Registration of Crop Varieties

REGISTRATION OF 'A-59' ALFALFA¹
(Reg. No. 30)

Edgar H. Beycr and J. L. Allison²

'A-59' alfalfa (Medicago sativa L.) was developed by the Farm Seed Research Corporation and placed in commercial seed channels by Ed. F. Mangelsdorf & Bro. Inc. A-59, experimentally designated as FSRC A-3, is adapted to the hay-producing areas of the Central United States.

A-59 was derived from 45 selected clones in established fields in Montana in 1957, 25 clones from a 2-year-old 'Vernal' field, 10 clones from a 10-year-old 'Ranger' field, and 10 clones from a 20-year-old field of common alfalfa. Twelve selected seedlings from each of the 45 parental clones were randomly planted in an isolation block near Bakersfield, Calif. Seed bulked from this isolation constitutes breeder seed stocks.

Forage yields of A-59 from tests in Illinois and Missouri compare favorably with Vernal and Ranger. Seed yields in California have been acceptable. A-59 has dark green foliage and flower color is variegated but less so than Vernal. It is later in fall dormancy than Vernal and is comparable with Vernal in reaction to leathopper yellowing and foliar diseases.

Seed production of A-59 shall be on a four-generation basis: breeder, foundation, registered and certified. Breeder seed will be maintained by Farm Seed Research Corporation and will consist of seed harvested in 1962 and 1963 from the original 540 selected seedlings. Foundation seed will be used for production of registered or certified seed. Certified seed fields will be established with foundation seed, except in an emergency when registered seed will be used. Foundation and registered seed will be produced in Kansas.

A-59 received favorable consideration by the National Certified Alfalfa Variety Review Board in 1966.

REGISTRATION OF 'FREMONT' ALFALFA¹
(Reg. No. 31)

W. A. Riedl and G. H. Starr³

'Fremont' alfalfa (Medicago sativa L.) is a 5-clone synthetic variety developed by the Wyoming Agricultural Experiment Station. The parent clones were selected from approximately 200 clones screened for bacterial wilt resistance from a large number of selections obtained from old alfalfa fields in Wyoming and commercial varieties. Progeny evaluations for forage and seed yield were made in polycross and diallel tests. Fremont is made up of three clones from old alfalfa fields in Wyoming, one from 'Ranger' and one from 'Turkestan.'

Fremont has been tested as W58 in the Northern States and in Alberta and Saskatchewan, Canada. The probable areas of adaptation for hay production are in Wyoming, western Nebraska and areas with similar climatic conditions.

Fremont is a high seed yielding variety, resistant to bacterial wilt, mildew and winter injury. It is intermediate to above average among the better adapted varieties in forage yield in Wyoming and western Nebraska.

Seed production of Fremont shall be on a three-generation basis: breeder, foundation and certified. Parent clones will be

¹ Registered by the Crop Science Society of America. Received Feb. 15, 1968.
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