

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 WEST  
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 West.

As a Selected release, this plant will not be given a name, but will be referred to as the Fort Boise selection of Common Threesquare to document its original collection location. The Fort Boise 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.

<b>Species:</b>	<b><i>Scirpus pungens</i> Vahl</b>
<b>New Name:</b>	<b><i>Schoenoplectus pungens var. pungens (Vahl) Palla</i></b>
<b>Synonymy:</b>	<b><i>Scirpus americanus auct. non Pers.</i></b>
<b>Common Name:</b>	<b>Common Threesquare</b>
<b>Plant Symbol:</b>	SCPU3, SCPUP5
<b>Accession Number:</b>	9057578

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*. We have chosen to release it as *Scirpus pungens* because of public recognition and familiarity.

**Source:** Fort Boise Wildlife Management Area, west of the town of Apple Valley, Canyon County, Idaho.

**Collection area Information:** Stands are located within Fort Boise 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 2200 feet. The soils are mostly poorly drained calcareous loams, and the precipitation ranges from 8 inches to 10 inches.

**Method of Selection:** From a Common Threesquare collection found in Land Resource Region (LRR) B West, which includes Major Land Resource Regions (MLRAs) western 2/3 of 11, and all of 10.

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 of SCPU3 were made from B West. The Fort Boise collection outperformed the other collection from B West in all criteria except height. It also ranked in the top five overall for SCPU3. The Fort Boise selection of Common Threesquare was selected for its rapid spreading from rhizomes, shoot density per unit area, vigor, and potential seed production. 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 Fort Boise 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 Fort Boise 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 Fort Boise selection would be an excellent choice for use throughout the ecoregion defined as LRR B West.

**Seed Maintenance:** Breeders seed will NOT be maintained by the USDA-NRCS Plant Materials Center. To make collections of the Fort Boise selection of Common Threesquare, contact Fort Boise Wildlife Management Area Manager, Idaho Fish and Game, Southwest Region, 3101 S. Powerline Road, Nampa, ID 83686, (208) 465-8465. 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:**

**Fort Boise Selection of Common Threesquare (*Scirpus pungens*)** for Land Resource Region (LRR) B West from Fort Boise Wildlife Management Area, west of the town of Apple Valley, Canyon County, Idaho.

---

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

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

Gary R. Nordstrom \_\_\_\_\_ Date \_\_\_\_\_  
Director  
Biological Conservation Sciences Division  
Natural Resources Conservation Service