

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

STATE OFFICE

STILLWATER, OKLAHOMA 74074

PLANT SCIENCE TECHNICAL REFERENCES - FOR IN SERVICE USE ONLY

Agronomy - OK - 4

September 17,

1974

Re: Bermudagrasses Released

The Oklahoma Agricultural Experiment Station has released 'Hardie' bermudagrass for the northern one-half and 'Oklan' bermudagrass for the southern one-half of Oklahoma.

Foundation sprigs from these sources are available in small quantities to qualified applicants for the production of certified sprigs. An eligible grower is any person that exhibits potential for successful production of pedigree sprigs and has land eligible for producing certified materials according to certification rules and regulations.

Applications for sprigs should be made to Jim Trybom, Secretary-Manager, Oklahoma Foundation Seed Stock, Inc., Oklahoma State University, Stillwater, Oklahoma 74074, by March 15, 1975.

A field to be eligible for the production of certified planting stock must have been free of other strains of the same species for one year preceding the year it is to be planted.

A preplanting field inspection must be made by a representative of the Oklahoma Crop Improvement Association at a time prior to planting, when objectionable plants can be determined, and must have been found free of noxious weeds and other strains of the same species. The field being inspected with minimum distance of 33 feet from other strains. of bermudagrass, must not have been tilled or otherwise molested prior to inspection in such a way as to obscure objectionable plants.

OKLAN BERMUDAGRASS

Forage Yield: It begins growth about 7 to 10 days later than Midland and makes less early season growth. It then equals or surpasses the yield of Midland in mid and late season. It produces about 15 percent more dry matter than Midland.

Forage Quality: it consistently has been higher than Midland in dry matter digestibility by an average 9.5 percent. Theoretically, assuming equal intake, this percentage increase should amount to approximately a 23 percent increase in daily animal gains.

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TECHNICAL NOTE

Establishment: In research station tests Oklan has spread faster and thereby established faster than Midland. This is particularly true on tighter soils where Midland has characteristically been slow to establish. Oklan does not produce many rhizomes and will be propagated primarily by stoloniferous runners, small rhizome corms, and crown buds.

Adaptation: Oklan has a winterhardiness level somewhere between that of Midland and Coastal. It begins spring growth a few days later than Midland and makes slower spring growth. Consequently, it is suggested that Oklan be used in the southern one-half of Oklahoma, roughly south of Interstate Hwy 40.

HARDIE BERMUDAGRASS

Forage Yield: Under favorable moisture conditions it has consistently yielded more dry matter than Midland. At Muskogee it averaged producing 7 and 28 percent more dry matter than Midland and Greenfield, respectively. It characteristically makes more early season growth than Midland.

Forage Quality: Dry matter digestibility of HG 'AY has been consistently higher than Midland by an average of 6 percent. Theoretically, assuming equal intake, this percentage increase should amount to approximately a 15 percent increase in daily animal gains.

Establishment: In research station tests, Hardie has spread faster and thereby established faster than Midland. This is particularly true on tighter soils where Midland has characteristically been slow to establish. Hardie has large robust rhizomes which should make it quite easy to mechanically sprig;

Adaptation: Hardie is adapted throughout the state but is suggested for use in the northern one-half of the state. It is best adapted to the northeast quarter of the state with its higher rainfall, and to other areas in northern Oklahoma under irrigation.

/s/Hampton Burns

Hampton Burns
State Conservationist