

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

and

IDAHO AGRICULTURAL EXPERIMENT STATION
ABERDEEN, IDAHO

NOTICE OF RELEASE OF COMMON THREESQUARE
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 Common Threesquare (*Scirpus pungens*) 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 Market Lake selection of Common Threesquare to document its original collection location. The Market Lake selection is released as a Selected Class of certified seed (natural track).

This alternative release procedure is justified because existing commercial sources of Common Threesquare 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 Common Threesquare have been released at this time.

Species:	<i>Scirpus pungens</i> Vahl
New Name:	<i>Schoenoplectus pungens var. pungens (Vahl) Palla</i>
Synonymy:	<i>Scirpus americanus auct. non Pers.</i>
Common Name:	Common Threesquare
Plant Symbol:	SCPU3
Accession Number:	9057648

The scientific name for Common Threesquare has been changed from *Scirpus pungens Vahl* to *Schoenoplectus pungens var. pungens (Vahl) Palla*. Taxonomists have found that Common Threesquare more appropriately fits into the genus *Schoenoplectus* than *Scirpus*. We have chosen to release it as *Scirpus pungens* because of public recognition and familiarity.

Source: Market Lake Wildlife Management Area, just north of the town of Roberts, Jefferson County, Idaho.

Collection area Information: Stands are located within Market Lake WMA. Very little variability among SCPU3 stands was observed within the boundaries of the WMA. This variability was judged to be inconsequential. Therefore, any collection of SCPU3 located within the WMA 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 Common Threesquare 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.

A total of 12 SCPU3 collections from the Aberdeen PMC Service Area were evaluated from 1991 to 1995. All collections were evaluated for survival, overall growth and spread, vigor, and potential seed production. Two collections were made from B East. The Market Lake collection significantly outperformed the other collection from B East in all areas except seed production potential. It also ranked fourth overall out of all the SCPU3 collections in the Service Area. The Market Lake selection of Common Threesquare was selected for its rapid spreading from rhizomes, height, shoot density per unit area, and vigor. This accession needs special seed treatment and stratification procedures to achieve acceptable germination rates.

Description: *Scirpus pungens* is a perennial, rhizomatous, wetland obligate. Stems are upright, triangular, and grow up to 3 feet tall. The leaves are small, borne near the base, blades are elongate or reduced when the plant grows in shallow water rather than on wet ground. Inflorescence consists of a sessile, compact cluster of 1 to 8 spikelets which protrudes from the base of a prominent green bract, (1 to 6 inches) which appears as a continuation of the stem. Scales yellowish-brown to reddish-brown, thin, with a firm midrib. Bristles barbellate, 4-6, often unequal, not exceeding the achene. Achene 2.2-3.3 mm long (including the evident, slender stylar apiculus of about 0.5 mm) and 1.6-2.3 mm wide.

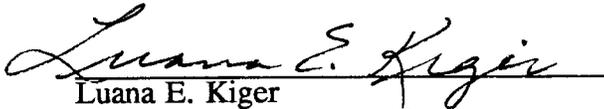
Anticipated Conservation Use: The potential uses of the Market Lake selection of *Scirpus pungens* include erosion control, Constructed Wetland System applications, wildlife food/cover, wetland creations and restorations, and for increasing plant diversity in wetland and riparian communities. Its tendency to spread rhizomatously makes the Market Lake selection an excellent plant for soil stabilization in sites which are saturated or have up to 6 inches of standing water. The rhizomes also form a matrix for many beneficial bacteria making this plant an excellent choice for wastewater treatment.

Potential Area of Adaptation: *Scirpus pungens* is an obligate wetland plant and is found throughout the Intermountain West. It commonly inhabits poorly drained soils which are saturated or have up to 6 inches of standing water. It will tolerate periods of inundation and drought. The Market Lake 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 Market Lake selection of Common Threesquare, contact the Market Lake Wildlife Management Area Manager, Idaho Fish and Game, Upper Snake Region, 1515 Lincoln Road, Idaho Falls, ID 83401-2198, (208) 525-7290. 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:

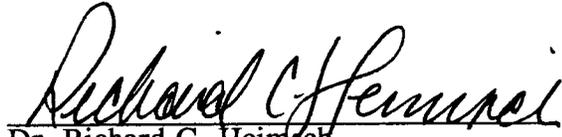
Market Lake Selection of Common Threesquare (*Scirpus pungens*) for Land Resource Region (LRR) B East from Market Lake Wildlife Management Area, just north of the town of Roberts, Jefferson County, Idaho.



Luana E. Kiger
Idaho State Conservationist
USDA, Natural Resources Conservation Service

4/8/97

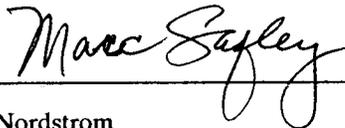
Date



Dr. Richard C. Heimsch
Director
ID Agricultural Experiment Station
University of Idaho

4/14/97

Date



Gary Nordstrom
Director
Biological Conservation Sciences Division
Natural Resources Conservation Service

7/18/97

Date