

REGISTRATION OF CHAMP BLUESTEM¹

(Reg. No. 2)

L. C. Newell²

'CHAMP' bluestem is an interbreeding population of divergent types (3,4) in the taxon comprising big bluestem (*Andropogon gerardi* Vitman) and sand bluestem (*Andropogon hallii* Hack.). It was released in 1963 by the Nebraska Agricultural Experiment Station in cooperation with the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture. Champ was developed by hybridization of 5 typical clones of big bluestem from the fine-textured prairie soils of Iowa and southeast Nebraska with 5 clones of sand bluestem from the northern Nebraska sandhills. Eight Syn-1 clones from each of the 10 reciprocal crosses were intercrossed in isolation. Breeder seed is the Syn-2 generation.

Plants of Champ are leafy and intermediate to parent types in many characters including basal spread. They are variable in culm and glume color from yellow-green to purple and in foliage color from light green to glaucous gray. Inflorescences are intermediate in awn length and villousness. The cultivar makes good vegetative growth during midsummer and is moderately late maturing, ordinarily 7 to 10 days earlier in heading and maturity for seed harvest than Pawnee big bluestem. Champ may be grown in solid stands or mixtures of warm-season grasses for conservation and forage uses on sandy as well as fine-textured soils in the Eastern two-thirds of Nebraska.

The principal area for seed production of Champ is central and eastern Nebraska as far north as the central Platte and lower Loup and Elkhorn valleys. Good yields of high quality seed are produced in cultivated rows with timely irrigation.

One generation each of breeder seed, foundation seed, and certified seed is recognized for Champ. Breeder seed and foundation seed grown from breeder seed are maintained by the Nebraska Agricultural Experiment Station. Certified seed produced from foundation seed is the market class for forage production and conservation plantings.

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³Newell, L. C. and LeRoy V. Peters. 1961. Performance of hybrids between divergent types of big bluestem and sand bluestem in relation to improvement. *Crop Sci.* 1:370-373.

⁴Peters, LeRoy V. and Newell, L. C. 1961. Hybridization between divergent types of big bluestem, *Andropogon gerardi* Vitman, and sand bluestem, *Andropogon hallii* Hack. *Crop Sci.* 1:359-363.

REGISTRATION OF BLAZE LITTLE BLUESTEM¹

(Reg. No. 3)

L. C. Newell²

'BLAZE' little bluestem (*Andropogon scoparius* Michx.) was released in 1967 by the Nebraska Agricultural Experiment Station in cooperation with the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture.

Blaze was developed by hybridization of clones derived from the 1953 Domestic Collections from native prairie in Nebraska and Kansas. Fifteen clones, selected for late maturity, leafiness, and good seed production, were polycrossed in isolation. Their progenies were selected again for seedling vigor and a green leaf character which proved recessive to glaucous blue foliage color. A second generation of synthesis provided breeder seed.

Blaze is a leafy, late-maturing variety. Individual plants may attain heights of 76 cm (30 inches) and spread of 38 cm (15 inches). Foliage is bright to dull green in color, turning to a deep anthocyanin red at maturity in fall months. In limited tests Blaze produced better stands and was more productive than other selected strains and native ecotypes. The variety is recommended for conservation plantings and pasture mixtures of warm-season grasses in central and eastern Nebraska and adjacent areas in bordering states. The area of reliable seed production is centered in southeast Nebraska.

Seed classes recognized for Blaze are three consecutive generations designated as breeder seed, foundation seed, and certified seed. Breeder seed and foundation seed are maintained by the Nebraska Agricultural Experiment Station. Certified seed is grown from foundation seed. It is the market class for range, pasture, and conservation plantings.

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