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Coastal Bermuda Grass
At the West Louisiana Experiment Station

By Harold E. Harris and C. B. Roark

Cows and calves grazing Coastal Bermuda in December

LOUISIANA STATE UNIVERSITY
AND
AGRICULTURAL AND MECHANICAL COLLEGE
Agricultural Experiment Station
W. G. Taggart, Director
METHODS OF PLANTING COASTAL BERMUDA GRASS

HAROLD E. HARRIS¹ AND C. B. ROARK²

Green grazing during late summer and fall has long been a dream of owners of livestock. This dream is now possible and practical with Coastal Bermuda.

This is a relatively new grass developed at the Coastal Plains Experiment Station at Tifton, Georgia, in cooperation with the USDA.

Georgia farmers were quick to see the merits of this grass, as evidenced by its widespread use in that state.

A five-year grazing test at the Georgia Station resulted in an annual increase of 116 pounds of beef per acre above that from Common Bermuda.

A grazing trial with this grass is now being conducted at this Station, but the purpose of this publication is to describe different methods of propagation.

Coastal Bermuda produces few, if any, viable seed and therefore must be started from vegetation—either sprigs or green grass stems. This grass is well adapted to a wide area. Its drouth and cold resistance add to the length of its growing season in the fall, when green grazing is usually scarce. It is a warm season plant that starts growth in spring and continues to grow until late fall. Coastal Bermuda remains green after most other grasses have turned brown. It may be planted over a long season of the year. Sprigs may be planted from late winter to early fall. Green stems should be planted in summer. This grass puts out long stems which run along the ground; from these, upright stems appear and grow to a height of 12 to 18 inches.

COMPANION CROPS

Pastures with high grazing capacity usually contain one or more grasses associated with at least one legume.

Such a combination gives variety to the grazing, and the legumes add nitrogen to the soil, which helps support the growth of grasses. Grasses help prevent bloat caused by legumes. Clover, lespedeza and Singletary peas have been used for this purpose. The Singletary pea is especially adapted as a companion crop for Coastal Bermuda because of a characteristic enabling the seed to germinate and the young plant to come up through tall grass.

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METHODS OF PLANTING

Coastal Bermuda was first hand-planted at this Station in the spring of 1949, from plants supplied by the Tifton Station. Later plantings during that year were made with a tree planter using green stems (green hay). A more recent method of propagation has been the planting of green stems broadcast, on a well-prepared seedbed. Repeated trials planted between showers during summer months have resulted in thick stands. The grass was planted immediately after cutting and before it had time to wilt.

Hand Tools for Plots of 1,000 Stolons

1. For each 1,000 stolons of grass, prepare a seedbed as for water-melons, 8 feet wide and 500 feet in length. A thousand stolons is sufficient to plant four rows 2 feet apart and 2 feet in the drill, the full length of the bed.

2. Spread one load of barnyard manure and apply 400 pounds of 12-12-12 fertilizer per acre, or fertilize according to needs as shown by chemical analysis of the soil. Apply sufficient lime, if needed, to support a companion legume crop. If lime is not available, apply one-fourth to one-half ton of basic slag to the acre.

3. Protect plants from direct sunlight until planted. Keep plants moist and in the shade, covered with wet feed bags or similar cover.

4. Set out plants 2 feet by 2 feet with hand tools.

5. If there is insufficient moisture, plants should be watered as for sweet potatoes.

6. Topdress bed every few weeks with an application of 30 pounds of nitrogen per acre until grass has covered ground.

7. Mow frequently to keep down weeds and to force growth into the horizontal runners.

8. Plant stolons from March 1 to October 1, during cloudy, damp weather.

Tree Planter Method

1. Prepare a seedbed by plowing, disk ing and leveling.

2. Prior to disk ing, apply barnyard manure, lime and other fertilizer, according to needs.

3. During early spring, plant sprigs in 2-foot drills, placing as near 2 feet in the drill as possible.

4. Topdress frequently with nitrogen until grass has covered ground.

5. Mow frequently to retard growth of weeds and to force growth of grass into horizontal stems.
Broadcast Planting of Coastal Bermuda

Green stems are distributed evenly with a manure spreader.

Stems are disked in lightly leaving part of grass exposed.
New Growth Following Broadcast Planting

Green shoots of new growth ten days after planting.

Left of hat: Thick stand and good growth 30 days after planting, without irrigation but between showers. Area on right newly planted.
Broadcast Method

1. Prepare and fertilize seedbed as previously described.
2. Select areas of Coastal Bermuda not mixed with Common Bermuda or other grasses.
3. Cut grass when 10 to 12 inches tall, as for hay.
4. Spread grass broadcast rather thickly.
5. Disk in lightly on moist, well-prepared, and heavily fertilized seedbed.
6. Roll with cultipacker.
7. Plant only during damp, cloudy weather. Plant between showers, or irrigate.
8. Mow and fertilize as previously described.

SUMMARY

Coastal Bermuda may be established on a farm by hand, or machine, planting a small area to be used as a source of green stems for later planting on a large area.

The main area may be planted by mowing green stems (hay) and scattering them broadcast. Sufficient stems should be scattered to result in a thick stand within a few days, in order to crowd out other undesirable plants. Only pure Coastal Bermuda stems should be planted, in order to avoid competition from other grasses and in order to have pure Bermuda for further planting. Grass should be kept moving rapidly from the time it is cut until rolled in with a cultipacker, following the disk.

This grass should be disked in lightly, leaving much of the stems exposed, and then rolled with a cultipacker. Bermuda should be planted on a moist seedbed during cloudy, damp weather. Excellent stands have been established without irrigation. However, irrigation will sometimes save stands if no rains fall soon after planting.

Fertilizing heavily before planting and topdressing with nitrogen frequently until ground is covered, will result in a thick stand within a few days.

Frequent mowing forces growth into horizontal stems and hastens ground cover.