Centipedegrass

Centipedegrass (*Eremochloa ophiuroides*) was introduced into the United States from seed found in the baggage of Frank Meyer, a USDA plant explorer who disappeared on his fourth trip to China in 1916. It was initially used for low-maintenance cemeteries and eventually for lawns during and after the Depression and is sometimes referred to as "lazy man's grass" or "poor man's grass". It is well adapted to the climate and soils of the coastal plains and lower Piedmont areas of the southern United States.

Centipedegrass lawn.
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Centipedegrass is a low-growing and medium-textured naturally yellow-green colored perennial turf. Its low fertility requirements result in slow growth and reduced maintenance. Centipedegrass' natural color is Granny Smith apple green. Over-fertilizing to obtain an unnatural dark green color reduces its cold tolerance, increases the thatch layer and usually increases long-term maintenance problems along with eventual turf failure.

Centipedegrass is adapted to infertile, acidic soils that are moderately to well-drained. Heavy, clay soils or muck soils with poor drainage will not provide a good growing environment unless extensive drainage techniques are implemented.

Centipedegrass spreads by stolons, producing a medium-textured turf. Maintenance requirements are low when compared to other turfgrasses. It has fair shade tolerance, good drought tolerance, and can be established from seed or sod. Since it only produces surface runners (stolons), centipedegrass is easily controlled around borders of flowerbeds and walks.

Irrigation management is also important to the success of a centipedegrass lawn. Centipedegrass inherently has a shallow root system. Light, frequent watering will lead to a weak, shallow root system unable to withstand periods of drought. Centipedegrass should be watered infrequently, only when needed as water stress appears in the turf. Then irrigate to a depth of 6 inches. Do not irrigate again until the turf is thoroughly dry.

Centipedegrass is highly susceptible to damage from nematodes (especially ring nematodes) and ground pearl insects. Nematode damage limits centipedegrass' use in deep sandy soils that has an inherent nematode population. It exhibits iron chlorosis (yellowing) and produces a heavy thatch if over-fertilized. It has poor salt tolerance and forms a loose turf that is not very wear-resistant, so it will not withstand heavy foot traffic. Stolons from centipedegrass have high lignin content and do not decompose readily, thus developing a thatch layer.
The rate of thatch accumulation is a direct result of management practices. High levels of management, mainly nitrogen fertilization, on centipedegrass will produce excessive vegetative growth. When over-fertilized, the subsequent growth results in new runners, which will soon grow several inches above the soil surface. This exposes the vital growing points of the plant to the wide fluctuations of temperatures normally experienced in late fall, winter and early spring. Within several years, large brown dead patches form in early spring. This dieback is collectively referred to as "centipedegrass decline."

Following proper management techniques can prevent this problem:

- Avoid over-fertilizing (i.e., use only 0 to 2 lbs of actual N per 1000 sq.ft. yearly) or fertilize according to soil test results.
- Supplement with iron applications during the growing season, especially on higher pH soils to improve the green color of the lawn.
- Routinely test the soil to assure proper soil pH.
- Prevent thatch accumulation or remove thatch when it exceeds ½-inch in thickness.
- Irrigate during drought stress, especially in the fall and early spring. Apply 1 inch of irrigation water per application to encourage deep rooting of the grass.
- Do not over irrigate or allow the soil to stay wet. Irrigate only when needed.
- Maintain a mowing height of 1½ to 2 inches.

**Varieties**

Improved varieties of centipedegrass are available, including Centennial, Oaklawn, Covington, Santee, TennTurf, (formerly, Tennessee Hardy), and TifBlair. The improved cultivars have better cold tolerance than common. However, some of these newer varieties must be vegetatively propagated and are selected specifically for their improved cold tolerance. Currently, only TifBlair is available as seed. Santee may be available as seed in the near future. Centennial will perform a little better on alkaline soils than common centipedegrass. Santee is recommended for the lower one-third of South Carolina, and Covington is recommended for all areas except the Upstate.


Revised by Gary Forrester, Regional Horticulture Extension Agent, Clemson University, 01/16. Originally prepared by Bob Polomski, Extension Consumer Horticulturist, and Debbie Shaughnessy, HGIC Information Specialist, Clemson University. Revised by Trent C. Hale, Extension Turfgrass Specialist, Clemson University 08/03. New 01/99.

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