Registration of Crop Cultivars

REGISTRATION OF KANZA ALFALFA

(Reg. No. 41)

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'KANZA' alfalfa (Medicago sativa L.) was developed cooperatively by the Crops Research Division of the U. S. Department of Agriculture and the Kansas Agricultural Experiment Station. It was named and released jointly by the Crops Research Division, USDA, and the Kansas, Nebraska, and Oklahoma Agricultural Experiment Stations in February, 1969.

Kanza is a 7-clone, synthetic variety tested experimentally as KS12. Parentage traces to 'Cody', 'Culver', 'Kansas Common', and 'Turkistan'. Elite bacterial wilt-resistant plants selected from polycross progenies of clones that trace to Kansas Common and Turkistan x Kansas Common derivatives were crossed with spotted alfalfa aphid-resistant clones selected from Culver. The progenies were screened for resistance to pea aphid, spotted alfalfa aphid and bacterial wilt. Plants selected from the survivors on bases of agronomic characteristics and disease resistance in the field were crossed with plants derived from Cody through the same selection program. The seven parental clones of Kanza were the result of reselection from the progenies for the same traits.

Kanza has high resistance to the pea aphid, spotted alfalfa aphid, and bacterial wilt. It is more tolerant to potato leafhopper yellowing than 'Buffalo' or Cody but is similar to those cultivars in reaction to downy mildew, summer blackstem, Leptosphaeria leafspot and bacterial leafspot.

The winter hardiness and area of adaptation of Kanza appear to be similar to those of Buffalo and Cody. Forage yields were equal or superior to those of Buffalo or Cody in areas where the cultivars were compared. Kanza ranked high in a seed production trial in California. Its foliage is dark green; flower color ranges from purple to blue.

Seed classes are breeder, foundation, registered, and certified. Breeder seed is a composite of equal amounts from each of the seven parent clones, which are intercrossed under isolation. Foundation seed is the first generation grown from breeder seed. Breeder and foundation seed will be produced under the direction of the Kansas Agricultural Experiment Station. Registered seed is the first generation grown from foundation seed in the Central Alfalfa Region. Certified seed may be grown only from foundation or registered seed. The National Certified Alfalfa Variety Review Board issued a favorable report in December, 1968, on the application for certification of Kanza.

REGISTRATION OF WL 305 ALFALFA

(Reg. No. 43)

D. F. Beard

'WL 305' alfalfa (Medicago sativa L.) is an 8-clone wilt resistant synthetic cultivar developed by the Waterman-Loomis Company and first made available for trial plantings in 1967. Four of the parent clones were selected from 'WL 215' and one from 'Vernal.' Selection was based upon seed yielding capacity and resistance to leaffopper yellowing. The area to which WL 305 is adapted is similar to that of 'Buffalo' and 'WL 305,' where it exhibits only slightly more fall dormancy than those cultivars. In addition to its resistance to leaffopper yellowing, WL 305 has a significant level of resistance also to the pea and spotted alfalfa aphids, being superior in these characteristics to the cultivars Buffalo, 'Ranger' and Vernal. The forage yield of WL 305 has been more comparable to that of WL 303 and superior to that of Buffalo. The flower color of WL 305 is predominantly purple with about 30% variegated, white and yellow.

WL 305 was favorably reviewed by the National Certified Alfalfa Variety Review Board at its December 1968 meeting, and subsequently approved for certification.

Breeder seed is produced by growing the eight parent clones in isolated open pollination. Foundation or registered seed is produced from fields planted with breeder seed between the 55° and 43° parallels. Certified seed will be produced only from breeder seed or the first increase of breeder seed, whether it be foundation or registered.

REGISTRATION OF '520' ALFALFA

(Reg. No. 44)

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'520' alfalfa (Medicago sativa L.) is an 8-clone wilt resistant, winter-hardy synthetic cultivar adapted to the Northern and Central areas where 'Vernal' and 'Ranger' are grown. It was developed cooperatively by the Arnold-Thomas Seed Service and Pioneer Hi-Bred Corn Co. Seed of this cultivar will be available for 1970 seedings. The parent clones were selected from 'Vernal' (two), 'Narragansett' (one), 'Armin' (one), 'Culver' (two),