

BALTIC RUSH

Juncus balticus Willd.

Plant symbol = JUBA

Contributed by: USDA NRCS Aberdeen PMC



Photo by Derek J. Tilley

Uses

Baltic rush is suitable for erosion control, constructed wetland system applications, wildlife food and cover, wetland restoration and creation and improvement of plant diversity in wetland and riparian communities. Plants provide good cover and food for waterfowl, songbirds and small mammals. The rhizomes also host many beneficial bacteria making this plant an excellent choice for wastewater management applications.

Baltic rush is also traditionally used by Native American cultures in basketry as well as for food.

Status

Consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. wetland indicator values).

Description and Adaptation

Baltic rush is a perennial, rhizomatous wetland plant. It is the most widespread and common rush found the Great Basin and arid Intermountain regions. Plants form dense stands of dark green, round, upright stems from 30 to 90 cm (12 to 35 in) tall. Most leaves are basal and bladeless. A single, leaf-like bract subtends the inflorescence and appears to be an extension of the stem. 10 to 50 flowers are born in a loosely arranged panicle. The six tepals are 3.5 to 5 mm long. The fruit is a capsule which bears numerous tiny brown seeds (0.6 to 0.8 mm long)

Baltic rush is found at low to mid elevations and occasionally in subalpine and alpine sites. It grows in wet depressions, swales, meadows, sloughs and springs. Plants are both flood tolerant and drought tolerant. They are most often found in areas that are flooded in the spring and dry in the summer and fall.

Soils range from silt and clay loams to coarse substrates and peat soils. Plants have been documented growing on soils that are acidic to neutral to saline and sodic (pH 6 to 9 and EC<14).

Establishment

Seed does not require any pretreatment. Seed requires light, moisture and heat for germination. For greenhouse propagation, place seeds on soil surface and press lightly to assure good soil to seed contact. Do not cover seed. Soil should be kept moist, and the greenhouse should be kept hot, 32 to 38° C (90 to 100° F). Germination should begin within one week. Maintain soil moisture until transplanting. Plugs should be transplanted at 25 to 30 cm (10 to 12 in) spacing. This allows plants to fill in interspaces within one growing season. Soils should be kept saturated with no more than 8 cm (3 in) of standing water at any time during the first growing season. Fluctuating water levels during the establishment year will facilitate spreading. Seed can be collected by hand stripping or clipping with hand shears. Seed is very small and plants should be handled carefully to prevent seed loss.

Management

Hydrology is very important to the establishment and management of *Juncus* species. Standing water should fluctuate throughout the growing season and should be kept no deeper than 2.5 to 8 cm. Baltic rush can tolerate long periods of drought as well as total inundation. Water levels can be managed to control terrestrial weeds and to facilitate spreading of Baltic rush.

Pests and Potential Problems

There are no known problems with insects or diseases. Aphids will feed on the stems, but rarely cause significant damage.

Environmental Concerns

These selected class releases are from a species native to the Intermountain West and have no known negative impacts on wild or domestic animals.

Cultivars, Improved, and Selected Materials (and area of origin)

The Aberdeen PMC has released four performance tested ecotypes of Baltic rush from the PMC service area. Railroad Valley Selection was collected from the Railroad Valley Wildlife Management Area (WMA) in Nye County, NV. It was selected for use in Land Resource Region (LRR) D South. The Roswell Selection was selected for use in LRR B West. It was collected from the Roswell WMA near Roswell, ID. The Sterling Selection comes from the Sterling WMA, north of Aberdeen, ID and was selected for use in LRR B East. The Stillwater Selection was selected for use in LRR D North. The collection site was the Stillwater National Wildlife Refuge near Fallon, NV.

Fourteen Baltic rush collections were evaluated at the Aberdeen Plant Materials Center from 1991 to 1995. All collections were evaluated for survival, vigor, overall growth and spread, potential seed production, above ground biomass production, stability of land ownership, and public accessibility. The PMC released one selection from each LRR in the PMC service area. The released selections are the accessions with the best overall rating against others from within its respective LRR.

Generation 0 (G0) seed is maintained at Aberdeen PMC. Later generation seed (ie G1) is not produced, maintained or available through the USDA-NRCS Plant Materials Center. To make collections of these Baltic rush releases, contact the appropriate managing agency for the original collection site.

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

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