Ornamental Grasses & Grass-like Plants

Ornamental grasses and grass-like plants are valued in home landscapes for their hardiness, ease of care, dramatic appearance, and the wide variety of colors, textures, and sizes available.

Most ornamental grasses planted in the South are classified as cool or warm season plants. Cool season grasses begin new growth in fall or winter and bloom in spring or early summer. They will go dormant or decline in appearance during the summer heat. Most ornamental grasses for the South are warm season growers. They grow rapidly during spring and summer, bloom in late summer or fall, and are dormant through the winter.

**Height**
Ornamental grasses vary in height from those that reach-up to 15 feet tall to lower growing grasses that are used as ground covers. Grass forms vary from low mounds to fountains and tall verticals.

**Ornamental Features**
The flower heads of many grasses are very showy. Flowers vary in size, color, and texture. Flowers and seed heads last for weeks or months, and many varieties provide interest throughout the winter.

Foliage provides additional interest with a range of fine to coarse textured leaf blades, softly arching or upright forms, and deep green, blue, red or purple, yellow, or variegated leaf colors. Many grasses have good fall color, changing to golden yellow, orange, red, or purple before fading to tan or straw hues in the winter.

Grasses also give interest to the garden in ways that few other plants can. They sway easily in the wind, adding the appeal of movements and rustling sounds to the landscape. Their rapid growth and changing appearance throughout the year add seasonal interest.

**Types of Grasses**
Ornamental grasses refers to both true grasses and plants that have a grass-like appearance, such as sedges, that are used for similar purposes in gardens.

Most ornamental grasses are perennials, living for two or more years. Annual grasses live for only one growing season because of their natural growth habit or they are not hardy in our climate.

Grasses have growth habits that are either clumping or spreading. Spreading grasses expand rapidly by aboveground or underground stems. Care must be taken in planting spreading grasses as they may as they may overtake desirable plantings. Clumping or bunch grasses grow in a clump that gradually increase in diameter.
**Landscape Use**

Because grasses are such a varied group, they can be incorporated for many different landscape purposes. Grasses with a striking growth habit, foliage color, or flowers can be used as accent plants. They may be substituted in place of smaller shrubs, in perennial borders, and used in container plantings. In mass, some grasses can stabilize hillside soils for erosion control.

**Growing Conditions**

Grasses are a large group, with varying needs, but nearly all share some growing preferences. Most ornamental grasses must have well-drained soil and full sun. Well-established sun loving grasses are drought tolerant. Planting them in raised beds will help to ensure good drainage. Ordinary garden soil is adequate for most grasses. Some grass-like sedges and rushes will thrive in moist or even wet soil.

A small number of grasses and grass-like plants will grow in part to full shade. A few examples of shade tolerant grasses are northern sea oat grass, Japanese forest grass, and sedges.

**Planting**

While many perennials prefer fall planting in South Carolina, the warm season ornamental grasses will do best if planted in spring. Cool season grasses can be planted in fall. Plant grasses as far apart as they will grow in height at maturity.

Ornamental grasses are usually available grown in containers. If plants are pot-bound, loosen the roots around the bottom and sides of the root ball. Soil preparation depends on the type of grass. Many grasses will not thrive well in amended soils, while others will grow with additions. It is important to know what each type of grass requires in order to plant it properly. Spread the roots out and refill the planting hole, firming the soil in around the plants roots to avoid air pockets. Be sure the crown of the plant (the point where roots and top join) is even with the soil surface. A good rule is to keep the soil level the same as it was in the container.

Water plants thoroughly after planting to settle the soil around the roots. Pay close attention to watering the first few weeks after planting. While many mature grasses are drought tolerant, they must have a well-established root system to withstand dry periods.

For more information, refer to [HGIC 1052, Planting Shrubs Correctly](https://www.bhg.com/gardening/plants/planting-strategies/hortic-gardening/hortic-care-plants-hgic1052/).  

**Maintenance**

**Watering:** Once established, moisture needs vary by grass species, soil type, temperature, and other factors. Most ornamental grasses will grow best with at least 1 inch of water per week from rain or irrigation. Drip irrigation is an excellent way to water grasses. It saves water by applying it directly to the roots and reduces the chance of foliar diseases.

**Fertilization:** Most ornamental grasses need very little fertilizer. It is best to base any fertilizer applications on the results of a soil test. Excessive nitrogen in the soil can lead to disease susceptibility, overly vigorous growth, and weak stems that will cause the grass to fall over.

**Cutting Back:** Cut back grasses before the new season’s growth starts. Since many grasses are attractive in the garden during winter, cutting them back is usually done in late winter or early spring. Cut stems to a few inches above ground level for best appearance. There are a number of ways to cut back grasses. They may be cut back by hand with pruners or hedge shears, electric hedge shears, or a weed eater with a brush-cutting blade.

Some evergreen grasses, such as sedges (*Carex*) or sweet flag (*Acorus*) do not recover quickly from being cut back. Comb the foliage of these plants with gloved hands in spring to remove old leaves.

**Dividing:** Most grasses should be divided every 3 to 4 years. If ornamental grasses are not divided, they will eventually become thin or die out in the center. It is best to divide grasses while they are a manageable size. Overgrown grasses can be incredibly difficult to dig and divide.

Dig and divide warm season grasses during early spring, just before new growth starts. Divide cool season grasses in early fall.

Most grasses have tough, vigorous root systems and may have to be divided with a shovel, saw, or ax. Hose off soil to make the roots easier to work with,
then separate and replant the vigorous growth on the outer edges of the clump. Replant promptly and never let the roots dry out. For more information, refer to HGIC 1150, Dividing Perennials.

**Problems**

Ornamental grasses have few insect or disease problems. Rust occasionally attacks some cool season grasses, but most plants recover quickly after being cut back. Anthracnose is occasionally a problem. Diseases are most common on plants in improper growing conditions, with low light, poor air circulation, or excessive fertilization.

A few grasses, such as running or prolific seeding non-native grasses, can become pests if planted in the wrong location. To prevent running grasses from getting out of control, confine the root system in a deep bottomless container. Non-native grasses that seed vigorously should be used with care, especially near natural or wetland areas.

**Species & Cultivars of Ornamental Grasses**

**Big Bluestem** (*Andropogon gerardii*): This tall native grass grows from 3 to 8 feet tall in a narrow clump. The leaves are blue-green in summer and turn a rust color in fall. It needs full sun and prefers moist to average soil but is very drought tolerant once established.

- 'Lord Snowden' is a clump-forming 4 to 8 feet tall grass with large, powder blue foliage. It grows best in full sun and is drought tolerant. The summer blooms are in shades of orange, red, and tan. USDA Zones: 4 to 10
- 'Red October' has narrow deep green leaves with red streaks. In the fall, the red hue changes to burgundy, and after the first frost, the foliage turns candy-apple red. When in bloom, it reaches a height of 5 to 6 feet. USDA Zones: 3 to 9

**Side Oats Gramma** (*Bouteloua curtipendula*): Side Oats Gramma is a beautiful native grass that will grow in sandy to clay soils in sun and is drought tolerant. The green foliage has a mounding growth habit and will reach a height of 2 to 3 feet. The long bloom stalks have purple to red tinged spikelets. USDA Zones: 4 to 9

**Blue Gamma** (*Bouteloua gracilis*): This native grass is also commonly called mosquito grass, as the seed heads resemble mosquito larvae. The flowers float above the green foliage. This low growing grass will mature at ½ to 1 foot in height. It grows in full sun and is drought tolerant. USDA Zones: 3 to 9

- 'Blonde Ambition' (PP22048) has blue-green foliage and matures to a height of 1 foot. The 2½ to 3 foot tall horizontal seed heads will first be chartreuse and turn to blonde as they age. USDA Zones: 4 to 9

**Feather Reed Grass** (*Calamagrostis x acutiflora*): This cool season clump forming evergreen grass grows best in the upper Piedmont. It is a narrow, upright grass that reaches 2 to 4 feet tall with slim,
tall flower heads in spring that turn golden tan in summer. These grasses will grow best in sun and is drought tolerant.

- 'Avalanche' is easily grown in medium to wet soils in full sun and will grow between 3 to 5 feet tall. It has green and white variegated foliage. USDA Zones: 4 to 8
- 'Karl Foerster' has a strong upright growth habit. It grows 3 to 5 feet tall and prefers rich, consistently moist soils. USDA Zones: 4 to 7
- 'Overdam' has white striped foliage turning pink in cool weather. This variety will grow 2½ to 3 feet tall and must have part shade and moist soil. USDA Zones: 5 to 7

Korean Feather Reed Grass (*Calamagrostis brachytricha*): The arching dark leaves form a broad, mounded clump 3 to 4 feet tall that are covered by tall pink plumes in fall. This species tolerates hot summers better than *C. acutiflora*. It will grow best in the South in light or part shade, and moist well-drained soil. USDA Zones: 4 to 9

Upland River Oats (*Chasmanthium latifolium*): This native grass thrives in shade. In the fall, it bears oval flowers that dangle from 3 to 4 foot tall curving stems that are prized for dried flower arrangements. It can grow in sun to shade and prefers moist, rich soil, but tolerates drought once it is established. As it self-seeds abundantly, plant it in an appropriate area. This species is sometimes called northern sea oats. USDA Zones: 5 to 10

Japanese Forest Grass (*Hakonechola macra*): A shade loving, deciduous (i.e., loses its leaves in the winter) perennial grass that forms dense, cascading mounds. It grows best in humus rich, well-drained soils in part shade with medium moisture. Depending on the variety, the height ranges from 1 to 1½ feet. USDA Zones: 5-9

- 'Aureola' has green leaves with golden yellow striping. It grows 15 inches tall.
- 'Fubuki' is similar to 'Aureola' but has green and white variegated foliage. It will reach a height of 14 inches.

Muhly Grass or Hairgrass (*Muhlenbergia capillaris*): This showy native grass has clouds of tiny flowers that form a pinkish-purple or white haze appearing in October and fading to tan through the winter. Clumps of very fine, blue-green to gray-green foliage rise to 2 to 3 feet tall. It is best planted in full sun, and once it is established, becomes extremely drought tolerant. USDA Zones: 6 to 9
• 'White Cloud' is a cultivar of the native *Muhlenbergia*. The airy seed heads are bright white to ivory and blooms shortly after the native Pink Muhly.

**Bamboo Muhly (Muhlenbergia dumosa):** This ornamental grass has arching bamboo-like stems with billowy light green foliage and grows 5 to 6 feet tall. Bamboo muhly is an excellent non-invasive substitute for bamboo. It grows best in full sun and is drought resistant once established. USDA Zones: 7 to 10

**Mexican Feather Grass (Nessella tenuissima):** The exceptionally fine textured evergreen leaves of this grass will grow in a weeping mound. The delicate flower spikes appear in summer. Mexican Feather Grass prefers sun and dry soil; therefore, avoid excessive water once established. USDA Zones: 5 to 10

**Switchgrass (Panicum virgatum):** This beautiful native grass has many varieties with showy flowers, excellent fall color, and winter interest. Switchgrass prefers full sun in moist to wet soil, but is highly adaptable. It reseeds occasionally, but is not invasive.

• 'Cloud Nine' has light blue foliage growing 5 to 7 feet tall with large airy flower heads that rise another 1 to 2 feet in mid- to late summer. It is easily grown in average, medium to wet soils in full sun to part shade. USDA Zones: 5 to 10

• 'Heavy Metal' has an upright, narrow growth habit with airy flowers and grows 4 to 5 feet tall. The metallic blue foliage turns yellow in fall. USDA Zones: 5 to 9

• 'Shenandoah' has deep green leaves tipped with purple in summer and turns a burgundy purple in fall. Flowers are reddish pink. This variety grows to only 3 to 4 feet tall. Both this and the following cultivar are excellent substitutes for the invasive Japanese blood grass, a type of cogongrass. USDA Zones: 5 to 9

• 'Rotstrahlbusch' is similar to 'Shenandoah' with a more upright and narrow form. It matures between 4 to 5 feet in height. USDA Zones: 5 to 9

Hairgrass (*Muhlenbergia capillaris*) has beautiful white or pink blooms in October.
Barbara H. Smith, ©2017 HGIC, Clemson Extension

Mexican Feather Grass (*Nessella tenuissima*) grows in a soft, weeping mound.
Barbara H. Smith, ©2017 HGIC, Clemson Extension
Cloud Nine Switchgrass (*Panicum virgatum* 'Cloud Nine') has light blue foliage and blooms in late summer.

Barbara H. Smith, ©2017 HGIC, Clemson Extension

**Fountain Grass (*Pennisetum alopecuroides*):**
Beautiful, cream to pink, bottlebrush shaped flower heads appear from mid- to late summer above fine, arching mounded foliage 3 to 4 feet tall. It prefers sun and moisture, but needs well-drained soil. Fountain grass reseeds and may be invasive into natural areas.

- 'Hameln' is compact, growing to only 2 feet tall. It performs best in the Piedmont. USDA Zones: 4 to 9
- 'Little Bunny' grows to only 1 foot tall in full sun to part shade. USDA Zones: 5-9
- 'Moudry' has striking black flower spikes in late summer to early fall. It grows 2 to 3 feet tall. This variety reseeds abundantly, but usually does not come true from seed. USDA Zones: 5-9

Chinese Fountain Grass (*Pennisetum orientale*): The soft pink or white flower spikes appear from late spring through fall above blue green foliage only 1½ feet tall. It spreads slowly by rhizomes, but rarely reseeds.

- 'Karley Rose' is easily grown in average, medium moisture, well drained soils in full sun, and will get 2 to 3 feet tall. The pink flower spikes appear in the summer. USDA Zones: 5-8
- 'Tall Tails' grows 4 to 5 feet tall in full sun with average, medium moisture, well-drained soil. It has showy, pinkish-white flower spikes from June to September. USDA Zones: 5 to 8

Annual Fountain Grass (*Pennisetum setaceum*):
Grown as an annual throughout South Carolina, it will get 4 to 5 feet tall by summers end. The striking purplish pink flowers are produced continuously through summer. Fountain grass grows best in full sun and moist, well-drained, fertile soil, and is popular for use in mixed container gardens. These grasses are only cold hardy in USDA Zones 9 to 10.

- 'Fireworks' has burgundy, hot pink, green, and white variegated leaves. It typically grows 3 to 4 feet tall with burgundy blooms spikes in June.
- 'Rubrum' has dark burgundy-red foliage and bloom spikes and grows 3 to 5 feet tall.
- 'Rubrum Compacta' grows 2½ to 3 feet tall, with even finer foliage, but is not quite as red as 'Rubrum'.
- 'Burgundy Giant' is a hybrid with very broad, deep red foliage and maroon flower spikes. It is a robust grower and will get 5 to 6 feet tall.

Purple fountain grass (*Penisetum setaceum* 'Rubrum') is planted as an annual in South Carolina.

Barbara H. Smith, ©2017 HGIC, Clemson Extension
**Indian Grass** (*Sorghastrum nutans*): This adaptable tall, upright native grass blooms with narrow, dark gold flower plumes in late summer. Foliage turns golden tan in the fall. Prefers full sun and rich, moist well drained soil, but tolerates most soil. Plants reseed, but are not invasive. Indian grass is the state native grass of South Carolina. USDA Zones: 4 to 9

- 'Sioux Blue' has stiff, upright blue-gray foliage and will grow 3 to 5 feet tall.
- 'Indian Steel' grows 3 to 5 feet tall with slender, blue-green leaves.

**Giant Sacaton** (*Sporobolus wrightii*): The fine-textured leaves arch to form a wide clump 3 to 5 feet tall. It flowers in late summer. This grass prefers full sun and well-drained soil. Giant sacaton is native to the southwestern U.S. and is an excellent native substitute in place of *Miscanthus*. It is semi-evergreen in mild climates and is tolerant to salt exposure and drought. USDA Zones: 3 to 9

**Giant Needle Grass** (*Stipa gigantea*): The flower stems are 5 to 6 feet tall, arching and airy, with gold dangling flowers in early to mid summer. The narrow evergreen foliage grows 2 feet tall. This grass prefers sun with moist, well-drained soil. USDA Zones: 6 to 10

**Sea Oats** (*Uniola paniculata*): This native Southern beach grass tolerates harsh growing conditions and stabilizes dunes. Gray-green sharp leaves grow 3 to 8 feet tall are topped by arching flower stems. This grass prefers full sun and well-drained sandy soil. Do not fertilize sea oats. Never collect or purchase wild collected plants, as they are protected by state law. Any person violating this law will be subject to fines and possible imprisonment. USDA Zones: 7b to 11
Species & Cultivars of Grass-like Plants

**Japanese Sweet Flag (Acorus gramineus):** Fine grass-like, foot tall semi-evergreen leaves give a texture similar to mondo grass, but thrive in constantly moist or wet soil. They will grow in ordinary garden soil in part shade, but need more moisture in full sun.

- 'Licorice' has evergreen licorice scented leaves. This variety will grow in part sun to light shade and reaches a height of 1 to 1½ feet tall. USDA Zones: 5 to 10
- 'Minimus Aureus' spreads slowly by rhizomes and matures at 4 inches tall. The bright green and gold foliage has a citrus-like smell when crushed. USDA Zones: 5 to 10
- 'Ogon' has yellow leaves that are especially bright in spring and fall. The mature height is 15 inches, and it will grow in full sun to shade with the best foliage color in part to full shade. USDA Zones: 5 to 9
- ‘Variegata’ reaches a height of 1 to 1½ feet and features narrow dark green leaves with creamy-white margins. USDA Zones: 5 to 9

![Variegated Japanese sweet flag](image)

Variegated Japanese sweet flag (*Acorus gramineus 'Variegata') has narrow, dark green leaves with creamy-white margins.
Barbara H. Smith, ©2017 HGIC, Clemson Extension

**Japanese Sedge (Carex morrowii):** This grass-like plant is grown for its foot tall slender leaves. It grows best in part shade or shade, and in moist or wet soil.

- 'Goldband' is evergreen, with stiff, brightly striped, white and green leaves. It does well in sun to shade with even moisture. USDA Zones: 5-9
- 'Ice Dance' has dark green leaves with white margins that matures at 6-12 inches tall. It grows best in partial sun to shade in moist areas. USDA Zones: 5-9
- 'Variegata' has green and yellow striped leaves. It will grow 1 to 1½ feet tall in moist soils in part to full shade. USDA Zones: 5 to 9

![Japanese Sedge](image)

Japanese sedge (*Carex morrowii 'Variegata') will grow in moist soils in part to full shade.
Barbara H. Smith, ©2017 HGIC, Clemson Extension

**Flax Lily (Dianella tasmanica):** This herbaceous perennial has wide, linear foliage. Small blue flowers bloom in the spring and summer, followed by turquoise berries in the fall. It grows best in full to part shade and tolerates drought, salt, and most soil conditions. USDA Zones: 9 to 10

- 'Baby Bliss' is a compact variety with bluish-green foliage that grows to 1 foot in height. It has pale violet flowers in the spring, followed by purple berries.
- 'Variegata' has wide green leaves with contrasting yellow stripes. It grows 3½ feet tall.

![Flax Lily](image)

Flax Lily (*Dianella tasmanica*)

**Matt Rush (Lomandra species):** Matt rush is in the asparagus family and is dioecious (separate male and female plants). This low maintenance evergreen will grow in sun or shade and is salt and drought tolerant. USDA Zones: 8 to 11

- 'LM300' Breeze™ has fine, bright green foliage. It will get 2½ to 3 feet tall with an arching growth habit.
Undesirable or Invasive Ornamental Grasses

There are a number of undesirable or non-native invasive ornamental grasses that are commonly used in the landscape, such as maidengrass (*Miscanthus sinense*), pampas grass (*Cortaderia selloana*), Japanese bloodgrass (*Imperata cylindrica* 'Rubra'), giant reed (*Arundo donax*), and weeping lovegrass (*Eragrostis curvula*). These grasses reseed freely and are not recommended for use in the landscape due to their ability to escape into the natural environment. This in turn will displace native grasses and plants that are important as a food source for pollinating insects and other wildlife.

Maidengrass (*Miscanthus sinense*) is a non-native, invasive grass that is commonly used in the landscape trade. Barbara H. Smith, ©2017 HGIC, Clemson Extension

For example, Japanese bloodgrass will revert to the highly invasive green form, cogongrass (*Imperata cylindrica*). It is illegal in South Carolina to sell, distribute, or plant Japanese bloodgrass.

Any sightings of Japanese bloodgrass or cogongrass must be reported to the Clemson Department of Plant Industry at 864-646-2140 for positive identification and eradication. Possible locations for infestations of cogongrass may also be emailed to the address below: [https://www.clemson.edu/public/regulatory/plant-protection/invasive/cogongrass/reportcogongrass.html](https://www.clemson.edu/public/regulatory/plant-protection/invasive/cogongrass/reportcogongrass.html)

Japanese bloodgrass (*Imperata cylindrica* 'Rubra') is not recommended for use in the landscape as it will revert to the highly invasive green form, cogongrass. Karen Russ, ©2009 GIC. Clemson Extension

For more information on cogongrass, refer to HGIC 2318, *Cogongrass*.


Cogongrass (*Imperata cylindrica*) is one of the ten worst weeds in the world. Barbara H. Smith, ©2017 HGIC, Clemson Extension

The South Carolina Exotic Pest Plant Council has an up-to-date list on invasive plants to be aware of in South Carolina.

[https://www.seeppc.org/southcarolina/invasivePlant/s.cfm](https://www.seeppc.org/southcarolina/invasivePlant/s.cfm) South Carolina Exotic Pest Plant Council
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