



Centipedegrass

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Centipedegrass (*Ermochola ophiuroides* [Munro] Hack.) is native to China and Southeast Asia. Introduced into the USA in 1916, it is a common turfgrass in the southeastern U.S. Mainland and Hawaii.

This medium-green, medium-textured, slow growing turfgrass is adapted to low-fertility conditions. It spreads by extending short, thick, leafy stolons; it does not form rhizomes. With their short internodes, the stolons produce a dense mat of prostrate, low-growing stems and leaves. The individual leaf blades rarely grow to more than 4 inches long.

Centipedegrass produces a low-maintenance turf that tolerates neglect. It tolerates medium shade and seems to grow better under light shade than in full sun. It is better adapted to heavy soils than most other turfgrasses grown in Hawaii. Centipedegrass is especially suited to moist, acidic, coarse-textured (or moderately heavy) soils of low fertility. It is not tolerant of flooding. Iron chlorosis (yellowing) is common in alkaline soils.

Centipedegrass is well suited for use in lawns and parks and as a utility turf. It is not suited for athletic fields or other active areas because it does not tolerate wear or heavy use and recovers slowly. Salt and salt spray tolerance is poor. Therefore, centipedegrass is not suitable for exposed areas near the beach.

Sometimes called “lazy man’s grass,” centipedegrass is increasing in popularity as a lawn and utility turf because of its low maintenance requirements—it seems to thrive under minimal care. Although centipedegrass turf has some limitations, particularly the iron chlorosis on high-pH soils, it has a lot to offer for reduced-maintenance sites in areas with a favorable environment for it. The cost of its establishment is offset in a short time by reduced maintenance expenditures.

Establishment

Common centipedegrass can be propagated by seed, sprigs, plugs, or sod. Its seeds are large and expensive, and their germination percentage is low. Sow 1 pound

of seed per 1000 square feet of prepared seedbed to establish a quality lawn. Homeowners and contractors sometimes try to economize by seeding at rates that are lower than recommended. This delays turf establishment and use of the area and encourages weeds.

The seeds germinate slowly, taking several weeks to emerge after sowing. The initial growth and spreading will remain slow until the stolons begin to creep out into the surrounding area. Ryegrass (a cool-season, annual grass) seeded at ½ pound per 1000 square feet is sometimes mixed with centipedegrass seed as a “nurse” crop. The rapidly germinating ryegrass holds the soil while the centipedegrass fills in, then dies out during the hot summer months.

Proper preparation of the seedbed improves overall germination and rate of establishment. Eliminate weeds several weeks before planting (RoundUp® works well for this purpose). Bring the site to proper nutrient levels based on soil test recommendations before planting. Apply 1 pound of nitrogen per 1000 square feet at the time of planting. Do not use a fertilizer that is high in phosphorus unless a soil test has shown a P deficiency. A well managed planting should develop complete cover in about three months.

Broadcast stolons or sprigs at 5–10 bushels per 1000 square feet. Sprigs and plugs also take approximately three months to develop a complete cover.

Selections

Common centipedegrass is typically used in Hawaii and can be established by seed, sprigs, or plugs. Unlike the seed heads of common bermudagrass, those of common centipedegrass are low and inconspicuous. A cultivar called ‘Oklawm’ was released by Oklahoma State University in 1965, but it is not used in Hawaii. ‘AU Centennial’, a dwarf type released by Auburn University, is available in Hawaii but is very similar in appearance to common centipedegrass. These new cultivars of centipedegrass must be propagated vegetatively.

*Revised by Jay Deputy, Department of Tropical Plant and Soil Sciences, from CTAHR publication TMS-5, 1994.

Mowing

Mow centipedegrass with a rotary mower at a height of 1½–2 inches. Mow frequently enough so as not to remove more than about one third of the leaf blade per mowing. Because of the slow vertical growth of its blades, centipedegrass requires less frequent mowing than St. Augustinegrass or bermudagrass. During periods of moisture stress or if the grass is growing in shade, increase the mowing height to 2–2½ inches.

Mowing below 1–1½ inches reduces the density of centipedegrass turf and encourages weeds. Avoid close mowing, and do not scalp the turf. Mowing too high or too infrequently increases drought stress.

Nutrition

Centipedegrass requires little fertilizer after it is well established, and it will form heavy thatch in response to excessive fertilization. Apply 1 pound of slow-release nitrogen per 1000 square feet per year in the spring (March to May) as a complete fertilizer or as nitrogen alone, depending on soil test results. Fertilize established centipedegrass using a low-phosphorus, high-potassium fertilizer with an analysis in a ratio near 1-1-2 or 1-1-3. Fertilizers lacking phosphorus are preferred if soils supporting centipedegrass already have moderate to high levels of P. Lawns on sandy or coarse-textured soil may require an additional, light, slow-release nitrogen application in early fall.

Centipedegrass thrives on moderately acidic soils with a pH of 5–6. Iron chlorosis is a problem where the soil pH is 6.5 or above or where there are high levels of calcium or phosphorus in the soil. Iron chlorosis can be corrected by applying chelated iron or ferrous sulfate as necessary to maintain color. Frequent iron applications, sometimes monthly, may be required in severe situations. On alkaline sites or those with coral in the soil, applying sulfur reduces soil pH and may alleviate iron chlorosis in centipedegrass. A more economical and a longer lasting solution may be to change the turf to a more suitable grass species.

Irrigation

Centipedegrass thrives in areas receiving 40 inches or more of rain per year. A relatively shallow-rooted grass, centipedegrass is not as drought tolerant as it is sometimes promoted to be.

Light, frequent watering is necessary during the first two to three weeks of establishment with seed or stolons. Newly established centipedegrass lawns should be irrigated regularly for the first six to ten weeks.

Water established turf deeply on an as-needed basis when the grass shows signs of water stress such as wilting or discoloration (bluing or graying). Light, frequent sprinkling should be avoided, as it promotes rooting in the upper soil and thatch layer, which makes the turf drought-sensitive. Centipedegrass is more salt-sensitive than some of the other warm-season grasses. Do not irrigate with brackish or “gray” water.

Pests

Well managed centipedegrass turf has few insect or disease threats in Hawaii. Chinch bug is present in some areas. Fungal diseases such as dollar spot and brown patch may become problems in very wet and shady areas. Weeds may be a problem during establishment.

Do not assume that herbicides used to control weeds in bermudagrass or other turfgrasses can also be used safely on centipedegrass. Centipedegrass is sensitive to many herbicides, especially those containing arsenic-type ingredients, such as MSMA. Do not use MSMA or straight 2,4-D on centipedegrass. Always read the product label to ensure that it can be used in centipedegrass. Some herbicides labeled for postemergent control of weeds in established centipedegrass are listed below.

Herbicides for postemergent control of weeds in centipedegrass.

Weed type	Herbicide
Broadleaf weeds	Confront™, Prompt®, Trimec-Southern™, Weed-B-Gon-Southern™
Grassy weeds	Poast®, Vantage®
Green and white kyllingas	Image®, Basagran®, Manage®
Purple nutsedge	Image®, Manage®

Several preemergent herbicides are labeled for control of various grassy and broadleaf weeds in established centipedegrass, including Balan™, Barricade®, Gallary™, Princep®, Pendulum®, Pennant®, Surflan™, Team™, Pre-M®, XL™, and others. Follow the recommendations and instructions on the product label.

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