Registration of Crop Cultivars

REGISTRATION OF KANZA ALFALFA¹
(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 × Kansas Common derivatives were crossed with spotted alfalfa aphid-resistant clones selected from Culver. The progenies were screened for resistance to the 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, Lepotosphaerulina 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 Central Alfalfa Region. Certified 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.

¹Registered by the Crop Science Society of America. Received August 25, 1969.
²Vice President — Research, Waterman-Loomis Company.

REGISTRATION OF WL 305 ALFALFA
(Reg. No. 43)

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'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 'Buffalo' and 'WL 303,' where it exhibits only slightly less fall dormancy than those cultivars. In addition to its resistance also to the pea and spotted alfalfa aphid, WL 305 has been equal to or slightly higher in yield than either Vernal or 'WL 202' when harvested four times in northern Ohio and northern Illinois. Forage yields have been equal to or slightly higher than those of Vernal in the first- and second-harvest years and significantly higher in the third-harvest year. It has been more resistant to leafhopper yellowing and less fall-dormant than Vernal. The cultivar WL 305 is highly variegated with about 50% purple or blue coloration.

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 honeybee pollination in isolated open pollination. Foundation seed will be produced only from fields of either foundation (or breeder) seed. No other seed class of seed is to be used.

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²Vice President — Research, Waterman-Loomis Company.

In forage performance trials WL 215 has produced yields equal or superior to those of Buffalo and Cody in areas where 'Vernal' and 'WL 202' are grown. It was tested as an experimental cultivar in California. Its foliage is dark green; 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 selected clones in isolated open pollination. Foundation or registered seed will be produced from fields planted with breeder seed in a 1:1 ratio of 35° and 43° parallels. Certified seed will be produced from breeder seed or the first increase of breeder seed, foundation or registered.