

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

AND

OKLAHOMA AGRICULTURAL EXPERIMENT STATION

AND

TEXAS AGRICULTURAL EXPERIMENT STATION

AND

AGRICULTURAL RESEARCH SERVICE
WASHINGTON, D.C.

NOTICE OF NAMING AND RELEASE OF 'SALTALK' ALKALI SACATON
FOR SOIL STABILIZATION AND RANGE FORAGE

The United States Department of Agriculture, Soil Conservation Service; Oklahoma and Texas Agricultural Experiment Station; and the United States Department of Agriculture, Agricultural Research Service announce the naming and release of 'Saltalk' alkali sacaton Sporobolus airoides (Torr.) Torr.

Origin: Seed was collected near Erick, Oklahoma, in 1967 by Robert Lippert and Charles Mowry, Soil Conservation Service.

Description: Alkali sacaton is a perennial warm season bunch grass. Culms are erect to spreading 50 to 100 cm tall; sheaths pilose at the throat; ligule pilose; leaf blades elongate, flat becoming involute, usually less than 4 mm wide. The panicle is nearly half the entire height of the plant and at maturity is half to two-thirds as wide as long. The spikelets aggregate along the upper half to two-thirds and are 2 to 2.5 mm long. The first glume about half as long, commonly falling toward maturity. The second glume, lemma and palea about equal the palea splitting as the grain ripens.^{1/}

Area of Adaptation: The full range of adaptation of 'Saltalk' is unknown. It has been evaluated in northern Texas, Oklahoma, and Kansas and has established and performed well in these locations. It grows on moderately fine textured saline, saline alkali, and alkali soils. Establishment is sometimes difficult unless sufficient moisture is available after planting. Once established, the plant requires little maintenance. It is drought tolerant and performs well in the 30-46 cm mean annual precipitation zone. It withstands flooding and tolerates considerable deposition of sand or silt.

^{1/} Description adapted from Hitchcock, A.S., 1951, Manual of The Grasses of the United States.

Testing: 'Saltalk' alkali sacaton was evaluated and selected from a collection of 32 accessions assembled at the James E. 'Bud' Smith Plant Materials Center located at Knox City, Texas. 'Saltalk' was evaluated as PMT-1733 and PI-434445. During an 11-year period, seed production averaged 189 kg/ha and forage production during the 3-year period used in testing averaged 4,850 kg/ha. Two accessions ranked higher in forage production although they ranked lower in seed production or difficulties were encountered with stand establishment.

There are no cultivars of alkali sacaton available in the seed market; consequently, no commercial standard for comparison was included in these trials.

The relative germination of 'Saltalk' achieved over several periods of time and osmotic tensions developed with sodium chloride showed the highest germination during the period immediately after planting of any of the alkali sacaton accessions tested. This was considered to be a desirable characteristic because of the often unfavorable sites where the species is likely to be planted.

Field plantings established since 1970 in Texas, Oklahoma, and Kansas have indicated the desirability of this cultivar on slick-spot (Zaines-Wang) soils or on soils that are excessively high in sodium chloride caused by oil well seeps or naturally salty areas. 'Saltalk' is highly palatable and care must be taken to limit livestock access where critical areas are involved.

Use: 'Saltalk' alkali sacaton is a valuable soil stabilizer for vegetation of critical saline, saline-alkali, and alkaline soils where vegetation is normally difficult to establish. Because it is palatable to livestock, it will be useful in rangeland seed mixtures on selected soils within its range of adaptation.

Seed Source: Breeder and foundation seed will be maintained and produced at the Plant Materials Center at Knox City, Texas. Limited quantities of foundation seed will be available in 1982 to growers through the Foundation Seed Associations in Oklahoma and Texas. Standards for all classes of seed will be included in the Texas and Oklahoma Seed Certification Standards.

RELEASE OF SALTALK ALKALI SACATON
SPOROBOLUS AIROIDES (Torr.) Torr.

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