



# FORAGE FACTS

*Publication Series*

## EASTERN GAMAGRASS

### INTRODUCTION

Eastern gamagrass is a native, warm-season bunch grass adapted to deep soils with good moisture relationships. The tall, clump type grass has thick, knotty rhizomes that can form plants 2 to 4 feet in diameter. Eastern gamagrass is rarely found in native rangeland grazed season long, but can be found on sub-irrigated sites throughout Kansas. It is highly palatable and forage production and quality are higher than other native species.

Eastern gamagrass is currently being promoted for tame pasture, hay meadow or seed production. Under irrigation and high fertility, forage production has reached as high as 10 tons per acre. Production on non-irrigated situations varies.

Only one named cultivar, "Pete," has been officially released to commercial seed companies. All seed released is from this source which was released in 1988. Historically, eastern gamagrass has been considered difficult to establish. Seed dormancy, seeding date, stand establishment, and grazing management are the major barriers.

#### ESTABLISHING NEW STANDS

Dormant seed should be planted  $\frac{1}{2}$  to 1 inch deep between December 1 and March 1 at a rate of 6 to 8 pounds per acre of pure live seed (PLS). Within the first year after harvest, seed dormancy can greatly limit seedling emergence. The process of stratification, which is chilling, soaking, and treating with a fungicide, can improve the problem. Stratified seed cannot be allowed to dry before planting and must be kept chilled if not planted immediately after purchase. Since it is moist, it may heat and destroy the germination. Stratified seed should be planted  $\frac{1}{2}$  to 1 inch deep between March 15 and May 30 at a rate of 6 to 8 pounds per acre of PLS.

The ideal row spacing for Eastern gamagrass is 10 inches wide or less. Traditionally, stands have been planted 30 to 60 inches apart, which results in large clumps up to 3 feet across with large bare spaces between plants. The rough fields are difficult to harvest and hard on harvest equipment.

There currently aren't any herbicides labeled for eastern gamagrass weed control, but frequent clipping and flash grazing can control weed growth. Once established, a prescribed burn will enhance grass production and weed management. The burn should occur when new spring growth is about 1 inch tall, which is prior to the usual time to burn native rangeland.

#### MANAGEMENT

Fertilizer should be applied in late April according to soil test results. Eastern gamagrass can be cut for hay or grazed. When cut for hay, the first harvest should occur about June 15 to 20 and the second cutting six weeks later. A 6- to 8-inch stubble should be left at both cuttings.

About 50 pounds of actual nitrogen can be applied in mid-April and again after the first cutting. This will produce 3 to 4 tons of hay with 12 percent crude protein.

Eastern gamagrass should not be grazed continuously or grazed shorter than 8 to 10 inches. Successful grazing should include a seven- to nine-paddock pasture system with each paddock grazed two to five days. The paddocks should be allowed at least a 30-day

rest period before restocking. A five-year research project in Oklahoma produced an average daily gain of 2.03 pounds in cattle grazing a paddock system between May 9 and August 25.

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