A Most Deserving Coral Bell

I believe it is fair to say most gardeners get their passion for gardening from their parents and/or grandparents. I am certainly guilty of this genealogical plight! One plant I remember well from my youth is *Heuchera sanguinea*. Commonly called Coral Bells, the red, bell-shaped flowers always added a touch of drama to the summer garden. At the time, it was the primary selection of Coral Bells available but, similar to the plight of the Daylily and Hosta that has long changed! Today the selection of Coral Bells has grown exponentially, with the focus now on foliage colors, not flowers. Interestingly, this foliage revolution all began with a plant known for its green foliage and a wonderfully long flowering period – *Heuchera villosa* (pictured below in mid-July).

The genus *Heuchera* is a member of the Saxifragaceae or Saxifrage Family and consists of between 37-50 species, all native to North America barring one species native to far Eastern Russia. The plants are typically shallow rooted and rhizomatous with coarse, rounded foliage ranging from 1-2" to upwards of 6" in diameter. The genus was named in 1753 by the Swedish botanist Carl Linnaeus (1707-1778). The name honors a contemporary German botanist and physician, Johann Heinrich von Heucher (1677-1746). Von Heucher was involved with the development of the Wittenburg Botanical Garden in the early 1700's and his botanical pursuits focused mostly on the medicinal use of plants and herbs.

Heuchera villosa was described by the French botanist André Michaux (1746-1802) in his book *Flora Boreali-Americana* published posthumously in 1803. From 1785-1796 Michaux traveled throughout the United States and parts of Canada in search of new and interesting plants, publishing many of his discoveries in this book. *Heuchera villosa* was discovered in the Appalachian Mountains of the Carolinas and the species epithet of *villosa* is from the Latin *villōsa* meaning hairy; it describes how much of the plant is covered with small hairs (as seen along the margins of the foliage at right and on the floral stem below). *Heuchera villosa* is native from Virginia south to northern Georgia, west to Arkansas and Missouri with the greatest concentration in the Appalachian Mountains! The villose or

hairy nature of the plant contributed to its common name of Hairy Alumroot. Alumroot is another common name for *Heuchera* species and refers to how the tannin rich roots and foliage have a bitter taste and were used much like the mineral salts of Alum (Potassium Aluminum Sulphate) as an astringent to stop bleeding. This bitter taste also aids in reducing predation by deer and rabbits.

This plant is one of the largest growing and coarsest species of *Heuchera*, with each leaf having 7-9 lobes and reaching upwards of 6" in diameter! The plant can easily stretch to 2' tall and slightly wider over time and, of course, all parts of the plant are hairy, making the plant rough to the touch. Rising above the foliage, the wispy white flower panicles reach from 18-36" tall with the lower portions of the stems bearing an attractive rust color (as seen at left). The upper 5-9" of the panicles features the floral display!

By definition, a flower panicle consists of a central stem (the peduncle) from which branched flowering structures extend. In the case of Hairy Alumroot, upwards of 30 of these one-inch-long branched structures appear in a radial fashion around this central stem. Each branch displays two to twelve individual flowers or florets (as seen below). The florets are small, measuring roughly ¼" long by ⅛" wide. They begin to appear in late June or early July and continue to appear through October, making this species one of the latest blooming of the Coral Bells.

Interestingly, the white flower color is not produced by the petals but rather the cup-shaped calyx, which consists of 5 sepals covered with glistening white hairs that serve to enhance the white color. The calyx is initially green, with the main body of the 'cup' transitioning to white as it matures, although the tips and base of the calyx retain splashes of green. As the calyx opens, 5 long stamens tipped with reddish-brown anthers are the first to appear, followed by two glossy and rigidly straight white female styles and stigmas. Also appearing are 5 'crinkled' white petals measuring 1-2mm wide by 3-4mm long although, as mentioned they add little impact (all seen in the image at right). Although each floret is small,

with so many blooming simultaneously along the panicle, the effect is quite impactful! The flowers are also admired by native bees and butterflies. As the florets fade and transition to tan, the panicles can be deadheaded or allowed to collapse to the ground, although I do not find them objectionable. Even if the faded floral stems remain, new panicles continue to be produced well into October, yielding a smattering of seedlings that only serve to increase the impact of the display.

Aside from *Heuchera villosa*, few gardeners today buy Alumroot for its flowers but rather for the copper, purple, yellow, red or multicolored foliage. Oddly, it was *Heuchera villosa* that initiated the breeding frenzy for more colorful foliage! At some point in the late 1970's Edgar T. Wherry (1885-1982) collected seed from a purple leafed form of the variety *Heuchera villosa* var. *macrorrhiza*. This variety of *Heuchera* has a slightly larger creeping stem or rhizome and is found in the Western part of the plant's native territory, specifically west of the Appalachian Mountains. Wherry, who originally received a Doctorate in minerology, developed a passion for plants and authored 3 guides on fern identification and taught botany at the University of Pennsylvania from 1930-1955. He is honored with many plants, including *Tiarella wherryi*, the plant by which I best know his name! The seed he collected was sent to the Royal Botanic Gardens at Kew, located adjacent to Kew Palace. As one may have guessed, the seed produced a purple seedling, which was initially discovered in 1980 by Brian Halliwell (1929-2014), the Assistant Curator of the Alpine and Herbaceous Plant Department at Kew. Owing to its color and discovery near Kew Palace, it was called 'Palace Purple' (pictured above) and was awarded the Perennial Plant of the Year in 1991 by the Perennial Plant Association. Although many of the seedlings of 'Palace Purple' have an inferior leaf color, the plant was still instrumental in creating numerous crosses with superior purple foliage and is still available in the trade today.

Of the many named selections of *Heuchera villosa* on the market, I have always had great luck with 'Autumn Bride'. Selected by Richard Simon of Bluemont Nurseries in Monkton MD, the plant and flowers are slightly larger than the species while the foliage is a lighter green, enabling the plant to brighten shady niches. The plants are seed grown, allowing for some variation in leaf color from plant to plant with some displaying an occasional rich, deep red color. Like the species, this selection is great for use as a groundcover

since they happily seed in-between existing plants to create a dense planting. In the image above, the plants were 17 years old when the image was taken and remained as vigorous as when planted! I also discovered they will seed into stone dust of dry-laid bluestone patios, providing the area is shaded and remains moist. Perhaps not the most desirable of traits, I found the flower stems growing through a bench in mid-October (pictured at right) to be a comical conversation starter, although their floral prowess certainly prevents the bench from being used for its intended purpose! Their ability to seed also allows them to take root amongst moss and stones adjacent to water features. As seen in the closing image, the seedlings are thriving on rocks where they never could have been planted!

Aside from 'Palace Purple', another good purple leaf form introduced more recently is *Heuchera villosa* 'Bronze Wave' (pictured at left). Growing to 18" tall with flowers stretching to 30", the thick and glossy bronze foliage is noteworthy for the red undersides of the leaf. Unlike the green foliaged species, this plant needs added protection from hot afternoon sunlight in order to prevent leaf scorch.

The biggest issue with most selections of *Heuchera* is the need for division every several years to keep the plants vigorous. This is not the case with *Heuchera villosa*, which retains good vigor when left untouched. It is superb as a groundcover or blended with other shade lovers like Sedges (*Carex* spp.), or the bold dark green foliage of Christmas fern (*Polystichum acrostichoides*) and Jack-in-the-Pulpit (*Arisaema triphyllum*). In the image at right, the selection 'Autumn Bride' is paired with Low Woodland Sedge (*Carex socialis*), creating an attractive and low maintenance combination. Hardy in zones 4-9, the plants are able to cope with hot humid summers and are best planted in dappled shade or morning sun. The green forms are more tolerant of full sun, especially in northern regions providing the soil is rich in organic matter and does not dry out

excessively. Preferring a pH between 6 and 7, little to no spring clean-up is necessary since the new foliage simply extends up and over the semi-evergreen leaves remaining from the year past.

Coral Bells have certainly seen dramatic changes since my youth and *Heuchera villosa* should not be overlooked simply due to its green foliage! I was introduced to *Heuchera villosa* during the 1990's and its popularity continues due to its ease of culture and the prolonged display of white blossoms from summer to fall! A great plant for enduring hot, humid summers of the south and the cold of the north, this green foliaged Alumroot remains a most deserving garden plant!

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