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H. N. Wheaton

L. H. Smith

M. D. Cunningham

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SUDANGRASS AND SORGHUM-SUDANGRASS CROSSES

H. N. Wheaton and L. H. Smith, Extension Agronomists;
M. D. Cunningham, Extension Dairyman

Sudangrass and sorghum-sudan crosses are the best emergency or supplementary crop for pasture or green crop during July, August and September. These related forages are heat tolerant annuals that are very productive when moisture and fertility are available.

A large number of sorghum-sudan crosses have recently been released for use as sudangrass. Both the crosses and the sudangrasse may help provide summer feed on your farm. The sorghum-sudan crosses are taller and have thicker stems than straight sudangrass. The crosses often yield more than sudangrass but not always. If the crop is cut only two or three times the crosses usually out-yield recommended sudangrass. However, in trials where four or more cuttings are removed to imitate grazing, the sudangrass have yielded as much or more than the newer sorghum-sudan crosses.

Carrying capacity varies a great deal according to moisture supply, fertility and temperature, about one-half acre of pasture for each cow is a good estimate of the amount needed if average yields are obtained.

Wide spread research across the country has shown little difference in feed-

ing value between sudangrass and sorghum sudan if both are cut at the same stage of maturity. Palatability and digestibility are relatively the same for both types. Remember that the crosses are taller growing, and it is easier for them to grow away from you. As the plant becomes tall and coarse it is less palatable and higher in crude fiber—hence, lower in feeding value.

Keeping the plants in an early stage of maturity is especially important for dairy cows. This practice takes advantage of the higher protein and lower fiber content and also results in higher intake per cow. Because high moisture content of sudan or sorghum-sudan pastures, high producing cows should have access to other feeds to keep their dry matter intake high, thus making it possible to maintain body weight and milk production. Purdue studies show that slightly higher grain levels resulted in higher and more persistent milk production when grazing sudan or sorghum-sudan pastures.

If the sudangrassses and sorghum-
sudan crosses are harvested as silage they will contain less energy but about the same protein as corn silage. When harvested for hay the protein content ranges from 8 to 12 per cent. Compare this to the protein content of good alfalfa hay which will range from 15 to 20 per cent protein.
Both sudangrass and sorghum-sudan crosses are much better adapted for grazing or greenchop than for hay or silage. If an emergency hay crop is needed, try soybeans drilled in 8-inch rows. Cut and bale when the pods are in the early dough stage.

Neither sudangrass nor the crosses will perform as well as corn silage, alfalfa hay or haylage for stored or winter feed.

Soils well suited for corn or soybeans are well suited to sudan. Prepare the seed-bed as if it were for corn or beans. Then drill 20-25 pounds of sudan or sorghum-sudan hybrid seed per acre in 8" rows. Higher yields will be obtained if it is seeded about the middle of May. It may start slowly but will start to grow rapidly as the weather becomes warmer. It can be seeded in June, but production will not be as great as if it was seeded earlier.

Apply phosphorus and potash as if to grow 100-150 bushels of corn per acre. If possible, have a soil test. Split the nitrogen application. Apply 50-80 pounds at seeding time. This can be put on with the drill while seeding, or anhydrous ammonia can be applied in the seedbed just prior to seeding. After the first cutting another 50 pounds of nitrogen will be necessary if top production is desired.

All sudan grasses and sorghum-sudan crosses contain a poisonous substance called dhurrin, which ruminants can convert to prussic acid. Sorghum-sudan hybrids and crosses contain more dhurrin than sudangrasses. Piper, in particular, was bred for its low prussic acid potential. This substance is always highest in immature plants. Therefore, do not graze before growth exceeds 15 to 18 inches in height. If the plant is wilted because of drought or frost, it is also dangerous. The poisonous material will disappear from the plant after normal growth resumes. Only in the small plant stage or in the wilted stage is there danger to livestock.