REGISTRATION OF CROP CULTIVARS

range in color from dark purple to variegated with approximately 5% white and yellow.

WL 210 was favorably reviewed by the National Certified Alfalfa Variety Review Board at its December 1967 meeting, and subsequently approved for certification.

Breeder seed is produced by natural cross pollination of the 10 parent clones grown in isolation in Kern County, California. Foundation seed is produced in the northern region of adaptation only from breeder seed. Certified seed will be grown only from breeder or foundation seed. No other class of stock or commercial seed is planned or authorized for WL 210 to assure stability of performance.

REGISTRATION OF WL 214 ALFALFA

D. F. Beard

'WL 214' alfalfa (Medicago sativa L.) was developed by the Waterman-Loomis Company and first offered for sale in 1968. Its parentage traces to 82 spotted aphid resistant progenies from 'Atlantic,' 'Vernal,' 'Ranger,' 'Nebaska 67-283,' and 'Grimm' and 7 plant introductions. From this 82-progeny block, 1 to 14 plants (total of 244) from the best 49 progenies in wilt resistance were bulk harvested as 62 WB. WL 214 combines fast recovery with winter hardiness and moderately high resistance to the bacterial wilt organism. Its persistence and winter hardiness have been similar to Ranger. Late fall regrowth has been about 2 inches greater than that of WL 202 and an inch more than that of WL 210. At locations north of the 40th parallel WL 214 is similar to Buffalo in fall dormancy, but significantly superior to it in winter survival. The flowers of WL 214 are predominantly purple with a few white.

WL 214 was favorably reviewed by the National Certified Alfalfa Variety Review Board at its December 1967 meeting and subsequently approved for certification.

About 40 pounds of the original 62 WB seed are held in controlled storage as breeder seed for producing foundation seed. Foundation seed is grown only from breeder seed north of the Idaho-Nevada line in the Pacific Northwest. Certified seed may be produced only from breeder or foundation seed. No other generation or class of seed is to be produced to assure the consistent performance of WL 214.

1 Registered by the Crop Science Society of America. Received May 13, 1968.
2 Director of Research, Waterman-Loomis Company, Bakersfield, California.

REGISTRATION OF WL 303 ALFALFA

D. F. Beard

'WL 303' alfalfa (Medicago sativa L.) was developed by the Waterman-Loomis Company and has been commercially available since 1966. It is an 8-clone synthetic derived from 'Atlantic' (6) and 'Vernal' (2). The clones had been progeny tested and were selected for rapid recovery, high forage yield, and good winter survival in the Central Cornbelt. WL 303 is moderately resistant to bacterial wilt and has persisted significantly better than the wilt susceptible Flemish varieties. It has been equal or superior to the Flemish varieties in forage yield for two harvest years after seeding and superior to them thereafter. In several yield trials from Nebraska to Maryland and north to St. Paul, Minnesota, WL 303 has been the top yielder. It is significantly more fall dormant than the Flemish varieties. The flowers of WL 303 are predominantly purple and bluish purple with some variegation. About 2% are white, yellow, or cream colored.

1 Registered by the Crop Science Society of America. Received May 13, 1968.
2 Director of Research, Waterman-Loomis Company, Bakersfield, California.

WL 303 was favorably reviewed by the National Certified Alfalfa Variety Review Board at its December 1967 meeting, and subsequently approved for certification.

Breeder seed is produced by intercrossing the eight parent clones under isolated field conditions. Foundation seed is grown only from breeder seed in the area between the 37th and 44th parallels. Certified seed is produced only from breeder or foundation seed. No other seed class or generation is to be used to assure superior performance.

REGISTRATION OF MESILLA ALFALFA

Bill Melton

'Mesilla' alfalfa (Medicago sativa L.) was developed by the New Mexico Agricultural Experiment Station and released in November 1967.

Mesilla is a 4-clone synthetic tested experimentally at N.M. St. Selection of parent clones was by recurrent selection with progeny tests for forage yield, resistance to pea aphids (Acyrthosiphon pisum (Harris)), resistance to spotted alfalfa aphids (Thripocephalus maculatus (Buckton)), resistance to bacterial wilt (Corynebacterium ulis) and fusarium wilt (Fusarium solani). The parental clones and their origins are: 61-30 from 'Lahontan' × N.M. Common cross; 61-69 from an inbred intercross generation of the clone 7-375 derived from 'New Mexico Common'; 61-130 from an experimental synthetic of New Mexico Common and 'Zia' origin; and Nev. 729 developed from 'Nematan' by the U.S. Department of Agriculture, Agricultural Research Service, and the Nevada Agricultural Experiment Station.

Antibiuc tests showed that Mesilla was equal to Washoe in resistance to the green pea aphid and superior to Zia in resistance to the spotted alfalfa aphid. Mesilla was equal or slightly better than Zia in resistance to bacterial and fusarium wilts in disease nursery tests and like Zia in field persistence. Forage yields of Mesilla were 13% higher than Zia in 5 testing years at Las Cruces, New Mexico.

Mesilla has a short but definite dormancy period in fall and spring. This variety maintains a higher level of growth through the final cutting in October, then usually becomes dormant. Mesilla starts growth later in the spring than Zia but yields more at the first cutting. It has a more uniform purple flower color and vegetative growth than Zia. Mesilla performs well in resistance to the green pea aphid and superior to Zia in resistance to the spotted alfalfa aphid. Mesilla is equal or slightly better than Zia in resistance to bacterial and fusarium wilts in disease nursery tests and like Zia in field persistence.

Seed production of Mesilla shall be on a four generation basis; namely, breeder, foundation, registered and certified. Parent clones will be maintained and breeder seeds will be produced by the New Mexico Agricultural Experiment Station. Breeder seed will consist of equal amounts of polycross seed of the four parental clones produced under isolation.


1 Registered by Crop Science Society of America. Received June 7, 1968.
2 Associate Professor of Agronomy, Department of Agronomy, New Mexico State University, Las Cruces, N. M.

REGISTRATION OF FIRLBECKS III BARLEY

C. W. Schaller and Wilson H. Foote

'Firlebeck's III' barley (Hordeum distichum L. emend. Lam.), CI 10088, is a selection from the cross ('Ackermann's Isarin' × Weihenstephaner Meltuarestiizte C.P.) × (breeder owned strains × 'Heines Haisa 1'), made by J. Firlebeck, Gut Rinkam b.

1 Registered by Crop Science Society of America. Received June 3, 1968.
2 Professor, Agronomy Department, University of California, Davis, and Professor, Farm Crops Department, Oregon State University, Corvallis 97331, respectively.