

Publication Series

NONTRADITIONAL FORAGES AS EMERGENCY OR SUPPLEMENTAL FEEDSTUFFS

INTRODUCTION

Despite the best plans, shortages of forage commonly occur some time during the year in Kansas. Drought, hail, early freeze, crop failure, harvest delays and unusually cold and wet winters can cause forage shortages. In response, producers may choose to buy the extra forage needed or sell livestock. But in many cases, it may be more economical to utilize nontraditional forages.

SOYBEANS

Soybeans can be grazed hayed or ensiled, and livestock performance can be adequate. Pasturing can begin as soon as the plants are 12 to 18 inches tall, and if livestock is removed once most of the leaves have been eaten, there can be enough regrowth in about a month. Soybean hay is a satisfactory substitute for alfalfa or clover hay if it is cut before the pods are 1 inch long. A mixture of chopped soybeans with corn or sorghum forage at the rate of 1 ton of soybean silage with 2 to 4 tons of other forage produces good silage.

KOCHIA

Kochia can be used in central and western Kansas as an emergency forage source for livestock, but it does not grow well in the eastern third of the state. This hardy weed can be used as hay, silage, or grazing. During its early stages of growth, it is a low-fiber, high protein forage with protein levels comparable to alfalfa.

Even under extreme conditions, kochia should not comprise a major portion of the diet. Weight loss and oxalate toxicity symptoms have been reported in cattle grazing older, mature stands of kochia. Steers that graze kochia gain less than those grazing native grass pasture, but they do perform well when placed in the feedlot.

AMARANTH

Although normally considered an alternative grain crop, amaranth (red pigweed) can be cut for hay or silage. It is generally comparable to soybean or oat forage, but inferior to sudangrass or sorghumsudangrass hybrids in forage yield and protein content. Mature drought-stressed amaranth forage can produce nitrate and oxalate toxicity, and the risk is higher when it is the sole source of feed.

BRASSICAS (KALE, RAPE, TURNIPS)

Forage brassicas are high-quality, fast growing cool-season crops that can offer good grazing potential throughout the state. They can be seeded from mid-March through May for summer grazing, or June through August for fall and winter grazing. Grazing usually begins about 45 to 60 days after seeding. Brassica forage has exceptionally high digestibility, protein and energy content. However, the fiber content is low so roughage must be provided. When planted immediately after wheat harvest on irrigated ground, brassicas can make an excellent forage for livestock during the summer.

CRABGRASS

Crabgrass can make an excellent forage for grazing or having because the palatability of immature crabgrass is comparable to native grasses. Crabgrass can be grazed or hayed to about 3 inches and then allowed to regrow. It should be cut prior to maturity for optimum quality and to avoid spreading the seeds in the hay.

JOHNSONGRASS

Johnsongrass is a noxious weed in Kansas that can be used as a grazing crop or harvested at the boot stage to provide an emergency hay crop. Prussic acid poisoning can be a problem with grazing weatherstressed Johnsongrass, but it is generally not a problem with hay or silage. Because Johnsongrass is a noxious weed, it should not be allowed to produce seed.

OTHER PUBLICATIONS

Emergency and Supplemental Forages (MF-1073)

Contact: John Fritz Contact: Dale Fjell Professor **Extension Specialist Forage Production Crop Production** Telephone: 785-532-5776 Telephone: 785-532-5539 FAX: 785-532-6315 FAX: 785-532-6315 E-mail: jfritz@oz.oznet.ksu.edu E-mail: dfjell@oz.oznet.ksu.edu **Contact: Dale Blasi Extension Specialist** Forage Nutrition and Management Telephone: 785-532-1249 FAX: 785-532-7059 E-mail: dblasi@oz.oznet.ksu.edu

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

Issued in furtherance of Cooperative Extension Work, acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and U.S. Department of Agriculture cooperating, Richard D. Wootton, Associate Director. All educational programs and materials available without discrimination on the basis of race, color, religion, national origin, sex, age, or disability.