

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

and

OREGON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

and

WASHINGTON STATE UNIVERSITY AGRICULTURE RESEARCH CENTER

NOTICE OF RELEASE OF 'ARLINGTON' BLUE WILDRYE

The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Oregon State University Agricultural Experiment Station, Corvallis, OR and Washington State University Agriculture Research Center, Pullman, WA, announce the naming and release of 'Arlington' blue wildrye (*Elymus glaucus* Buckl.), a native perennial bunchgrass. It was selected and tested by the NRCS Plant Materials Center, Corvallis, Oregon, under temporary number 9019633 and assigned the permanent number PI-527333 in 1988.

'Arlington' blue wildrye was collected from a native stand two miles north of the city of Arlington in Snohomish County, Washington at an elevation of 200 ft. (61 m) above sea-level. The **seed** was originally obtained by employees of the NRCS (formerly the Soil Conservation Service) in 1979. It was evaluated for four years in a common garden at Corvallis against 128 other populations assembled from western Oregon, western Washington, northwestern California **and** several other western states. 'Arlington' was also tested in solid stands (swards) against other select blue wildrye accessions for two to four years at several sites in Oregon and Washington. There are no officially released cultivars of blue wildrye.

'Arlington' was not bred but was selected for its overall performance and uniformity (0-2% variants from generation to generation). It has been evaluated for culm height, above ground biomass, foliage appearance (as influenced by disease symptoms), foliage abundance, phenology, seed yield, vigor, and other characteristics. The variety can be distinguished from other populations tested by its combination of (1) three to five day later maturity, (2) light blue-green stem and foliage color in summer, (3) finer stems, and (4) slightly shorter culm height (range 60-140 cm, average 105 cm). The leaf blades are glabrous and the awns on the lemmas are 1-2 cm long as described for var. *glaucus* in Hitchcock, et. al. 1969. 'Arlington' maintains good vigor the first two to three years and **ranks** high in terms of foliage appearance (fewer visible disease symptoms, primarily leaf rust). The variety is dormant in winter (December to mid-March).

'Arlington' blue wildrye is a native, cool season, perennial bunchgrass. It establishes rapidly from seed but is short-lived. Field evaluations in western Oregon and Washington indicate that 'Arlington' is suitable for erosion control and quick, self-perpetuating cover on logging roads, cut-over timberland, burned areas and steep hillsides. Prior to maturity, blue wildrye is considered fair to good forage for cattle, horses, deer and elk, but poor for sheep. The species may also be less competitive with recently planted forest tree seedlings compared to certain introduced grasses. However, the specific forage value of 'Arlington' and its compatibility with tree plantations is not fully established.

The range of adaptation of 'Arlington' appears to be the Olympic Mountains of Washington **and** the Cascade Mountains, Coast Range and western interior valleys of Oregon and

Washington below an elevation of 2000 ft (610 m). Potential area of adaptation may extend to the north Coast of California and other regions with similar climate and soils within the species natural range. [USDA-SCS Major Land Resource Areas A1-4, US EPA Ecoregions 1-4]. Average annual precipitation should exceed 25 in (635 mm). Soils can vary from well-drained to somewhat poorly-drained and moderately coarse to fine textured. The species prefers partial shade to full sun.

'Arlington' is a public variety. Four classes of seed (breeder, foundation, registered, and certified) are recognized. Breeder seed will be maintained by the Natural Resources Conservation Service, Plant Materials Center (PMC), Corvallis, Oregon. Foundation seed and other classes may be produced by the PMC or commercial growers.

The NRCS has given due consideration to the National Environmental Policy Act in the release of this plant for commercial use.

Individuals who have concerns for native plant restoration in a particular environment or ecosystem may need to address those concerns on a case by case basis. NRCS makes no claims concerning the suitability of this plant in native plant restoration efforts.

REFERENCES

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