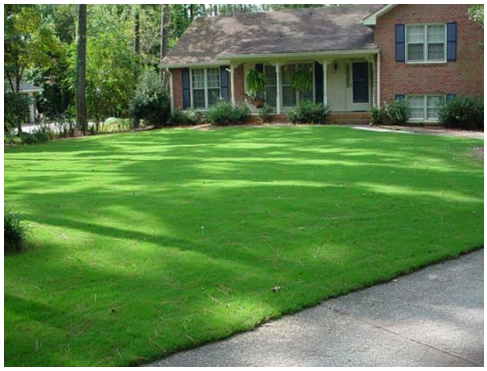
Bartlett Tree Research Laboratories

PLANT HEALTH CARE REPORT

Bermudagrass

Bermudagrass (*Cynodon dactylon*) is a warm-season turf that spreads by rhizomes (belowground stems) and stolons (aboveground stems). A durable grass, it exhibits good wear and drought tolerance. Several hybrid varieties are available, and selection should depend on the intended use and growing conditions.



A healthy lawn requires a comprehensive maintenance program that includes regular mowing, aerating, irrigation, fertilization, and disease and pest management. Weather and environmental factors can create unexpected problems even with the best of care. Routine monitoring is critical. Bermudagrass tolerances for factors are rated below.

1. Shade: Very poor
2. Heat: Very good
3. Cold: Very poor
4. Drought: Excellent
5. Wear: Excellent

Cynodon × 'TifSport' has some cold tolerance

Photo courtesy of Michael Rivera
University of Georgia, Research and Education Garden

Regular mowing at the proper height is important for optimum turf vigor. Bermudagrass is fast-growing turf and prefers a mowing height of ¾ to 2". A mowing height below ¾" on common bermudagrass can damage the stolons, causing the turf to thin and increasing its susceptibility to diseases and insect pests. A thin lawn is also prone to weed invasion.

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Core aeration is beneficial to established bermuda turf lawns. Aeration aids in thatch decomposition, reduces soil compaction, and improves water and air movement in the soil. Aeration should be done May through July when the grass is actively growing.

Although bermudagrass exhibits excellent drought tolerance, 1" of water per week is needed to maintain optimum health. Irrigation should be monitored and adjusted on a weekly basis according to rainfall to ensure that the correct amount of water is applied. Supplemental irrigation is usually not needed until the turf begins to show drought symptoms such as wilted leaves or footprints that remain after walking. Turf in full sun may require more frequent irrigation to prevent the onset of drought symptoms.

Bermudagrass should be fertilized and the soil pH adjusted based on a soil analysis. It requires approximately 3–5 pounds of nitrogen per 1,000 square feet per year to maintain optimum health. Fertilizer applications should begin in April after the grass turns green and continue through September at the rate of ½ to 1 pound of nitrogen per 1,000 square feet. This rate should accumlulate to the total amount of nitrogen per season. Do not apply nitrogen after late September. Maintain soil pH between 5.5 and 7 through applications of lime (raises pH) or sulfur (lowers pH).

Diseases that may affect bermudagrass are large patch, dollar spot, and spring dead spot. Insect pests that may affect bermudagrass are chinch bug, mole cricket, and grubs. Monitor turf weekly for onset of disease and insect symptoms. Treat

Monitoring and Treatment Considerations for Bermudagrass

Late winter

Apply pre-emergent herbicide on lawn, and spot treat with post-emergent herbicide on winter weeds. Irrigate if drought occurs. Sample soil for nutrient and pH levels.

Late spring through early summer

Aerate lawn if there is more than 1" of thatch. Make 1st application of fertilizer after grass greens. Irrigate if needed. Begin mowing when lawn reaches 1–2", later reducing mower height to ¾–1.5". Apply preventive fungicide applications if spring dead spot and dollar spot were problematic last season.

Mid to late summer

Make 2nd, 3rd, and 4th applications of fertilizer 6 weeks apart. Monitor for chinch bug, mole cricket, grubs; treat as needed. Apply spot treatment herbicide directly to weeds. Irrigate if needed.

Early through mid-fall

If large patch was problematic last season, apply preventive fungicide. Apply 2nd pre-emergent herbicide for winter grass and broadleaf weeds. Stop mowing when grass is dormant.

disease preventively and apply insect management programs when the pest is first detected.

Weeds are a constant threat to turf health because they compete for sunlight, nutrients, and water. Effective weed control can be achieved with a combination of pre- and post-emergent herbicides. Apply pre-emergent herbicides in late September and late February to prevent the germination of seeds of both broadleaf and grassy weeds (annual bluegrass). Spot treatments with a post-emergent herbicide can suppress weeds during the growing season, but are most effective on winter weeds since dormant turf will not absorb the herbicide.