UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE ABERDEEN, IDAHO

and

IDAHO AGRICULTURAL EXPERIMENT STATION ABERDEEN, IDAHO

NOTICE OF RELEASE OF HARDSTEM BULRUSH FOR LAND RESOURCE REGION B EAST SELECTED CLASS OF NATURAL GERMPLASM

The Natural Resources Conservation Service, U.S. Department of Agriculture and the Idaho Agricultural Experiment Station announce the release of a selected ecotype of Hardstem Bulrush (*Scirpus acutus*) for Land Resource Region (LRR) B East.

As a Selected release, this plant will not be given a name, but will be referred to as the Camas selection of Hardstem Bulrush to document its original collection location. The Camas selection is released as a Selected Class of certified seed (natural track).

This alternative release procedure is justified because existing commercial sources of Hardstem Bulrush are inadequate. Propagation material of specific ecotypes is needed for ecosystem restoration, enhancement, and construction of wetlands. The potential for immediate use is high, and commercial potential beyond specific wetland uses is probably limited. No commercial cultivars of Hardstem Bulrush have been released at this time.

Species: Scirpus acutus Muhl. ex Bigelow

New Name: Schoenoplectus acutus var. acutus (Muhl. ex Bigelow) A. &

D. Love

Synonymy: Scirpus lacustris L. p.p., Schoenoplectus ssp. acutus

(Muhl. ex Bigelow) A. & D. Love

Common Name: Hardstem Bulrush Plant Symbol: SCAC, SCACA

Accession Number: 9057643

The scientific name for Hardstem Bulrush has been changed from *Scirpus acutus* to *Schoenoplectus acutus var. acutus*. Taxonomists have found that Hardstem Bulrush more appropriately fits into the genus *Schoenoplectus*. We have chosen to release it as *Scirpus acutus* because of public recognition and familiarity.

Source: Camas National Wildlife Refuge (NWR), just west of the town of Hamer, Jefferson County, Idaho.

Collection area Information: Stands are located within Camas NWR. Very little variability among SCAC stands was observed within the boundaries of the NWR. This variability was judged to be inconsequential. Therefore, any collection of SCAC located within the NWR boundary would be considered a constituent of this Selected Release. Elevation is approximately 4800 feet, the soils are mostly poorly drained calcareous loams.

Method of Selection: From a Hardstem Bulrush collection found in Land Resource Region (LRR) B East, which includes Major Land Resource Regions (MLRAs) eastern 1/3 of 11, all of 12 and 13.

Collections were evaluated at the Aberdeen Plant Materials Center from 1991 to 1995. A total of 26 SCAC collections from the Aberdeen PMC Service Area were evaluated from 1991 to 1995. All collections were evaluated for survival, vigor, above ground biomass production, overall growth and spread, and potential seed production. Of these 26 collections, seven were from B East. Overall, the Camas collection outperformed all other collections from B East. The Camas collection ranked second out of 26 for above ground biomass production and within the top five for overall growth, overall spread, and seed production potential. The Camas selection of Hardstem Bulrush was selected for its rapid spreading from rhizomes, shoot density per unit area, vigor, seed production potential, and above ground biomass production. This accession needs special seed treatment and stratification procedures to achieve acceptable germination rates.

Description: *Scirpus acutus* is a perennial, densely colonial, rhizomatous, wetland obligate. Stems are upright, round, over 1 cm at the base (sometimes over 5 cm), up to 9 feet tall, not easily crushed between fingers. The leaves few, 3 to 5 basal sheaths with poorly developed blades, borne mainly toward the base of the culm. The inflorescence is a panicle of up to 60 spikelets. Spikelets mostly 8-15 mm long, more or less numerous in an open or compact inflorescence, all or nearly all are sessile in small clusters at the ends of mostly stiff and ascending branches of the inflorescence. Scales mostly 3, 3.5-4 mm long, thin with reddish-brown streaks on a pale, grey-white background. Achenes mostly 2.2-2.5 mm long, dark brown.

Anticipated Conservation Use: The potential uses of the Camas selection of *Scirpus acutus* include erosion control, Constructed Wetland System applications, wildlife food/cover, wetland creations and restorations, and for increasing plant diversity in wetland and riparian communities. Its tendency to spread rhizomatously makes the Camas selection an excellent plant for soil stabilization in sites which have saturated soils or standing water up to 12 to 18 inches deep. The rhizomes also form a matrix for many beneficial bacteria making this plant an excellent choice for wastewater treatment.

Potential Area of Adaptation: Scirpus acutus is an obligate wetland plant and is found throughout the Intermountain West. It commonly inhabits wetlands as an emergent in water depths up to about 18 inches. It will tolerate periods of inundation and drought. The Camas selection would be an excellent choice for use throughout the ecoregion defined as LRR B East.

Seed Maintenance: Breeders seed will NOT be maintained by the USDA-NRCS Plant Materials Center. To make collections of the Camas selection of Hardstem Bulrush, contact the Refuge Manager, Camas National Wildlife Refuge, U.S. Fish and Wildlife Service, 2150 East 2350 North, Hamer, ID 83425, (208) 662-5423. For official Selected tags to verify genetic identity of these plant materials, contact Idaho Crop Improvement Association (208) 377-3420.

Signature sheet for release of a selected class of:

C	mas Selection of Hardstem Bulrush (Scirpus acutus) for Land Resource Reg.	ion
(LRR) B	ast from Camas National Wildlife Refuge (NWR), just west of the town of Har	ner,
Jefferson	County, Idaho.	

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Idaho State Conservationist	

USDA, Natural Resources Conservation Service

Dr. Richard C. Heimsch	Date	
Director		
ID Agricultural Experiment Station		
University of Idaho		
·		
Gary R. Norstrom	Date	
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Signature sheet for release of a selected class of:

Camas Selection of Hardstem Bulrush (Scirpus acutus) for Land Resource Region (LRR) B East from Camas National Wildlife Refuge (NWR), just west of the town of Hamer, Jefferson County, Idaho.

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Date