USDA NRCS
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Plant Fact Sheet

VIRGINIA WILDRYE

Elymus virginicus L.

Plant Symbol = ELVI3

Contributed by: USDA NRCS Kika de la Garza Plant Materials Center

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Uses

Livestock: Virginia wildrye (*Elymus virginicus*) is very palatable and nutritious, and is readily eaten by all classes of livestock in the spring and fall while it is green. It can be used in range restoration as a cool-season grass, and in native range seed mixes. It can also be used as a cool season pasture grass in shaded, wooded, or riparian areas. Virginia wildrye is a good forage producer. It can produce as much as 3,300 lbs of dry weight forage per dryland acre.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

Virginia wildrye is a native, cool season, perennial bunchgrass which grows two to three feet in height. It reproduces by tillering and seed. Virginia wildrye self-fertilizes, but has been known to hybridize and introgress (outcrossing depression).

Adaptation and Distribution

Virginia wildrye prefers moist soils, high soil fertility, heavier soil textures, and it is shade tolerant. It can be found scattered on shaded banks, along fencerows and in open woodlands. Virginia wildrye can be found throughout the United States except for Nevada, California, and Oregon. In Texas, it can be found occasionally throughout most regions with the exception of the most western fifth of the state.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Web site.

Britton & Brown 1913
Illustrated flora of the northern states and Canada

Establishment

Virginia wildrye is best established from seed. The Kika de la Garza Plant Materials Center in Kingsville, Texas has been looking at two collections of Virignia wildrye that are adapted to South and South Central Texas. We have had consistent

germination percentages above 85 percent. East Texas Plant Material Center in Nacogdoches, Texas is also evaluating this species for collections adapted to the northern and eastern portions of Texas and the Southern part of Oklahoma.

For South and South Central Texas, plantings should be done in the early fall on a clean, firm, weed-free seedbed, with adequate soil moisture. Planting depth will vary according to the soil type of the planting location. An emergence study conducted by the Kika de la Garza PMC (1998) found that seeds should be planted from ¼ - ½" deep on clay soil type, and up to 1" deep for sandier soils.

Virignia wildrye can be drilled at a minimum of ten pounds of pure live seed per acre, or broadcast at twenty pounds of pure live seed per acre. If it is a critical area planting or if dense coverage is desired, double the seeding rate. When including Virginia wildrye in a seed mixture, adjust the seeding rate accordingly. The planting should be considered successful if 1-2 plants are present per square foot planted. Stands are best established and maintained if they are not planted next to areas with a large concentration of aggressive warm-season grasses, such as K-R Bluestem or Buffelgrass.

Virginia wildrye is also a good seed producer. It can produce as much as 400 pounds of seed per dryland acre per year. Virginia wildrye contains approximately 80,000 seeds per pound.

Management
Virginia wildrye should not be grazed the first year, in order to allow the formation of a strong root system. Once established, graze on a rotational basis throughout the cool-season. Optimum forage height for use is between 4 and 10 inches.

Viriginia wildrye can be grown dryland or with irrigation. It should not be fertilized after planting until the new plants have become established. After the stand is established, fertilize as indicated by the results of recent soil tests.

Pests and Potential Problems
Virginia wildrye is susceptible to damage from white grubworms. Stands may be treated with diazinon, other grub-killing pesticides, or biological controls to limit damage. Treatment should be applied when the grubs are in the active phase, usually in the late spring or early summer. Consult with your local agricultural extension office for the treatment and timing most effective for your area.

For additional assistance regarding the production and establishment of Virginia wildrye, please contact the Kika de la Garza Plant Material Center at (361) 595-1313.

Cultivars, Improved, and Selected Materials (and area of origin)
Northern Missouri Germplasm Virginia Wildrye was released in 1999 by the Missouri Plant Material Center for use in northern Missouri.

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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>