

## BLUE WILDRYE *Elymus glaucus*

**Market:** Disturbed sites, culvert removal, side cast, pull back, general reclamation and soil stabilization, DOT, USFS, SCS, USFWS, native riparian and upland sites.

**Characteristics:** Blue wildrye is a large, rapid developing, short lived, perennial bunchgrass native to the central and western US. It has approximately 120,000 seeds per pound. Blue wildrye grows where annual rainfall ranges between 10-40 inches and is generally more drought tolerant than meadow barley and California brome. Blue wildrye is an upright, tall grass ranging from 1-1.5 meters in height. Typical habitat consists of open woods, prairie, thickets, and moist or dry hillsides from sea level on the Pacific coast to high elevation in the Rocky Mountains (Hitchcock et al., 1969). Blue wildrye is genetically variable, but a highly self-pollinating species (Wilson et al., 1999). Populations appear to be highly differentiated (genetically different from each other). There are more compact leafy ecotypes adapted to sunny grassland habitats. Some with dark green dense leafy plant canopies and others almost leafless and light green in color. Important characteristics of this species for revegetation include broad adaptation, high seed production, ability to reseed readily, good ground protection, and strong seedling vigor. Blue wildrye exhibits intermediate shade tolerance. Blue wildrye is compatible with tree plantings and is utilized in revegetation of logged-off and burned-over timberlands and oak woodlands. Blue wildrye provides excellent wildlife habitat for mammals, birds and waterfowl. It does not become as rank or stemmy as introduced natives and provides more uniform cover.

**Comments:** Blue wildrye seed has distinct awn tipped glumes that require removal for effective seed box planting (de-bearding in seed cleaning process). Blue wildrye is susceptible to premature shatter during commercial seed production. It is one of the more popular native grasses at present because of its excellent seedling vigor and tolerance to shade. These characteristics make it a valuable tool in forest lower canopy revegetation projects.

**Seeding rate:** Seed @10-30 lbs. per acre. Lighter seeding rates are recommended on sandy loam soils and higher seeding rates on high bulk density or clay loam soils.

**Availability:** There are several populations of blue wildrye presently available for different elevation and watersheds of the Pacific Northwest. **Mid Willamette Riverbottom** blue wildrye is ecotype collected north of Albany, OR along the Willamette River flood plain. It is characterized by robust plant growth, heavy leaf canopy and attractive anthocyanin pigmentation of leaves and seed heads. **Eugene BLM** blue wildrye is characterized by robust seedling germination, slender leaf canopy, bright green leaf color and ivory colored seed heads. Other blue wildrye ecotypes adapted to the Pacific Northwest include **Siuslaw NF 3C** (coastal mountain range type with dense leaf canopy), **Salem BLM**, **USFWS Finley NWR**, **Portland Metro Cooper Mountain** and **NRCS-Corvallis** cultivars **Elkton** and **Arlington**. New in 2003 will be **GF Waterloo Williams Medford BLM**, **Fate Creek Roseburg BLM**, **Anaktuvak Medford BLM** and **Boomer Hill Roseburg BLM**.

