



CULTIVATION NOTES

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Joe-Pye Weed

Eupatorium spp.

A Rhode Island Native Plant

by Jean Haley

Family ASTERACEAE

Joe-Pye Weed is a majestic, Rhode Island native that lends brilliant splashes of color to moist meadows and thickets from midsummer into the early fall. Colonies of Joe-Pye Weed present an eye-catching architecture and a showy display of color: whorls of large, handsome, lance-shaped leaves are spaced alternately along the sturdy, purplish stems, which are topped by huge, softly domed, branching clusters of small flower heads in hues that have been described as "dusky rose," "amethyst," and "crushed raspberry." The flower heads consist of groups of tiny tubular disk flowers typical of the Aster family. Long, purple-tipped, branched styles protruding from the centers of the densely packed flowers lend a soft, pale-purple haziness to the mature flower clusters. The purplish nodes and purple speckling of the stems harmonize with the flower hues.

Joe-Pye Weed has been used enthusiastically by European gardeners for a long time, but it is just beginning to be valued horticulturally here on its native ground. At least one named cultivar is now commonly available. Placed at the back of a sunny perennial border, or in a naturalized meadow garden, Joe-Pye Weed makes a striking end-of-the-summer show, particularly in combination with other late-blooming natives such as goldenrod, the weed, and aster. It attracts butterflies, and it has a sufficiently imposing presence to stand up to all ornamental grasses, for which it provides interesting architectural and color contrasts. Joe-Pye Weed also makes a stunning cut flower or seedhead for fresh or dry arrangements.

Four species of *Eupatorium* go by the common name Joe-Pye Weed. Eastern or Three-nerved Joe-Pye Weed, *Eupatorium dubium* (Mild.), is the most common native Rhode Island species, flowering from early August to late September in open moist areas. This 3-7 foot native has purple flower clusters, with coarsely serrated, strongly three-veined leaves in whorls of three or four. Trumpetweed or Hollow-stemmed Joe-Pye Weed, *Eupatorium fistulosum* Barratt, is also fairly common in Rhode Island; it has hollow stems with a whitish "bloom" and only one main vein on the leaves. Spotted Joe-Pye Weed (*Eupatorium maculatum* L.) and Sweet Joe-Pye Weed (*Eupatorium purpureum* L.) are common in calcareous soils in other areas of New England and into the midwest and south, but are rarely recorded here in Rhode Island.

Both the common and Latin names for Joe-Pye Weed come from its history of medicinal usage. Joe Pye, or Jopi, may have been a Native American or a colonialist "yarb man" who instructed in herbalism, including the use of *Eupatorium* species as treatments for coughs, colds, fevers, and typhus. Another early common name, Gravelroot, indicated its use for kidney infections and stones. But the *Eupatorium* genus, comprising perhaps 1,000 species, takes its name from much more ancient medicinal connections. Mithridates Eupator, king of a first century B.C. realm neighboring Rome, intensively investigated the medicinal uses of many plants, presumably including *Eupatorium* species; his physician has been credited with many botanical illustrations that served as sources for Dioscorides' *De Materia Medica*, a pharmaceutical compilation that was central to the Western medical tradition for over 1600 years.

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Eupatorium spp.

Joe-Pye Weed

Perennial. Purple or pink-purple tubular disk flowers (2-3mm), in small cylindrical heads of 4-20 flowers; terminal branching clusters of flower heads, 3-18" across; blooming July or August to September. Tall, robust, 4-7' or higher, depending on species or variety and cultivation conditions; best in sunny, moist areas. Leaves lanceolate, large, to 10" long and 4" wide, depending on species; toothed margins, prominent veins beneath, attached in whorls of 3-7. Stems more or less prominently purple spotted, may have purple nodes.

Cultivation: The most common Rhode Island native Joe-Pye Weed, *E. dubium* L., and the commonly available cultivar, *E. maculatum* 'Gateway,' do best in open, sunny areas with the plentiful moisture that approximates their native habitats. With full sun and sufficient moisture in average soil, these Joe-Pye Weeds should grow to 5 feet or more. Appropriate locations are the back of the sunny perennial border, where they should be planted three feet apart, or any naturalized, open, moist area. Although a newly planted Joe-Pye Weed should not be allowed to dry out during its first season, it will tolerate somewhat drier conditions later on. However, it should be watered during periods of extended drought. Over successive seasons of growth in the same location, colonies will form, as new stems grow from a large crown with a massive, fibrous root system. The crown should be divided every three years or so to reduce crowding and maintain robust, erect plants.

Propagation from seed: Seeds collected from the native species may be sown directly outdoors in the fall as soon as they are ripe. Seeds are held within small, black nutlets that mature in mid- to late-September and remain attached to the seed head until early October. Only a small proportion of the nutlets have viable seed; these are plump and swollen rather than small and shriveled. Place the entire seed head into a paper bag and shake to loosen mature nutlets. Plant thickly in an outdoor seed bed (5/8" deep). Refrigerate unused seeds in a dry, sealed container. Seeds germinate in the spring, with flowers in the second year. The seedlings are undemanding, although they grow more vigorously if kept evenly moist.

Propagation from divisions: Native plants or cultivars may be divided in the fall as they go dormant, or, more commonly, in the early spring as the first shoots appear at the crown. Use a sharp shovel or spade to cut through the crown and fibrous root mass between two stem buds, removing a section of the crown that has at least one intact bud and a cluster of roots. Replant the new division immediately and keep it well watered until it is established.

RIWPS Policy: Never dig plants in the wild without written permission of the landowner. Take seeds sparingly.

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