

TECHNICAL NOTE

U.S. DEPARTMENT OF AGRICULTURE
STATE OFFICE

SOIL CONSERVATION SERVICE
STILLWATER, OKLAHOMA 74074

PLANT SCIENCE TECHNICAL REFERENCES - FOR IN SERVICE USE ONLY

October 4, 1982

AGRONOMY OK-11

RE: "Guymon" Bermudagrass and "Ww Spar" Bluestem

Guymon bermudagrass and Ww Spar bluestem have been released in Oklahoma and will be certified by the Oklahoma Crop Improvement Association.

Guymon bermudagrass is a seed-propagated hybrid which was developed by the Oklahoma Agricultural Experiment Station in cooperation with the USDA. Guymon was derived from the interpollination of two cross-compatible self-incompatible clonal bermudagrass accessions. One accession was collected near Guymon, Oklahoma, and the other was introduced from Yugoslavia.

The outstanding feature of Guymon to common bermudagrass of Arizona origin is its substantially greater winterhardiness. Guymon has been successfully established at Manhattan, Kansas, as well as in Virginia and Maryland. Discussions with researchers indicate it should be as winterhardy as forage varieties Midland and Hardie, and turf varieties U-3, Midway and Midiron.

Arizona common is superior to Guymon in morphological uniformity, fineness of texture and growth during the establishment phase. Guymon is expected to be used primarily in turf and erosion control. In yield studies at various locations, it has only yielded 50 to 75 percent as much as existing forage varieties. It is expected that it will be 2 to 3 years before Guymon bermudagrass seed is commercially available.

Ww Spar bluestem was developed by USDA Southern Great Plains personnel at Woodward, Oklahoma. The variety was derived from seed collected in Pakistan and grown in experimental Old World bluestem nurseries by the Oklahoma Agricultural Experiment Station.

Ww Spar is a perennial, tufted bunchgrass with an upright growth habit. The stems are yellowish with brown glabrous nodes. Forage production of Ww Spar has been consistently higher than Plains bluestem in testing at Woodward. Ww Spar has excellent stand persistence and spring vigor. Very little comparative data is available in comparing palatability and nutritive quality of Ww Spar with Plains or Caucasian.

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Initial evaluations of WW Spar indicate it should be slightly more winter-hardy than Plains but not quite as winterhardy as Caucasian.

A small amount of WW Spar seed should be available next year. A significant amount of seed should be available by 1984.

/s/Roland R. Willis
Roland R. Willis State Conservationist