Halimiocistus*, probably the best overall is *×Halimiocistus sahuicii*, which forms a dense mat barely 1 ft tall and 4 ft across, with white flowers in May.