

PLANTING GUIDE

Elymus canadensis L.
species

Canada wildrye
common name

9062277
9062276
9062275

Description:

A cool-season native perennial bunchgrass, which is mildly rhizomatous. Leaves may be glaucous (greenish color which appears to be somewhat powdered with a whitish bloom); stems are erect, tufted, and generally one to 1.5 meters tall. Sheaths may be glabrous and the amount of hair found on them is variable. Leaf blades are flattened or curled inward near the tips and are generally rough to the touch. Leaf width is one to two centimeters. Where the leaf blade joins the sheath, an earlike lobe extends from the leaf margins to clasp the stem. The seedhead is usually drooping or nodding and is 10 to 25 centimeters long. Spikelets are commonly found in threes and fours; they spread away from the stem at the base of the seedhead. Glumes are narrow and also rough to the touch. Awns are two to three centimeters long and must be removed before it will flow satisfactorily through a drill. *Elymus canadensis* has a chromosome count of 28 and is a tetraploid $2n=4x=28$.



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

Revegetate roadsides in the state of Iowa along with providing hay and forage production as this species is palatable and nutritious to all classes of livestock. Canada wildrye was an important part of prairie pastures. Its stout creeping habit has potential for stabilizing sand or critical areas, it may prove useful for wildlife food and cover and prairie restoration.

Source: Collections were obtained from identified zones (North, Central and South) of native collections throughout the entire state of Iowa.

Establishment:

Prepare a clean weed free seedbed by disking and harrowing. Firm the seedbed by cultipacking or use of grass drill. Seedbed should be firm enough to allow the seed to be planted 1/4 - 1/2 inch deep. Use a no-till grass drill with double disc openers, depth bands, packer wheels, seed agitators and a positive feed mechanism capable of handling and applying the seed in a uniform manner. Plants are largely self-pollinated. Canada wildrye grows well on many kinds of soil and is especially well adapted to sandy soils. Growth starts early and often continues through the summer if moisture and temperature are favorable. Growth may resume in the fall after a period of summer dormancy. Grass maturity maybe reached in July.

The seedlings are very vigorous; therefore, new plantings can be established quickly. This makes Canada wildrye especially useful in mixtures with other grasses, many of which do not produce ground cover rapidly. The seed of wildrye is usually high in quality. It is ordinarily ready for harvest from July in the South to August in the Northern part of the region. Since the seed do not shatter readily, harvesting may be extended over a period of several weeks.

Fertilizer: Apply no fertilizer the establishment year unless soil test indicates a severe deficiency of nitrogen and/or phosphorus and potassium. On established stands apply nitrogen at 40 to 60 pounds per acre. Apply phosphorus and potassium according to soil test recommendations.

Seedins Rates: Seeding rates for Canada wildrye should be about 15 pounds of pure live seed (PLS) per acre drilled. For seed production, plant 30 to 40 PLS per linear foot of row when drilling in 30 inch rows (6 to 8 PLS per acre). There are approximately 115,000 clean debarbed seeds in one pound of Canada wildrye.

Seedins Dates: Spring (April to May), late summer (August to September) or dormant seeding (November to March. The seed of Canada wildrye needs cold stratification for maximum germination if eeded in spring or summer.

Manasement: Reduce weed competition by mowing at a height that will not affect the grass seedlings. Protect from grazing; use 2,4-D for broadleaf weeds. Remove dead plant material in spring for faster green-up by shredding. Burning of straw will weaken the plants unless done before it has broken dormancy.

(Note: These products may not be registered on this grass species in your state.