

Plant Materials Program

Coastal Germplasm Indiangrass

Sorghastrum nutans (L.) Nash

A Conservation Plant Released by the USDA NRCS Cape May Plant Materials Center, Cape May, NJ



Coastal Germplasm indiangrass (Sorghastrum nutans L.) is a sourceidentified plant release. Photo by Cape May NJ, Plant Materials Center, USDA NRCS.

Description

Indiangrass (*Sorghastrum nutans* L.) is a native, perennial, warm-season, rhizomatous, bunchgrass that can grow to 7 feet tall. The stems have nodes that are slightly hairy; and internodes that are smooth. Grass blades grow to 3 feet long, and the ligule attaching the blade to the stem is depressed, somewhat heart-shaped, and often described as being reminiscent of a "gunsight". The terminal inflorescence is a yellowish-brown, compact panicle, with fluffy seed. The spikelet has a small, twisted awn attached.

Source

Coastal Germplasm Indiangrass is a bulk-harvested, source-identified germplasm that is a composite of five parental populations. The collection sites represent a cross section of natural stands from Connecticut, Rhode Island and Massachusetts.

Conservation Uses

Coastal Germplasm is ideal for use in USDA conservation programs that control erosion, restore native habitats, pastures, and prairies, provide food and cover for wildlife, and sequester carbon.

Area of Adaptation and Use

Coastal Germplasm Indiangrass is recommended for planting throughout southern New England (Connecticut, Rhode Island, and Massachusetts). Generally, the species is tolerant of poor to well-drained soils, and acid to alkaline conditions.



Map of Coastal Germplasm indiangrass (Sorghastrum nutans L.) area of adaption and recommended area of use.

Establishment and Management for Conservation Plantings

Indiangrass, and other warm-season grasses, require a soil temperature above 50° F for satisfactory germination. Dormant seedings have not been successful. The optimum time to plant is from early May to late June. If seed is drilled for solid stands, use 6–8 lb/ac rate PLS (pure live seed). For broadcast seedings, the rate should be 12–15 lb/ac. Seeding depth is ¹/₄ inch. If seed is broadcast or hydro-seeded, it is important to incorporate the seed by tracking with a heavy machine to improve the seed to soil contact.

Indiangrass has strong seedling vigor, but stands are slow to develop where competition from broadleaf weeds and cool-season grasses are heavy. No-till planters can be used to limit the amount of exposed weed seeds where weeds are persistent. Cool-season grasses can be controlled with a contact herbicide or mowing before seeding. Broadleaf herbicides do not negatively affect Indiangrass.

The most common cause of failure of warm-season grasses is a loose seedbed. Tilled seedbeds should be packed before and especially after seeding. The seedbed should be firm enough to show only a light imprint when stepped on. When using a no-till drill, be sure the coulter furrows are closed to avoid seed exposure and drying. This can be accomplished by culti-packing after the drilling operation.

Ecological Considerations

There are no known limitations or cautions for its use.

Seed and Plant Production

Coastal Germplasm Indiangrass had a germination rate of approximately 17% and produced 40 lb/ac of cleaned seed at the Cape May, NJ Plant Materials Center (PMC). There are approximately 175,000 seeds/lb. Seed has a bristle that should be "debearded" or brushed free when cleaned. Bristles must be removed before using with conventional drills.

Availability

For conservation use: For sources of supply for Coastal Germplasm Indiangrass or 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: Coastal Germplasm Indiangrass is an Eastern US source-identified germplasm. NRCS maintains foundation stock at the Cape May Plant Materials Center (PMC) in Cape May Court House, NJ. It is now available from some commercial nurseries in the Northeastern United States.

For more information, contact: USDA-NRCS Cape May Plant Materials Center 1536 Route 9 North Cape May Court House, NJ 08210 phone: (609)465-5901 fax: (609)465-9284 http://plant-materials.nrcs.usda.gov/njpmc/

Citation

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