

# Home Lawns: Centipedegrass

► Centipedegrass is a slow-growing perennial turfgrass that is ideal for homeowners wanting a lawn that requires limited care and maintenance.



Centipedegrass (*Eremochloa ophiuroides*) was introduced into the United States in 1916 from China. Its popularity as a home lawn turfgrass is due to its low maintenance requirements and its adaptation to either full sun or partial shade conditions. It typically needs less fertilizer or lime and requires less mowing than other turfgrasses. Understanding the basic characteristics and vulnerabilities of this turfgrass and following simple care instructions can ensure a lush lawn for homeowners.

## Characteristics of Centipedegrass

### Appearance

Centipedegrass resembles St. Augustinegrass but has several features that distinguish it. The leaves have pointed tips and are in an alternating pattern whereas St. Augustinegrass leaves have rounded tips that are arranged opposite each other. Centipedegrass blades are finer (smaller) in texture (leaf size) than St. Augustinegrass but coarser (larger) than bermudagrass or zoysiagrass.

The stolons of centipedegrass are a key distinguishing factor. Centipedegrass spreads by thick, aboveground stems (stolons) that lie on the soil surface. These stolons have short internodes (close to the ground) from which they will root and develop a good leaf canopy and thick lawn.

When properly managed, centipedegrass produces little thatch and is not subject to scalping or other mechanical stressors. Centipedegrass will produce seed heads that easily can be managed with routine mowing. Due to the slow growth habit of centipedegrass, it does not recover from injury as quickly as other grasses and is generally not as wear-tolerant as either bermudagrass or zoysiagrass.

### Environmental Tolerance

The spreading growth of centipedegrass stolons into adjacent landscape beds is less of a problem than with bermudagrass, and it is more easily controlled with edging. Centipedegrass is more shade tolerant than bermudagrass but is less shade tolerant than St. Augustinegrass or zoysiagrass. In addition, centipedegrass has good drought tolerance and can be established from either seed or vegetative plantings (plugs, sprigs, or sod).

Centipedegrass has a number of disadvantages. It has poor cold tolerance and is susceptible to winter kill during extremely cold winters. It does not tolerate traffic, high-phosphorous soils, low-potassium soils, high soil pH, excessive thatch, salt, or heavy shade (needs 6-plus hours of direct sunlight). Centipedegrass also is susceptible to several pests, and herbicide injury is a common cause of decline.

## Varieties of Centipedegrass

'Common' centipedegrass is the most commonly used variety. 'TifBlair' is the only improved variety readily available in Alabama. Its cold tolerance is significantly improved, and it may perform better in the transition zone of northern Alabama.

## Establishing Centipedegrass

Centipedegrass, such as 'Common' and 'TifBlair', can be established by either seeding or vegetative plantings. Proper seedbed preparation of the lawn area before planting is critical to ensuring successful establishment.

Centipedegrass can tolerate acidic soils (pH 5.0 to 6.0) better than other turfgrasses, though it performs well at pH 6.0 to 6.5. Iron chlorosis (yellowing) may occur if the soil pH is above 6.5 or in early spring following greenup. This can be corrected by applying iron supplements. Soil pH adjustments should be made prior to establishment according to soil test recommendations.

## Seeding

Seed quality should be considered when purchasing seed for planting. Seed with a purity of 90 percent or better and a minimum germination rate of 85 percent is recommended.

The suggested seeding rate for centipedegrass is  $\frac{1}{4}$  to  $\frac{1}{2}$  pound of seed per 1,000 square feet of lawn.

Centipedegrass seed is extremely small; best results are obtained by mixing 20 pounds of dry sand with 1 pound of centipedegrass seed and spreading this seed mix on the lawn. Apply half of the seed in one direction and the remaining half perpendicular to the direction of the first application. This will ensure a more even distribution of the seed.

The best time to plant centipedegrass seed is from April to July. This provides a full growing season for the seed to germinate and become established before the onset of cold weather. Centipedegrass seed is naturally slow to germinate (2 to 3 weeks); therefore, it is important to mulch or use some other means to prevent soil erosion and potential loss of seed and/or seedlings.

## Sodding

For best results, use only high-quality sod that is free of weeds and disease. Lay the sod pieces tightly together to avoid large cracks in the turfgrass. Water the soil surface to wet it thoroughly before laying the sod. After laying the sod, water it thoroughly and roll over it with a lightweight roller to ensure firm contact between the sod and the soil and to smooth the sod.

Water the entire lawn or sodded area at least once a day using approximately  $\frac{1}{2}$  inch of water per irrigation during the first week of establishment. Once the sod has become rooted and established, water only as needed.

## Mowing Centipedegrass

As with any turfgrass, centipedegrass quality will be improved with the correct mowing height and frequency. Centipedegrass should be mowed to a height between 1 and 1½ inches. Make sure that no more than 30 percent of the leaf area is removed at any one mowing. Increase the mowing height during periods of stress.

Use a sharp and well-adjusted mower. Repeatedly mowing centipedegrass to a height below 1 inch will reduce the density of the lawn and thin out the turfgrass. Mowing too high and too infrequently also will be detrimental to the lawn as this allows for the accumulation and buildup of thatch, which can lead to injury from cold weather exposure and drought stress.

## Centipedegrass Decline and Winter Kill

Centipedegrass decline refers to a condition in which established lawns develop large dead patches of turfgrass or begin turning yellow (chlorosis) in the spring. Numerous conditions may contribute to centipedegrass decline, including excessive nitrogen fertilization, high soil pH, excessive thatch accumulation, nematodes, disease, and herbicide injury.

Winter injury is another problem with centipedegrass. Centipedegrass can survive well in the south, but it is sensitive to low temperatures and can be discolored by frost and sometimes killed by cold weather. This winter kill is erratic and confusing to homeowners who may see total devastation of their lawn while the neighbor's centipedegrass lawn is picture perfect. Many factors are related to this winter-kill phenomenon, including fertilization practices, amount of shade, soil type, elevation, mowing height, pest management (particularly chemical herbicides used), and sun exposure.

## Pest Problems

Centipedegrass can be damaged by several pests, including nematodes, insects, and diseases. These pests can become particularly harmful to centipedegrass that has been overfertilized.

Nematodes, especially ring and sting nematodes, can be a serious problem on centipedegrass. Areas of nematode infestation and damage will appear severely wilted, even when they are well watered. If nematode damage is suspected, it is recommended that you collect a nematode sample from the margin of the affected area and send it to the Plant Diagnostic Laboratory for analysis. (Find information and instructions at <https://offices.aces.edu/plantlabauburn/>.)

Several insect pests may cause damage to centipedegrass as well. Of these insects, the hardest to control is the ground pearl, which is a type of scale insect. At the present time there are no effective insecticides to control ground pearls. Other insect pests that will damage centipedegrass are lawn caterpillars, white grubs, mole crickets, spittlebugs, and sod webworms.

The principal disease that affects centipedegrass is *Gaeumannomyces graminis* var. *graminis* (the causal organism in centipedegrass decline). Large patch and dollar spot diseases also can be a problem. Large patch and dollar spot diseases can be controlled with fungicides, but chemical control options are not available for centipedegrass decline.

Weeds easily invade newly established centipedegrass due to its slow growth habit. Once established, however, centipedegrass crowds out many weeds. If weeds become a problem, certain herbicides can be applied without injuring the grass. Be sure to read labels carefully and thoroughly, however, before buying or using any herbicide on centipedegrass lawns. Some herbicides that are used on other turfgrasses may be harmful to centipedegrass. Consult your county Extension office for more information about pest control.



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For more information, contact your county Extension office. Visit [www.aces.edu/directory](http://www.aces.edu/directory).

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Revised September 2020, ANR-0073

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