

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
TECHNOLOGY DEVELOPMENT AND APPLICATION , ECOLOGICAL .SCIENCE
WASHINGTON, D.C.

and the

NEW JERSEY AGRICULTURAL EXPERIMENT STATION
COOK COLLEGE, RUTGERS UNIVERSITY
NEW BRUNSWICK, NEW JERSEY

NOTICE OF RELEASE OF 'AVALON' SALTMEADOW COROGRASS

RELEASE OF 'AVALON' SALTMEADOW CORDGRASS

The United States Department of Agriculture, Soil Conservation Service, and the New Jersey Agricultural Experiment Station announce the release of 'Avalon' saltmeadow cordgrass, Spartina patens (Ait.) muhl. It was developed by the Soil Conservation Service Plant Materials Center at Cape May Court House, New Jersey.

The field collection of 'Avalon' was made in September 1965 by Curtis Sharp, Field Plant Materials Specialist. Two plants were selected from a sand dune near Avalon, New Jersey. This vegetative material was identified as NJ-418 and has only been produced by this means. This accession was used from 1966 until 1974 by SCS as a test plant for tidal bank stabilization work in Virginia. In 1979, NJ-418 was assigned PI No. 421237.

Saltmeadow cordgrass is a perennial grass that grows about three feet tall. Plants are strongly rhizomatous. The rhizomes are long and slender, having a diameter of 1/8- to 1/4-inch and produce most of the new growth. The slender, flexible culms support cauline leaves.

Its blades are less than 1/4-inch wide, vary from two to sixteen inches long, taper to slender tips, and are divergent. They are glabrous on the underside, usually rolled inward with the upper surface concealed. Leaf color usually is dark green. One to four spikes are formed on a smooth rachis. These spikes, less than three inches long, usually are purple.

Avalon is somewhat typical for the species. It has medium textured, flexible culms with dark green leaves. Culm production per unit area exceeds that of most other cordgrasses. The rate of spread is greater and the root system is more dense and finer textured than most. Leaf height is 28-32 inches. Leaf blade length is longer than for most strains; many-leaves are 10-16 inches long.

The principal conservation use will be to vegetate and restabilize tidal stream-banks. Saltmeadow cordgrass is salt tolerant and will be established above the high tide elevation in conjunction with parallel strips of smooth cordgrass. It is well adapted to sandy and clay soils, will tolerate occasional inundation by storm tides and has the capability to trap and grow through thin layers of sand.

While tidal plantings will be the main use, Avalon is adapted to low elevation coastal sand dune areas. It has some potential on dunes where native vegetation has been killed by pests and to supplement other dune vegetation in the south.

Tidal plantings of avalon were made in seven states and evaluation data recorded for eight years. data taken from more than 20 individuals sites indicated that avalon was superior to all other strains for saltmeadow in the comparisons. it is well adapted on tidal streambanks from massachusetts to north carolina and may be adapted farther south.

A breeder field of Avalon will be maintained by the Soil Conservation Service. Foundation quality vegetative material will be distributed to potential growers in accordance with established procedures and will be available from the Cape May Plant Materials Center, Cape May Court House, New Jersey 08210.

James B. Newman

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8-11-86

Date

Joseph C. Branco

State Conservationist
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7/8/86

Date

[Signature]

Director
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6/24/86

Date