

Plugging is the planting of small plugs, usually 2 inches square. It is widely used to establish zoysiagrass.

Seeding can be used only for common bermudagrass. Broadcast 2 pounds of pure, high quality seed per 1000 square feet on a firm seedbed. Follow with a cultipacker to cover seed lightly and firm the soil. Keep moist until seed germinate and grass starts growing.

## MAINTENANCE

**Fertilizer.** Use the following guide for applying fertilizer if a soil test is not made:

For soil with low fertility, apply 1 pound each of N, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O (12 pounds of 8-8-8) per 1000 square feet every March, May, July, and September.

If fertility is high, apply 1 pound each of N, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O (12 pounds of 8-8-8) per 1000 square feet every March and July; then apply 1 pound of N per 1000 square feet in May and September.

For a soil with very high fertility, apply 1 pound of N (3 pounds of ammonium nitrate or 6 pounds of sodium nitrate) per 1000 square feet every March, May, July, and September.

**Mowing.** Start cutting grass in early spring. Mow regularly to keep lawns and other turfgrass areas neat. Recommended mowing height for lawns is  $\frac{1}{2}$  to  $1\frac{1}{2}$  inches; for golf greens,  $3/16$  to  $1/4$  inch. Never remove more than one-third of the leaf surface in one mowing.

It is good practice to mow lawns close ( $\frac{1}{2}$  inch) in early spring and gradually raise the mowing height (to  $1\frac{1}{2}$  inches) as the growing season progresses.

Mow lawns and similar areas often as needed to prevent scalping. Mow golf greens daily during the season of rapid growth.

Keep mowers sharp and in good condition. A more attractive lawn can be maintained with a mower equipped with a grass catcher. This practice retards build-up of thatch, and chance of disease damage is reduced.

**Compaction.** Soil in old established lawns often needs loosening to break up compacted layers of soil for better water penetration. Machines can be rented in many areas for this purpose.

## REFERENCES

Contact your county Extension office for copies of these and other publications.

Circular P-4, "Watering your Lawn"

Circular P-9b, "Soil Testing for the Home"

Circular P-17, "Lawn Insect and Disease Control Guide for Alabama"

Circular P-27, "Fertilizer and Lime for Lawns"

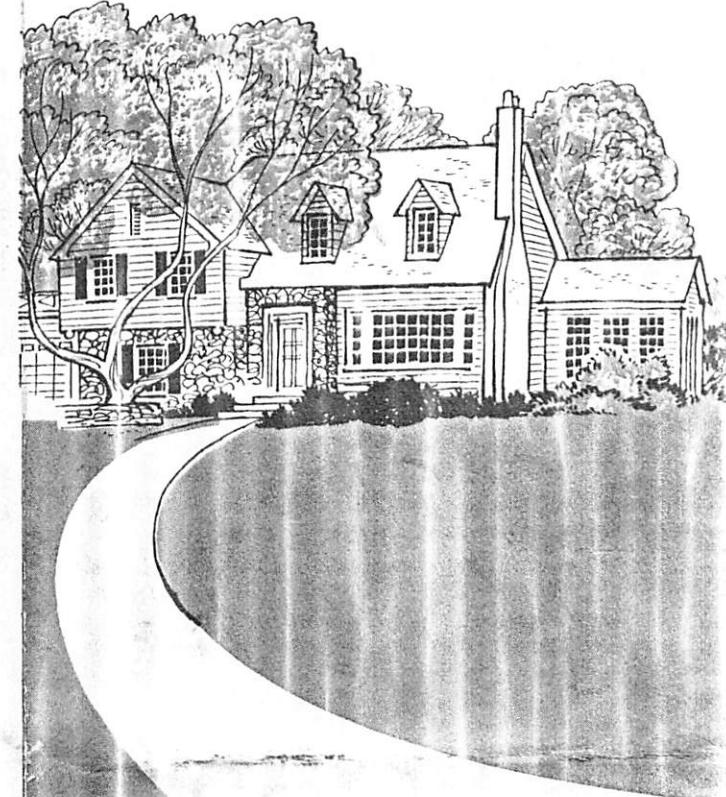
"Controlling Crabgrass and Broadleaf Weeds in Lawns and Other Turfgrass Areas," unnumbered circular.

*Jommie Fields  
272-5126 PM  
Horace W. Miller  
Elie Madison  
King Williams &  
A lady who is a nurse  
Austin Dunn*

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FOR LAWNS  
&  
OTHER TURFGRASS AREAS

**CIRCULAR P-59**  
COOPERATIVE EXTENSION SERVICE  
AUBURN UNIVERSITY

# BERMUDAGRASSES

by

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**B**ERMUDAGRASSES are widely used for lawns, golf courses, athletic fields, cemeteries, and other turfgrass areas in the South. They spread rapidly when properly fertilized and watered and soon form a dense sod.

These grasses are adapted to a wide variety of southern soils but grow best on well-drained soils of high fertility. They require full sunlight and should not be planted under trees or in shady areas.

Improved hybrid bermudas must be established vegetatively by sprigs or green clippings. Seedheads are produced but contain few, if any, viable seed. Common bermudagrass can be established vegetatively or by seed.

## VARIETIES

Several hybrid bermudagrasses described below are commonly referred to by the original selection number shown in parentheses.

**Tifgreen** (328). A very fine textured, emerald green hybrid, Tifgreen makes a dense sod. It is one of the most attractive bermudagrasses. Use for home lawns, on golf and bowling greens, around public buildings, and on baseball infields. Limited tests indicate that it can be used on football fields.

**Tifway** (419). A fine-textured hybrid, Tifway is a little darker than Tifgreen. Use for home lawns, on golf tees and fairways, and around public buildings. It has high resistance to frost damage. It may spread a little more slowly in North Alabama than other bermudas. The tendency to develop a thatch (non-decomposed dead plant material) because of very dense growth is its main weakness.

**Tiflawn** (57). A vigorous, dark green hybrid, Tiflawn is fine textured but is slightly coarser than Tifgreen or Tifway. Use on athletic fields, around public buildings, and for home lawns. It recovers rapidly from wear and heavy use. The football

## FOR LAWNS AND OTHER TURFGRASS AREAS

field (Cliff Hare Stadium) at Auburn University and a large number of high school football fields over the state are sodded to Tiflawn.

**Tifdwarf.** A very fine stemmed dwarf, slow-growing hybrid. Tifdwarf is darker green than Tifgreen. Its leaves, stems, internodes, and seedheads are all smaller and shorter than Tifgreen; it grows about half as fast and is more winter hardy. Tifdwarf makes a dense sod and its soft blades and few seedheads make it excellent for golf greens. Its value for other turfgrass areas has not been established.

**Sunturf.** A fine textured hybrid. Sunturf produces a dark green, dense sod. It greens early in the spring, has good wear resistance, and is more easily managed around flower beds than other bermudagrasses. It appears more susceptible to leaf diseases than Tifgreen. It is more suited to North Alabama than other sections.

**Common bermudagrasses.** These grasses vary in texture from medium to coarse, depending on their origin or locality. They are widely used for lawns, on fairways and athletic fields, and around public buildings, but they usually do not form a dense sod. Common bermuda can be established from seed. It also produces viable seed which may spread to other areas. The improved bermudas are superior to common bermuda in appearance and drought tolerance, and they are generally preferred for most turfgrass areas.

**Other bermudagrasses.** Tiffine, Texturf 10, Texturf 1F, and U-3 bermudagrasses are not recommended in Alabama. They are used in other areas in the South.

## ESTABLISHMENT

**Soil Preparation.** Spring through early summer is the best time to plant bermudagrass. Begin soil preparation early enough to have ground ready for planting at that time. Remove trash, bricks, rocks, stumps, and other objects. Do not bury them in the area. Grade and smooth the area to provide proper surface drainage.

If top soil is brought in, be sure it is free of nutgrass, common bermuda, and other noxious, hard-

to-kill weeds. Top soil used on football fields and golf greens should provide good vertical drainage.

Break the soil about 8 inches deep; disk and harrow to form a firm, smooth seedbed. Treat heavily nematode-infested soils with a recommended nematocide before planting grass.

**Lime and Fertilizer.** Have soil tested to determine lime and fertilizer needs. Apply lime if needed to correct soil pH.

Use the following guide for applying fertilizer if a soil test is not made:

For soil with low fertility, work 3 pounds each of  $P_2O_5$  and  $K_2O$  into the top 6 inches of soil per 1000 square feet of area. Twenty pounds of 0-14-14, or equivalent amounts of a similar fertilizer, can supply these nutrients. Then apply 1 pound each of  $N$ ,  $P_2O_5$ , and  $K_2O$  per 1000 square feet and work into the top 2 inches of soil. These amounts of nutrients are supplied in 12 pounds of 8-8-8 or an equivalent amount of any fertilizer with 1:1:1 ratio.

If the soil is high fertility, apply 2 pounds each of  $N$ ,  $P_2O_5$ , and  $K_2O$  per 1000 square feet (25 pounds of 8-8-8) and work into the top 2 inches of soil.

In both cases, when the grass begins to grow, topdress with 1 pound of  $N$  (3 pounds of ammonium nitrate or 6 pounds of sodium nitrate) per 1000 square feet at 3-week intervals for four applications. Make the last application before October.

**Planting Material and Methods.** Buy certified plant material, if possible. Otherwise, buy from a reputable dealer or from a known source. Keep sprigs or other vegetative material moist and covered until planted.

**Springing** is the most commonly used method of establishing bermudagrass. Use sprigs with three to five joints. Set them in moist soil, 10 to 12 inches apart in 10- to 12-inch rows. This spacing will require 1000 to 1200 sprigs, or 1 square yard per 1000 square feet of area. Firm soil around the sprig, leaving just the tip showing or barely covered. Water after planting to insure rapid establishment.

**Sodding** is laying solid blocks of sod to cover the entire area. This method is expensive but may be used to establish grass on banks or other areas where fast coverage is desired.