Joe-Pye Weed

Joe-Pye weeds (*Eutrochium* spp.) are early fall blooming wildflowers that colonize roadside ditches in sunny, moist sites. These native perennial plants grow to 4 - 6 feet tall and bloom along with goldenrods (*Solidago* spp.), ironweeds (*Veronica fasciculata*), and our native grasses to make a beautiful autumn display. The flowers are mildly fragrant and very attractive to butterflies and other beneficial insects.

Joe-Pye weed (*Eutrochium purpureum* var. *purpureum*) in full bloom growing in a roadside ditch in late August.
Joey Williamson, ©2017 HGIC, Clemson Extension

Joe-Pye weed was originally classified in the genus *Eupatorium* but was recently (2000) placed into the genus *Eutrochium*. Five species of *Eutrochium* naturally occur in the Southeast, and all are referred to as Joe-Pye weeds:

- *E. dubium* – Three nerved Joe-Pye weed. (common in the lower portion of SC and uncommon in the Upstate),
- *E. fistulosum* – Hollow stem Joe-Pye weed (common in the Upstate of SC, but uncommon in the lower half of the state),
- *E. maculatum* var. *maculatum* Spotted Joe-Pye weed (does not naturally occur in SC),
- *E. purpureum* var. *carolinianum* – Carolina Joe-Pye weed (occurs rarely in the Upstate of SC),
- *E. purpureum* var. *purpureum* – Purple node Joe-Pye weed (common in the Upstate of South Carolina, but uncommon in the lower half of the state),
- *E. steelei* – Appalachian Joe-Pye weed (does not naturally occur in SC).

Although not all *Eutrochium* species are naturally found in South Carolina, all of these species should grow well over the majority of the state, and improved cultivars of the first four species listed are also found in the nursery trade. Joe-Pye weeds are cold hardy plants and grow well in USDA Zones 4 to 8.

Joe-Pye weed (*Eutrochium purpureum* var. *purpureum*) flowers are fragrant and attract many pollinating insects, especially butterflies.
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Cultivars

There are a number of cultivars of the various *Eutrochium* species, where many are shorter than the original species, have better powdery mildew resistance on the foliage, and have better flower production. Approximately 13 cultivars of *E. dubium*, *E. maculatum*, and *E. fistulosum* are currently on the market. The six cultivars below were rated highest\(^1\) for best green leaf color, stem color (often purple), superior flower production and color, powdery mildew resistance, winter hardiness, and attractive growth habit (such as, compactness and stiffer upright form).

- *E. dubium* ‘Baby Joe’ PP#20,320; plant trial size: 60 x 54”; good powdery mildew resistance; excellent flower production & light purple flower color.
- *E. dubium* ‘Little Joe’ PP#16,122; plant trial size: 60 x 36”; excellent powdery mildew resistance; excellent flower production & purple flower color.
- *E. fistulosum* ‘Carin’; plant trial size: 80 x 42”; good powdery mildew resistance; excellent flower production & pale pink flowers.
- *E. fistulosum* ‘Bartered Bride’; plant trial size: 90 x 43”; good powdery mildew resistance; excellent flower production & white flowers.
- *E. maculatum* ‘Phantom’; plant trial size: 54 x 64”; good powdery mildew resistance; excellent flower production & purplish-pink flowers.
- *E. maculatum* ‘Purple Bush’; plant size: 64 x 50”; good powdery mildew resistance; excellent flower production & purple flowers.

The ultimate height of these cultivars is directly influenced by the amount of sunlight received, how consistent the soil moisture is, and the degree of soil fertility. For example, in a trial study ‘Baby Joe’ Joe-Pye weed grew to 5 feet tall, but nursery descriptions of this cultivar’s height are often listed as 3 – 5 feet, 3 – 4 feet, or as low as 2 – 3 feet tall. The same is true for the other cultivars. However, if a Joe-Pye weed species or cultivar grows too large for a specific landscape plan, the stems can be cut halfway down by mid-June. The plant will then re-sprout and be shorter, but more full and with more flower heads.

Landscape Use

Joe-Pye weeds need a soil that is consistently moist the first year for establishment and that contains at least some organic matter. They can tolerate more drought in subsequent years, but do thrive in drainage ditches that are more moist than the typical surrounding soils. Joe-Pye weeds are generally tall plants and most effectively are planted toward the rear of landscape gardens. They combine well with ironweed (*Vernonia fasciculata*), which is also equally tall and with dark purple flowers; goldenrods (*Solidago* spp.), with golden yellow blooms; and native asters (*Aster novae-angliae* and *A. laevis*), with lavender petals and yellow centers.

Propagation

Seed: Joe-Pye seed heads can be collected in late September. Cut a seed head, place it upside down in a large, brown paper bag, and hang the bag in a well-ventilated room for the seeds to finish maturing and drop into the bag. The seeds can be planted directly in the soil during the fall, or they can be stored in a sealed bag or jar in the refrigerator until sown. If planted in the fall, young plants will appear in the spring. Keep seedbed moist for both germination and growth of seedlings, which will flower the second season.

Division: Mature plants are best divided in the fall after they go dormant. Each plant will have numerous stems arising from a wide crown with a fibrous root system. To divide the crown, place a sharp shovel between the stems and force it downward to cut, and then separate pieces of stems along with their portion of the crown and roots. Replant the separated piece at the same depth as it was originally, and then mulch and water to settle the soil.

Problems

Joe-Pye weeds are relatively free of disease or insect pest problems, except for powdery mildew on the foliage. This is especially more of a problem on the straight species, i.e., when it is not an improved cultivar. Powdery mildew reduces the photosynthetic ability of the foliage (i.e., the ability to manufacture carbohydrates), as well as causes the leaves to desiccate (i.e., to dry up and die). Several fungicides will control powdery mildew on Joe-Pye weed, as well as on other perennials. For examples of both cultural controls that reduce disease incidence and fungicides with specific products, please see [HGIC 2049, Powdery Mildew](https://www.cooperativeextension.purdue.edu/PDFs/4 H/2049H.pdf).
Powdery mildew (the grayish-white fungal coating on the foliage) is a common problem on many Joe-Pye weeds, such as on this roadside *Eutrochium purpureum* var. *purpureum*. Joey Williamson, ©2017 HGIC, Clemson Extension

References:


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