

Establishment for Field Production

Saltmeadow cordgrass production fields are established with vegetative divisions. Plantings units should consist of about 10-15 stems when using transplanter so that the rubber boot can hold the material. Installation can be accomplished by the use of a vegetable transplanter. The leaves and roots are trimmed to lengths that meet the needs of the transplanter.

For more details on establishing production fields, refer to Publication TN-NJPMC-05-11, *Production Guidelines for 'Avalon'*, soon to be posted on our web site provided below.

Establishment for Conservation Use

Saltmeadow cordgrass is primarily used in estuary restoration and sand dune stabilization. Materials are planted on 18" centers.

For information about establishing saltmeadow cordgrass in estuaries, refer to Publication TN-NJPMC-05-12 *Conservation Uses for 'Avalon' Saltmeadow Cordgrass* soon to be posted on our website provided below.

Locate and Obtain Plant Material

The Cape May PMC selects and propagates plant cultivars called releases that are best-suited for the East coast, and tests them in field trials. Breeder or foundation material of these plants is made available to the public through commercial nurseries. A list of plant and seed vendors is available from the PMC or online at:

<http://www.nj.nrcs.usda.gov/plants.html>

Opportunities to Participate

NRCS Field Offices, District Employees, Partners and Volunteers: We need your help!

The Cape May PMC serves a nine-state area extending from Massachusetts to North Carolina. The plant developmental process used by the Cape May PMC relies heavily on the cooperation of our conservation partners to locate native plant stands; collect materials and ship them to Cape May; locate suitable plant testing sites; record plant performance data; and publish new scientific findings. Call the Cape May PMC for more details about how you can help.

Tours Available

Visitors are always welcome at the PMC. The center is open Monday through Friday. Please call the PMC to schedule your visit.

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Cape May Plant Materials Center (PMC)



'Avalon' Saltmeadow Cordgrass

Spartina patens (Ait.) Muhl.

*Cape May PMC products are
helping people help the land
through better plants and science*

Saltmeadow cordgrass



Hitchcock 1951

Scientific Name:

Spartina patens (Ait.) Muhl.

Alternate Common Names:

Saltmeadow cordgrass

Description:

Saltmeadow cordgrass is a rhizomatous, perennial warm season grass that grows to 0.75 m tall. It forms dense vegetative colonies that occur between the high tide line and higher marsh elevations. The rolled leaf blades are typically 6" to 12" long and 0.1 to 0.2 inches wide. Leaves are drooping and wiry in appearance. From late June to October an inflorescence emerges at the end of the stem which is composed of 2 -10 inch long spikelets.

Plant Distribution:

Though saltmeadow cordgrass is found in the shaded states, 'Avalon' is only recommended for use from Massachusetts to North Carolina. Prior to using any plant material determine its local invasive status.



Coastal Systems and Saltmeadow Cordgrass

Healthy estuaries are critical for much of our ocean life. Estuaries provide habitat for most of our nation's commercial fish catch. Commercial and recreational fishing, boating and tourism provide millions of jobs. Fishing alone generates over \$100 billion annually into the U.S. economy. Estuary and shoreline ecosystems provide immeasurable benefits to the American way of life.

The Natural Resources Conservation Service is proud to have developed 'Avalon' saltmeadow cordgrass. 'Avalon' saltmeadow cordgrass developed at the Cape May PMC restores estuary ecosystems, protects coastal sand dune habitat and can be used to revegetate areas altered by human activity.

Plant Selection Process

NRCS conducts its plant development activities in keeping with the philosophy of Dr. Franklin J. Crider, first leader of what is now the Plant Materials Program. Dr. Crider maintained that "in most cases, nature has evolved a plant for almost every growing condition."

In developing 'Avalon' saltmeadow cordgrass NRCS used the Comparative Observation Evaluation process. Many populations of the same species were planted side by side in evaluation plots. Populations were observed and compared to each other. The population with promising traits and characteristics was isolated, increased, tested in multiple environments and released to the commercial nursery industry.

Selection Attributes

'Avalon' was observed to have a superior and denser rooting system. This naturally evolved trait enabled this genotype to provide better site stabilization on high energy locations.

Origin

This material originated from naturally occurring salt marsh stands located near the Borough of Avalon, in Cape May County, New Jersey. 'Avalon' was released as a cultivar in 1987 to the commercial nursery market.

Adaptation

Saltmeadow cordgrass is adapted to both the secondary and back dune locations as well as the tidal marsh estuary. 'Avalon' is recommended for estuary application.

Application and Uses

- ◆ Restoring estuarine and marsh habitat
- ◆ Creating new sand dune systems
- ◆ Protecting beach replenishment projects
- ◆ Limited application on critical areas

