

0-30% of a mixture, using the previous seeding rate PLS for a pure stand. Use no fertilizer the establishment year unless soil test indicates a low deficiency of less than 15 PPM of phosphorus and or less than 90 PPM of potassium. Use no nitrogen during the establishment year as this can encourage weed competition.

### Management

Weed control can be accomplished by mowing over the height of the Canada wildrye plants or cultivating between the rows. For broadleaf weed control usage of a post emergence broadleaf herbicide can provide control and will encourage a good stand. Remove dead plant material in the spring for faster green-up by shredding. Burning of straw will weaken the plants unless done before it has broken dormancy.

Early vigorous growth and a fibrous, wide-spreading root system make Canada wildrye a valuable ground cover.

### Commercial Production

For a solid stand seeding, plant late fall or early spring into a firm seedbed at a rate of 15 pounds PLS per acre. For optimum seed production, seeding rate should be 30 to 40 pure live seeds (PLS) per linear foot of row in 30 inch rows, or at a spacing to accommodate available equipment. Follow recommendation under establishment for stratification and fertilization program.

One year is usually necessary for stands to develop and produce. Plants will produce seed the first growing season with favorable growing conditions. Seed yields of 300 to 400 bulk pounds per acre have

been obtained from natural stands; yields from grass grown in rows and cultivated are higher.

### Availability

Foundation seed of Iowa Germplasm Canada Wildrye has been allocated to Iowa seed growers by the USDA-NRCS.

### For More Information

Visit our Plant Materials Internet site at <http://Plant-Materials.nrcs.usda.gov> to find more information on solving conservation problems using plants.

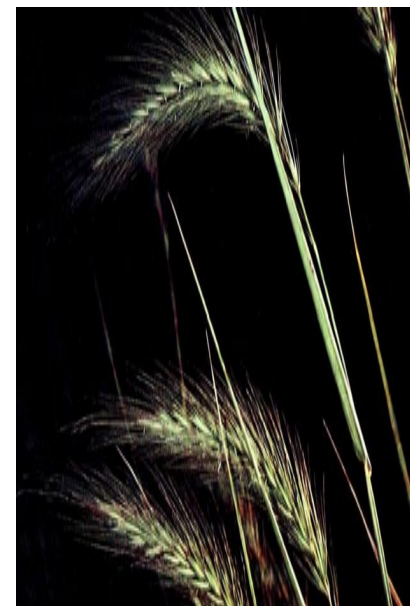
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# Iowa Germplasm Canada Wildrye



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Conservation Plants  
Developed by the  
Elsberry Plant  
Materials Center,  
Elsberry, MO



North, Central and Southern Iowa Germplasm of Canada Wildrye, (*Elymus canadensis* L.) Zones 1, 2 and 3 were released in 1994.

Cooperating agencies in these releases were: Natural Resources Conservation Service (NRCS), University of Northern Iowa (UNI), Iowa-Integrated Roadside Vegetation Management Program (IRVMP), Iowa Department of Transportation (IDOT), and the Iowa Crop Improvement Association (ICIA).

The Iowa Germplasm of Canada Wildrye is recommended for use in plantings on roadside re-vegetation, critical areas, wildlife food and habitat, parks, and recreational areas, and prairie restoration. Each zone is recommended for planting within its zone of origin. Zone 1 (Northern) is from the Northern three tiers of counties in Iowa. Zone 2 (Central) is from the Central three tiers in Iowa and Zone 3 (Southern) is from the Southern three tiers in Iowa.

*Elymus canadensis* L. can provide palatable and nutritious hay and forage to all classes of livestock. It is an important part of prairie pastures, however it can be a short-lived perennial. Canada wildrye has proven useful for wildlife food and cover and prairie restoration.

### Description

North, Central and Southern Iowa Germplasm of Canada Wildrye, Zones 1, 2 and 3, are cool-season native short-lived perennial bunchgrasses that tend to be more coarse than many of its close relatives. It grows 2 to 5 feet tall. Growth starts early

and often continues through the summer if moisture and temperature are favorable. In unfavorable years, growth may resume in the fall after a period of summer dormancy. Grass maturity may be reached in July. Almost 1 inch across and 12 inches long, leaf blades are thick and flat. The upper blade surface is rough to the touch and tends to curl inward near the tip. Their green color appears to be somewhat powdered with a whitish bloom. Where the leaf blade joins the sheath, an earlike lobe extends from the leaf margins to clasp the stem.

### Origin

North, Central and Southern Iowa Germplasm of Canada Wildrye, Zones 1, 2, and 3 originate from locations in the Northern, Central and Southern



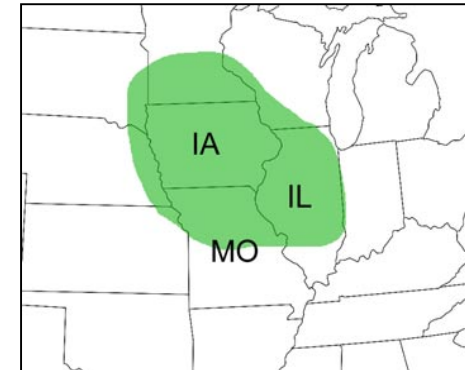
Yearbook of  
Agriculture 1948

counties of the state of Iowa; thereby making these accessions well adapted to these counties.

### Adaptation

Canada wildrye grows mostly in the tallgrass region in moist to moderately dry prairies, thickets, fields, and along stream-banks, usually in areas with a history of previous disturbance. It grows best on medium to well drained textured soils, but can also grow in moist, sandy soils.

### Recommended Area of Adaptation for Iowa Germplasm Canada Wildrye



### Establishment

Canada wildrye can be easily established by planting debarbed seed using a native grass drill. Plant unstratified seed in late fall or early spring into a firm seedbed. When seeding a solid stand in late spring use stratified seed (cold moist conditions for 60 days) at 15 pounds PLS per acre. Seed should be planted at a depth of 1/4 to 1/2 inch. The number of seeds per pound averages 115,000. Mixtures may be developed using Iowa NRCS Conservation Cover Standard. Canada wildrye is listed at