## A Much Needed 'Weed' For Your Garden

Every gardener has a palette of 'go-to' plants that may provide attractive foliage, a long floral display, fragrance, food for pollinators or perhaps all of the above! I have long admired Joe-Pye Weed, initially classified as *Eupatorium*, for all of these traits and above all, its impressive stature! Unfortunately, a frustrating challenge that gardeners face is maintaining pace with the ever changing botanical names of plants, since Joe-Pye Weed is now reclassified under the genus of *Eutrochium*. Increasing the confusion is that many other species remain under the genus *Eupatorium*! Fortunately, the impressive list of Garden benefits provided by Joe-Pye Weed makes the challenge of adapting to a new name worthwhile!

Joe-Pye Weed is a member of the Asteraceae or Aster Family and it was initially named *Eupatorium* by Carl Linnaeus (1707-1778) in 1753. Oddly, this very attractive group of plants was initially named after a rather ruthless and aggressive King. Mithridates VI (132BC-63BC) ruled Pontus (now Northern Turkey) and was known as Eupator Mithridates. Eupator means 'Of Noble Father' and it is written that he executed over 80,000 Romans in portions of Asia alone! Mithridites would take sub-lethal doses of poison in order for his body to develop resistance to the poison, a practice that became known as Mithridatism. *Eupatorium* – and now *Eutrochium* – species typically contain many semi-toxic chemicals; hence Linnaeus crafted the name in honor

of Eupator Mithridates! The name *Eutrochium* was penned by Constantine Samuel Rafinesque Schmaltz (1783-1840), who was born near Constantinople and was self-educated in France before traveling to the US in 1815. He ultimately settled in Ohio and wrote at length on the topics of zoology, botany,



geology and linguistics! In fact, he was the first person to theorize that the Native North American Indians had in fact traveled to North America via the ice bridge of the Bering Sea, connecting Asia to North America! He authored the genus name *Eutrochium* in 1838, from the Greek *Eu* meaning well or truly and *Troche* for wheel in reference to the whorled or wheel-like appearance of the foliage (as seen above in the meadow planting of *Eutrochium fistulosum*). The arrangement of the leaves is actually one of the reasons for the name change; those plants with

opposite leaves retained the name *Eupatorium*, while those with whorled leaves received the new name.

The common name of Joe-Pye Weed has several different stories concerning its origin. The most likely version focuses around a Mohegan sachem or chief who lived in Western Massachusetts during the mid-Eighteenth Century. He was originally named Shauquethqueat, and took the Christian name of Joe Pye. He was well versed in the uses of herbal remedies and believed that a tea of Sweet-scented Joe-Pye Weed, *Eutrochium purpureum*, would reduce fevers. Joe Pye was also very open to working with and developing friendly relations with the European settlers.

Eutrochium purpureum also happens to be one of the more popular species for the Garden. It is native to the Eastern half of North America and is common to moist swales and meadows. Growing to 4-8' foot tall, this species sports attractive purple stems that inspired the species epithet by Linnaeus. A whorl of 3-4 leaves growing up to 12" long appear at each node along the length of the stem. In Late July through early September, the stems are topped by 8-12" domes of vanilla scented pink flowers that are highly ornamental and much coveted by butterflies and other pollinators. Its tall height makes it ideal for use in tall grass meadows or near the back of the border.

Reaching a similar stature and also native to Eastern North America is *Eutrochium fistulosum* or Hollow Joe-Pye Weed. The species epithet means 'hollow and closed at both ends', a reference to the hollow green stems, which the common name also references. The large, dark green leaves reach 12" in length and are arranged in whorls of 4-7 at each node along the stem. This plant sports light pink flowers that are arranged into large, dome-shaped compound inflorescences that can reach upwards of 15" in diameter! As the flowers fade come autumn, the inflorescences often take on an attractive, ghostly pale tan appearance.

For those in need of a more compact plant, *Eutrochium maculatum* and its cultivars reach a relatively modest 5-6+' in height. It is native to the northern half of North America. The species epithet *maculatum* comes from the Latin *macula* for spot and refers to the spotted stems, a physical trait that is also reflected in the common name of Spotted Joe-Pye Weed. Although the species is not seen frequently in garden settings, the two cultivars 'Gateway' and



'Phantom' have become increasingly popular. 'Gateway' (as seen above with an Eastern Tiger

Swallowtail) is the larger of the two, growing to just over 6' in height and displaying large 12" diameter, pink floral trusses from late July through mid-September. 'Phantom' (picture in mass on the right at Chicago Botanic Garden in late August with Feather Reed Grass and Russian Sage) also produces 12" diameter trusses with purple-pink flowers on more compact stems reaching 4 ½' in height. In addition, 'Phantom' also has better resistance to outbreaks of powdery mildew on the foliage.



The shortest species is *Eutrochium dubium*, the Coastal Plain Joe-Pye Weed. As the common name implies, it is native to the Eastern Coast of North America, stretching from Maine to South Carolina. The species epithet was penned by the German botanist, pharmacist and plant taxonomist, Carl Ludwig von Wildenow (1765-1812). It is from the Latin meaning doubtful, indicating that it is unlike all the others in the genus. Most certainly, it is unlike all the other species since it grows to a far more subdued height of 3-5'! It is a more appropriate size for most home garden situations, although it can reach to 6' if conditions are ideal. The 6" long leaves



feature 3 strongly impressed veins that are arranged in whorls of 3-4 at each node. This species features two cultivars that have proven to be very garden worthy: 'Little Joe' and 'Baby Joe'. 'Little Joe' (inflorescence pictured on the left) was found in a batch of seedlings at the Conard-Pyle Nursery in Pennsylvania and was patented in 2005. It differs from the typical seedling plant by having a more upright and compact habit, only reaching 3-4' in height. The light

lavender trusses grow to 5" in diameter and the plants display improved tolerance to drought. 'Baby Joe' was a found in a batch of seedlings in a greenhouse in the town of Rijpwetering, the Netherlands in September of 2003. Being a 'Baby', it is the shortest growing form, reaching the subdued height of 2-3' with attractive 6" diameter trusses of light purple flowers. For both of these cultivars, I have noticed that they initially reach slightly taller heights during the first few years following planting, only to 'settle down' to the sizes mentioned with maturity.

For the Garden, all of the species make ideal candidates for perennial borders, mixed borders or meadow-like displays. Other than cutting the dried stems back to near the base of the plant in mid to late winter, they require minimal maintenance and all are long lived. Considering that the



plant is in the same family as Asters and Black-eyed Susan, one would think that the lack of the showy outer ring of ray flowers or 'petals' would create a less than spectacular floral display. However, the sheer number of tiny disc flowers that compose the domed inflorescences more than compensates for a garden-worthy display. I have seen

'Little Joe' effectively paired with *Hydrangea paniculata* 'Limelight' (as pictured above); the similarity of and repetition of the flower shape between the two plants is very attractive. In addition, come autumn, the dark brown seed heads of 'Little Joe' look attractive adjacent to the now pink flowers of the Hydrangea. In the wild, I have often seen Joe-Pye paired with the

equally tall New York Iron Weed, *Vernonia noveboracensis*. The combination of the purple flowers of the *Vernonia* (as seen at right) with the pink of *Eutrochium* is very becoming and well worth repeating in the garden! All the species are highly sought after by our native pollinators, especially the Eastern Tiger Swallowtail Butterfly, which flirts and dances about the flowers throughout its bloom period! Come autumn, the flowers typically turn to an attractive light tan to chocolate brown in color and continue to provide interest for the garden well into winter.



Plants that are titled as a weed, especially when it is part of the common name, are typically challenged to find acceptance among the gardening world. All the species of *Eutrochium* are

more than worthy garden candidates with a height and size for every garden. In fact, in order for these plants to not only be more visually effective, but to also magnify their benefit for our native pollinators, this is one weed that should be used generously, regardless of your garden size!

Bruce Crawford Director, Rutgers Gardens