

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF AGRICULTURE/PLANT MATERIALS CENTER
... PRACTICAL PLANT TECHNOLOGY FOR THE NORTH

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Notice of Naming and Release of 'Benson' Beach Wildrye for Vegetative Production

Scientific Name: Elymus mollis (Trin)

This accession was collected as Elymus mollis. The species is also referred to as Elymus arenarius L., and most recently Leymus mollis. The Alaska Plant Materials Center has elected to use Elymus mollis, as present convention dictates this nomenclature should be used for material of Alaskan origin.

Common Name: Beach Wildrye.

Often, a plant may have more than one common name. This species is no exception; as many as thirteen common names, including Basket grass and Beach grass, have been reported. Beach wildrye seems to be the widely accepted name in Alaska.

Cultivar: 'Benson'.

This variety name was selected to honor John Ben (Benny) Benson. Benny found his place in Alaskan history by designing the state flag of Alaska. Benny was from Kodiak Island, the origin of this accession of beach wildrye.

Other Identification Numbers: AKPMC 80-7

Origin: Parental seed for this accession was collected by Stoney Wright with the Alaska Plant Materials Center on September 9, 1980. The collection site was on a beach segment near the USCG Narrow Cape Loran Station. Seed was collected from four seed heads of an isolated stand of beach wildrye measuring ten feet by six feet. This stand exhibited extremely lush growth and aggressive rhizomes. Tips of emerging rhizomes extended five feet from the parent stand.

Description and Occurrence: Benson beach wildrye is an erect, leafy, perennial, sod-forming grass. Leaf color is dark green with no sign of blue as seen in some Beach wildrye collections. Seed heads tend to retain a light greenish color when mature. At maturity, this cultivar ranges in height from 38 to 42 inches. An occasional seed stalk may reach 48 inches. Benson is easily distinguished from 'Reeve' beach wildrye in its appearance; Benson is truly green while Reeve exhibits a blue color. Also, Benson is less scabrous and has less rigid leaves than Reeve.

Elymus mollis, is the North American and Asian complex within the broader taxa Elymus arenarius. This species has a wide, broken circumpolar range and can be found in a narrow, coastal band extending from Oregon north around Alaska and Canada, Arctic coasts, the southern Greenland coast, and southward to New York. In Asia, the species can be found on the eastern coastline of Siberia and the Kamchatka Peninsula, south to Japan. However, within this broad geographic range, this species only occupies a relatively narrow niche adjacent to the sea coasts.

Development: This collection of beach wildrye has been evaluated by the Alaska Plant Materials Center since 1981 when the seed from the original 1980 collection was planted at Palmer. While the accession exhibited extremely aggressive vegetative growth, it failed to produce commercial quantities of viable seed. In 1983, a project using beach wildrye to control sand erosion problems on the Aleutian island of Shemya proved that transplanting beach wildrye was both practical and very successful. Sprigs of this accession have been tested on Shemya (1983 and 1985), Adak (1988), St. Paul (1987), Kodiak (1984) and a coastal site north of Kotzebue (1987). On all these sites the sprigs or transplants exhibited excellent performance. Further work with sprigs of Benson beach wildrye is planned for southeast Alaska and the Arctic coast.

Use: Benson beach wildrye was released with one use in mind, a native plant for rapid recolonization or reclamation of critical coastal areas where natural erosion would prevent traditional seeding methods. Benson is limited to transplanting and commercial production of sprigs. No seed will be available at the commercial level.

Area of Adaptation: This cultivar is adapted for use in sandy, coastal areas in southcentral Alaska, westerly through the Aleutian chain and north to Kotzebue. Further research should extend it's range of adaptation.

Propagation Characteristics: Benson beach wildrye propagation and sale is limited to vegetative means. Therefore, anyone interested in production and sale of this variety will need to have standard transplanting equipment. Harvest can be accomplished with either hand tools or mechanical potato harvesters. Harvest can be conducted during any period from May through July as the species can be planted any time during this period. Obviously, harvest should only occur if an immediate demand exists for the sprigs because storage time is limited.

On Shemya, a one-acre donor community of beach wildrye planted seven acres of disturbed land. This seven to one ratio indicates a potential yield per acre of beach wildrye sprigs.

Increase and Distribution: Benson beach wildrye stands and sprigs will be recognized in parent, generation I, generation II, and certified classes. Parent stands will be grown and maintained at the Alaska Plant Materials Center. Generation I class sprigs will be available to growers through the Alaska Seed Growers, Inc. (formerly the Alaska Crop Improvement Association). Interested growers should contact either the Alaska Plant Materials Center or Alaska Seed Growers, Inc.

Approved By:

Frank Mielke

Frank Mielke, Director
Division of Agriculture

4-18-91

Date

Harold C. Heinze

Harold C. Heinze, Commissioner
Department of Natural Resources

5/6/91

Date