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Blue Panic Grass

Blue Panic—a summer perennial, fast-growing, highly palatable grass—is providing unusually heavy grazing for the few southwestern farmers and ranchers who have planted this relatively new forage plant.

The grass is similar to Sudan grass in its growing habits. It is an upright plant attaining a height of from 4 to 7 feet and is adapted to a wide area of the Southwest. It is making a commendable showing in all areas where the annual rainfall is at least 20 inches or where irrigation is available. Unlike Sudan grass, it does not have to be seeded each year but usually grows well for 3 or 4 years from the original planting. With adequate fertilization, satisfactory stands may be kept productive for many additional years.

Most efficient use of Blue Panic grass is obtained when it is used as a rotation pasture, according to Albert W. Crain, extension pasture specialist of The Texas A. & M. College System. In a recent publication by A. & M. College entitled *Blue Panic Grass,* Mr. Crain points out that although it has many desirable characteristics and is a welcome addition to the forage plants now available to southwestern farmers and ranchers, Blue Panic does have certain limitations. For instance, it is not a range grass, and it does not do well in a mixed seeding of grasses. Moreover, it is not successful on poorer soils unless it is preceded by a crop of vetch or other legume plus rather heavy applications of fertilizer.

Seeding usually is made in the spring after danger of frost is past, although late spring or summer plantings are safe if moisture is available. Best results are obtained when the grass is planted in standard width rows (36 or 40 inches apart) at the rate of 1 pound of seed per acre. A clean, firm, well-prepared seedbed is required, and the depth of planting should not exceed ¼ inch. A packing wheel or other device should be used following the planter to press the soil firmly against the seed. Some cultivation may be required during the first month or two to control weeds.

Spring plantings usually can be grazed about 2 months after seeding or when the plants have attained the height of about 3 feet. Early fall plantings also can be made and will provide grazing 1 or 2 weeks earlier the following spring than normally can be expected from Sudan grass.

The most efficient method of grazing Blue Panic grass is to use adequate cross fencing to permit rotation grazing. With such a procedure, one area can be grazed off fairly close and the livestock then moved to a new area, permitting the first pasture to develop a new growth. This rotation plan provides abundant, palatable feed at all times and permits the grass to produce the maximum amount of forage.

From San Antonio south, grazing can be obtained from Blue Panic grass any season

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of the year. In this area, farmers sometimes refer to it as "a perennial Sudan grass."

Blue Panic can be cut for hay or ensilage. Cutting should be started just as the seed heads become visible. If the planting is to be used primarily for hay, it may be desirable to broadcast the seed at a rate of 5 to 10 pounds per acre rather than to plant it in rows. This forces the plants to produce a finer stem, giving a better quality hay. However, broadcast plantings are not recommended for grazing.

Mr. Crain emphasizes that Blue Panic grass requires large amounts of plant food and that it will not do well on poor, unfertile soils. The plant is capable of producing large yields, but it will not do so unless adequate plant food is available. In the sandy soils of the West Cross Timbers region of Texas and in east Texas, all three of the major plant foods—nitrogen, phosphate, and potash—are needed, while in the Blacklands and Grand Prairie sections of the State, nitrogen and phosphate are the principal fertilizers recommended.

In tests at College Station, Texas, an investment of $17 per acre in fertilizer applied to Blue Panic grass brought a return of $78 in increased yields and a higher quality forage—14.3 percent protein compared with 11.3 percent on the unfertilized plot.

In closing his discussion of Blue Panic grass, Mr. Crain states:

"Blue Panic deserves a good trial. It is not a range plant and should not be expected to 'take care of itself.' A pound of seed per acre in rows on a good seedbed is enough; use adequate plant food; graze with enough cattle to prevent four or five feet of growth but not closer than six to ten inches; plant sweetclover, or singletary peas or another legume and remember: Good Pastures Are a Cash Crop—Treat Them As Such!"

Fertilizer for Johnson Grass

Most southwestern farmers have devoted many hours to eradicating Johnson grass from cotton fields, and generally the grass is considered a pest. However, many thousands of acres are cut for hay each year, and in some communities Johnson grass hay is the principal roughage available during the winter months.

Where Johnson grass is to be used as hay, the use of commercial fertilizer will pay big dividends. Albert W. Crain, extension pasture specialist of The Texas A. & M. College System, cites results obtained in tests in the Brazos River bottom over a 3-year period in which the yield of Johnson grass was doubled through the use of fertilizer. In this experiment an expenditure of $35 per acre for fertilizer resulted in an increase of 6 tons of hay. The protein content of the hay from the fertilized field also was higher, with the increase equivalent to a ton of cottonseed meal.

In DeWitt County, Texas, the application of 100 pounds of ammonium nitrate per acre on Johnson grass on September 16, following a rain, resulted in the production of 1 ton of forage per acre by November 1. The unfertilized field yielded only 600 pounds of forage per acre. In this test also, the protein content was higher, with the ton of forage produced on the fertilized field containing $24 worth of protein compared with only $5 for the value of the protein in the 600 pounds produced on the unfertilized area.

In citing these examples, it should be emphasized that the increase in yield on the fertilized fields was achieved with the same amount of rainfall as that received on the unfertilized areas. This fact emphasizes the importance of proper fertilization during seasons when rainfall is short.

If Johnson grass is to be used as hay, harvest should be started just before the seed heads first begin to appear. Delaying harvest beyond this stage may increase the tonnage

but will yield a coarser, less palatable hay, lower in protein content and less valuable as a livestock feed.

Close Spacing of Cotton Increases Yield

Higher yields of cotton were obtained with thicker stands of plants in tests at the Temple unit of the Texas Agricultural Experiment Station. Plants spaced 5.5 inches apart in the row yielded 174 pounds of seed cotton more per acre than an 11.4-inch spacing.

In commenting upon the tests, the specialist in charge pointed out that there were fewer bolls per plant on the closer spaced plantings but more bolls per acre. The size of bolls was about the same in both cases.

Another advantage of the closer plant spacing is that mechanical harvesters operate more efficiently in cotton that is planted to the thicker stand.

Chemicals for Weed Control in Cotton

Control of grass and weeds in cotton by use of chemicals rather than by hand hoeing was achieved during 1951 in tests at the Texas Agricultural Experiment Station.

Comparative costs show a saving of $2.39 in favor of chemicals over hand hoeing. In addition, there is the added advantage of being able to apply the chemicals faster and without waiting for hand labor. In the past 2 years, such labor has been very scarce and frequently unavailable when needed most.

Chemicals for weed control are applied with a spray machine attached to the tractor. The most satisfactory procedure used in the tests mentioned above was to make one application of a "pre-emergence" chemical at the time of planting and two "post-emergence" applications after cotton plants were up to a stand.

The pre-emergence application was made at the rate of 2 pounds of "Premerge" (the trade name of the chemical) in 10 gallons of water per acre. This solution was applied directly behind the planter press wheels and covered a 10-inch strip over the cotton row. The purpose of this application was to kill shallow-seeded annual weeds and grasses as they germinated, until the cotton was up sufficiently high to permit cultivation.

When the cotton plants were high enough to permit spray nozzles to be directed into the row below the bottom leaf of the plant (about 3 to 4 weeks old), the first application of a post-emergence chemical was made. The chemical used is called Lion Oil No. 1 and was applied at the rate of 5 gallons per acre. A second application was made 7 days later. These sprayings controlled seedling grass and weeds in the row but did not injure cotton plants, except for an occasional burning of lower leaves.

Satisfactory results with chemical weed controls also have been obtained in Louisiana, and it now appears that the solution of this bottleneck to the complete mechanization of cotton production is making rapid progress. It should be emphasized that chemicals can be used successfully in controlling weeds and grass in cotton only if manufacturers' directions are followed closely.

As is the case with most mechanized operations in agriculture, careful attention to details is necessary. Thus, farmers who contemplate using chemicals for controlling weeds and grass in their cotton should make a careful study of the methods that have proved satisfactory and should make certain that their tractor operators follow directions carefully.

Irrigated farming now occupies an important place in Texas agriculture. During the 9-year period, 1940-48, the area under irrigation in Texas increased from 1,045,000 to 2,885,000 acres, according to the Texas Agricultural Experiment Station.

Cull Chickens for More Profit

Frequent culling of the laying flock to eliminate birds that are not laying will help reduce the feed bill—the biggest single expense in producing eggs, says W. J. Moore, extension poultryman of Texas A. & M. College.

Mr. Moore suggests that the flock be culled at least four times each year: first, when the chicks arrive at the farm; second, when the pullets are turned out on the range; third, when they are brought back into the laying house; and fourth, when the hens reach maximum production. All birds that are moulting, diseased, or that are not laying for any reason should be eliminated immediately from the flock.

Inexperienced poultrymen should consult their county agricultural agents or other specialists in their communities in order to learn how to spot the nonlayers. Certain characteristics, such as coloring of the beak and shanks, give ample evidence of the bird's egg production, and a few minutes spent in learning how to cull the laying flock will pay big dividends.

1952 Farm Credit School Planned

About 200 bankers attended the first annual Farm and Ranch Credit School for Commercial Bankers held at Texas A. & M. College last month. The enthusiastic endorsement of this type of meeting led to a request by those present that a similar school be scheduled for 1952. Dean Charles N. Shepardson announced that A. & M. College would be happy to comply with this request and that dates for the 1952 school would be December 8-10.

"Students" attending last year's school were particularly pleased with the practical, down-to-earth approach of the "faculty" in discussing problems of farm and ranch credit. The discussion period following each lecture provided an excellent opportunity for the exchange of ideas and the clarification of points brought out by the speaker.

A. G. Brown, Chairman of the Agricultural Commission of the American Bankers Association, was unable to attend the school but extended his congratulations and stated that, to the best of his knowledge, this was the largest "first session" of any similar meeting in the Nation.

Publications

Texas Agricultural Experiment Station, College Station:

Bermudagrass Research in Texas, Circular 129, by E. C. Holt and others.

Chemical Control of Weeds in Converting Pasture Land to Tomato Production in East Texas, Progress Report 1338, by P. A. Young.

Water Conservation Increases Cotton Yields, Progress Report 1340, by C. E. Fisher and P. T. Marion.

Supplying Phosphorus to Range Cattle through the Fertilization of Range Land, Progress Report 1341, by E. B. Reynolds.

Fertilizer Requirements for Rice on the Soils of the Gulf Coast Prairie of Texas, 1947-50, Progress Report 1348, by R. L. Cheaney and R. H. Wyche.

Drying and Storing Flax Seed in South Texas, Progress Report 1352, by M. G. Davenport and others.

Effect of Time of Application of Various Fertilizers on the Yield of Rice Varieties of Different Maturity, 1949-50, Progress Report 1362, by R. L. Cheaney and others.

Livestock Auctions in Texas, Bulletin 732, by John G. McNeely and others.

American-Egyptian Cotton Variety Tests at the El Paso Valley Experiment Station, 1949-50, Progress Report 1406, by Lee S. Stith and others.

Cotton Variety Tests in the Lower Rio Grande Valley, 1951, Progress Report 1408, by J. L. Hubbard and others.

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