United States Department of Agriculture

A Conservation Plant Released by The Natural Resources Conservation Service
Cape May Plant Materials Center, Cape May Court House, New Jersey

'AVALON'
saltmeadow cordgrass
Spartina patens (Aiton) Muhl.

Figure 1: Avalon saltmeadow cordgrass is a cultivar released from the Cape May Plant Materials Center in 1986.

'Avalon' saltmeadow cordgrass (*Spartina patens*) is a cultivar released in 1986 by the Cape May Plant Materials Center, Cape May NJ.

Description
Avalon saltmeadow cordgrass is a rhizomatous, perennial, warm season grass that grows to 2.5 feet tall. It forms dense vegetative colonies that occur between the high tide line and higher marsh elevations. The rolled leaf blades are typically 6–12 inches long and 0.1–0.2 inches wide. Leaves are shiny and dark green above, with prominent veins underneath. Leaf blades tend to droop and are wiry in appearance. From late June to October an inflorescence composed of 2–10 inch long spikelets emerges at the end of the dark green stem. The flowers are wind pollinated and self-sterile (Leif, 2013).

Saltmeadow cordgrass is a versatile plant that can be found in soils from coarse sands to silty clays with a pH from 4.5–7.1, under both saturated and non-saturated conditions. It is found in brackish marshes, on sand dunes, and in tidal flats.

Source
Avalon saltmeadow cordgrass was developed from a single accession of two individual plants collected from naturally occurring salt marsh stands located near the Borough of Avalon in Cape May County, New Jersey in 1965. Avalon saltmeadow cordgrass was selected for release based on superior performance in tidal bank stabilization testing conducted at trial sites in seven Mid-Atlantic states. Avalon salt meadow cordgrass was observed to have a superior and denser rooting system. This trait provides better site stabilization on high energy locations.

Conservation Uses
Avalon saltmeadow cordgrass can be used in estuarine and marsh habitat restoration, shoreline protection, and dune stabilization and restoration projects. Saltmeadow cordgrass has also been effective in inhibiting the spread of the aggressive noxious weed *Phragmites australis* (Leif, 2013). It can be used to help remediate marshes affected by oil spills, provide food and cover for wildlife, and has been cut and dried as salt hay for livestock. There is limited application for its use on critical areas.

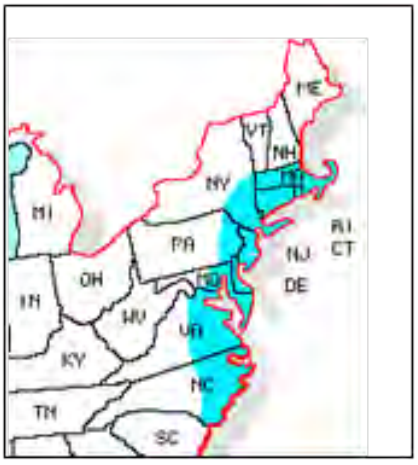

Figure 2: Map of Avalon saltmeadow cordgrass area of adaption and recommended area of use.

Area of Adaptation and Use
Avalon saltmeadow cordgrass was developed for use specifically in the Northeast to Mid-Atlantic coasts from Massachusetts south to North Carolina.

Establishment and Management for Conservation Plantings
Avalon saltmeadow cordgrass conservation plantings should be established between March to mid-June with vegetative bare root or containerized plant stock using a dibble bar or similar hand tool. A powered auger can be used for larger scale plantings. Each planting unit should consist of at least 3–5 stems and have readily apparent live nodes or shoots. Plant each planting unit 2 inches below nursery grown depth on 18-36 inch spacing depending on site conditions and conservation planting goals (Wootton et al., 2016).

Ecological Considerations
This plant may become weedy or invasive and may displace more desirable vegetation if not properly managed. Please consult with your local NRCS field office, Cooperative Extension Service office, or state natural resource or agriculture department regarding its status and use. Weed information is also available from the PLANTS Web site at plants.usda.gov.

Seed and Plant Production
Saltmeadow cordgrass does not spread well via seed and seedlings have low vigor. Therefore, it is most often vegetatively propagated and installed in nursery rows with a vegetable transplanter on 18-inch centers. Trimming the leaves and roots facilitates the process of planting with a transplanter. Establish plant production fields in a well prepared, weed free bed between March to mid-June using healthy bare root or containerized plant stock with live nodes or shoots and at least 3-5 stems. A single planting unit can grow up to fifty stems in one growing season (Leif, 2013). Controlling competing weeds will help produce quality plants.

Availability
For conservation use: refer to the *New Jersey Plant Materials Center Conservation Plant Releases and Suppliers* brochure for sources. For more information on the availability, planting, and use, contact your local NRCS office or Soil and Water Conservation District.

For seed or plant increase: Avalon saltmeadow cordgrass is an eastern US cultivar release. Contact the Cape May Plant Materials Center to obtain foundation material for the purpose of large-scale increase.

For More Information
Cape May Plant Materials Center, 1536 Route 9 North, Cape May Court House, NJ, 609-465-5901, https://www.nrcs.usda.gov/plant-materials/njpmc.

Citation
Release Brochure for Avalon saltmeadow cordgrass (*Spartina patens)*. 2014. USDA-Natural Resources Conservation Service, Cape May Plant Materials Center. Cape May Court House, NJ.

For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District <http://www.nrcs.usda.gov/>, and visit the PLANTS Web site <http://plants.usda.gov> or the Plant Materials Program Web site <http://www.plant-materials.nrcs.usda.gov>

References
Leif, J. 2013. Plant Guide for saltmeadow cordgrass (*Spartina patens*). USDA-Natural Resources Conservation Service, Rose Lake Plant Materials Center. East Lansing, MI.
Wootton, L., J. Miller, C. Miller, M. Peek, A. Williams, and P. Rowe. 2016. Dune Manual. New Jersey Sea Grant Consortium, Highlands, NJ.

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