



By Paul Pilon

Calamagrostis x acutiflora 'Eldorado'

Valued for its golden variegation, erect upright form and tidy clumps, this feather reed grass is easy to grow and boasts strong landscape performance.

Ornamental grasses continue their popularity as reliable, long-lived landscape perennials. Prior to calamagrostis 'Karl Foerster' being selected as the Perennial Plant of the Year in 2001 by the Perennial Plant Association, calamagrostis was highly acclaimed as a versatile, attractive and low-maintenance ornamental grass. 'Eldorado' is a variegated sport of the very popular 'Karl Foerster' and was discovered by Todd and Lisa Kowitz of Garden Gate Growers in Kettle Falls, Wash.

Calamagrostis 'Eldorado' has unique gold variegation; its green leaves have delightfully golden-yellow midribs with stems that maintain a honey hue. It forms attractive upright clumps reaching up to 6 feet tall when in bloom. The inflorescences appear in the late spring to early summer and develop tan wheat-like seed heads, which last the entire season and throughout the winter months.

Calamagrostis is a popular clump-forming cool-season ornamental grass that performs well in sunny locations across USDA Hardiness Zones 4 to 8. Feather reed grass is commonly used as a backdrop in perennial beds or can be utilized in borders or mass plantings. 'Eldorado' is highly valued for such ornamental characteristics as its golden variegation, erect upright form, tidy clumps, and winter interests. Additionally, feather reed grass is easy to grow, resistant to deer feeding, can tolerate salts and can be grown in dry soils. With these attributes and its strong landscape performance, calamagrostis 'Eldorado' is a "must have" for any ornamental grass program.

Propagation

Calamagrostis is vegetatively propagated by division in the fall or spring. 'Eldorado' is a patented plant; therefore unauthorized propagation of this cultivar is strictly prohibited.

Production

Most growers produce calamagrostis 'Eldorado' in 1-gallon or larger sized containers using large liners (32-cell or larger) obtained from a licensed propagator. Feather reed grass performs well in a wide range of growing mixes; it is recommended to use a medium with both adequate drainage and water holding capacity. While transplanting, avoid planting the liners too deeply or too shallow; always plant to match the original soil line of the liner with the growing mix of the final container. Since calamagrostis blooms in the late spring, it is often best to transplant the liners in the late summer the year before they are to be sold; larger container sizes should be potted even earlier to allow sufficient time for bulking.

It is important to keep the root zone of newly potted grasses moist, but not wet, until they become established. Once they are fully rooted, calamagrostis can be allowed to dry out slightly more between irrigations. Established containers require average amounts of irrigation; when irrigation is required, water them thoroughly and allow the substrate to dry slightly between waterings.

'Eldorado' requires moderate amounts of fertilizer during production. Controlled-release fertilizers can be used to deliver nutrients using low to medium label rates; typically incorporating with rates delivering 1.0 to 1.25 pounds of elemental nitrogen per yard of growing medium. Fertility can also be delivered using water-soluble fertilizers; feeding at rates of 75- to 150-ppm nitrogen with each irrigation or 200- to 300-ppm nitrogen as needed. The pH of the growing



Photo by Mark Babikow, owner of Emerald Coast Growers

medium should be maintained within the range of 5.8 to 6.4 during production.

Keep in mind that calamagrostis is a cool-season grass and should NOT be grown with high-temperature regimes, particularly during plant establishment or when they are being bulked up. For plant establishment, it is recommended to maintain average temperatures of 65 to 75° F. Feather reed grass performs best when they are grown under high light intensities with a minimum of 5,000 foot-candles. Plants grown under low light levels tend to become floppy and have lower quality characteristics.

Growers often express the need to reduce the plant height of ornamental grasses when they are grown in containers, particularly if they intend to ship them. The height of calamagrostis can be maintained

by routinely trimming them back during production; this reduces plant height and promotes more shoots to develop from the crown of the plant. It is important to remove no more than one-third of the existing foliage at any given time while

trimming or the crop may become stunted or reflush unsatisfactorily.

Spray applications of plant growth regulators on grasses are rather ineffective as the active ingredient has difficulty getting good contact with the



Photo: Hoffman Nursery



Upright clumps reach up to 6 feet tall. (Photo: Skagit Gardens)

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Green leaves have delightfully golden-yellow midribs. (Photo: Hoffman Nursery)



Photo: Skagit Gardens

stems, which are covered by the leaf sheath. Plant height can effectively be controlled using drench applications. I recommend beginning with the following rates for each of the effective products are: 10-ppm flurprimidol, 10-ppm paclobutrazol and 1-ppm uniconazole. Since there has only been limited research using PGRs on grasses, it is best to conduct small trials before making wholesale applications over the entire crop. Drenches should be applied by the time the plants are 6 to 12 inches tall. Later applications seem to be less effective and will not provide the desired results.

Pests and Diseases

Insect or disease problems are generally a rare occurrence when growing calamagrostis. Insects including aphids, cereal leaf beetles and spider mites may occasionally be observed feeding on them

but rarely become problematic. Rust, Phyllachora tar spot and crown root rots are the most common diseases growers observe. Insects and diseases can be detected with routine crop monitoring; control strategies may not be necessary unless the scouting activities indicate actions should be taken.

Forcing


Most producers of ornamental grasses do not market them as flowering plants. In fact, unless they are produced and sold on site, it is often very expensive to ship tall grasses with flower spikes to retail sites. With its golden variegation, calamagrostis 'Eldorado' can be easily marketed as a foliage perennial.

As mentioned above, it is generally best to transplant liners the year before they are needed for sales. The amount of time necessary for bulking depends on the final container size; 2-gallon pots will require more time for bulking than 1-gallon containers. Calamagrostis does have an obligate cold requirement for flowering. Growers wishing to produce flowering 'Eldorado' should provide a minimum of 12 weeks of temperatures less than 40° F.

After the containers are overwintered, they can be easily flushed to a marketable size inside heated or unheated structures. When maintaining 60 to 65° F throughout crop production, 1-gallon pots of non-flowering calamagrostis can be produced in approximately six weeks. It takes slightly longer to fill out the container when planting large liners in the spring. Growers should note that the plants may flower before the container appears 'full' when they are spring planted using vernalized liners. Calamagrostis are obligate

long day plants and will not flower while they are grown under short days. When forcing vernalized materials, it takes approximately nine to 10 weeks to flower when they are grown at 60 to 65° F.

Availability

Calamagrostis 'Eldorado' is widely available from a number of licensed propagators including Emerald Coast Growers (www.ecgrowers.com), Hoffman Nursery (www.hoffmannursery.com) and Skagit Gardens (www.skagitgardens.com). 

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