REGISTRATION OF CROP VARIETIES

REGISTRATION OF BEAVER ALFALFA1

J. L. Bolton, R. W. Peake, and R. K. Downey

1'Beaver' alfalfa is a winter-hardy, wilt-resistant variety produced jointly by the Canada Department of Agriculture Research Stations at Saskatoon, Saskatchewan, and Lethbridge, Alberta. It was licensed for sale in Canada, April 1961.

The varietal origin of Beaver is 25% from 'Ladak'; 20% from 'Turkestan'; 15% each from 'Cossack', 'Viking', and material from the Universities of Nebraska and Wisconsin of undetermined but hardy origin; and 5% each from 'Grimm' and Rhizoma. The 10-parent clones were selected on polygamous progeny performance for with resistance, forage yield, and winter survival and on clonal performance for seed yield. Breeder seed was produced by mixing equal amounts of reciprocal crosses of all possible combinations between parent plants. The original clones are being maintained and will be used to reconstitute the variety as necessary.

Beaver is slightly more winter hardy than 'Vernal' and somewhat more resistant than Vernal to bacterial wilt. Recovery after cutting appears intermediate between Vernal and Ladak. The variety is largely purple-flowered but a few plants occur with lemon-yellow flowers, and with varying shades of green.

The seed yield of Beaver has been superior to Vernal and slightly below Ladak. In Alberta and Saskatchewan the forage yield averages 7 to 8% greater than Vernal, and in Manitoba and British Columbia equal to Vernal. The area of adaptation in western Canada, but yield trials in eastern Canada and the United States suggest that Beaver may be adapted in eastern Ontario and in the States of North Dakota, South Dakota, Minnesota, and Wisconsin.

Seed of Beaver is increased on a three-generation basis: Breeder, Foundation and Certified. Breeder seed will be maintained at Saskatoon and/or Lethbridge by the Canada Department of Agriculture. Foundation seed fields of Beaver were established in Alberta and Saskatchewan. Adequate supplies of Foundation seed are available through the Canadian Forage Seed Project.

REGISTRATION OF RAMBLER ALFALFA1

D. H. Heinrichs

1Rambler alfalfa (Medicago media Pers.) was developed by D. H. Heinrichs and released by the Swift Current Experimental Farm of the Canada Department of Agriculture in 1953. The variety is a synthetic of seven clones derived from a breeding program in which 'Ladak' (M. media), 'Siberian' (M. falcata) and 'Rhizoma' (M. media) were used as parental plants. The selections were evaluated for combining ability by progeny tests (1).

The creeping-root character in about 65% of the plants conspicuously differentiates Rambler from most other varieties. It is extremely winter hardy and drought resistant, and persists better than such northern varieties as 'Grimm', 'Ladak', and 'Vernal' under hay and pasture use on dryland in the Canadian Northern Great Plains Region. Rambler produces somewhat higher forage yields at the first cutting than Ladak, Grimm, and Vernal but less at subsequent cuttings. In the drier areas of the Canadian Prairies (15 inches of precipitation per annum or less) it out-yields other varieties whichever used as hay or pasture in spite of its slower recovery and earlier dormancy in the fall. Rambler yields less seed than common northern hay varieties but recent selection within breeder stock of the variety has improved its seed yielding potential.

The variety is well adapted for pasture and hay use in the Northern Great Plains of North America where rainfall is low and the winters are long and cold.

Rambler seed multiplication is restricted to three generations of seed increase, namely, breeder, foundation and certified. The breeder seed is maintained from the original intercrosses of the seven clones. The Experimental Farm, Swift Current, Saskatchewan, Canada, maintains the breeder stock of the variety and produces the breeder seed.

REGISTRATION OF ADELPHIA SOYBEANS1

J. C. Anderson

1'Adelphia' soybeans (Glycine max (L.) Merr.) originated as an F1 plant selection from the cross 'C1070' X 'Adams' in a cooperative program of the Purdue Agricultural Experiment Station and the U.S. Regional Soybean Laboratory. C1070 is a sister line of 'Kent'. Prior to release, Adelphia was identified as C1225. It is classified in maturity group III and is adapted to the southern half of New Jersey.

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1 Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy. Received June 10, 1955.

2 Head and Alfalfa Breeder, Forage Crops Section, Experimental Farm, Canada Department of Agriculture, Swift Current, Saskatchewan, Canada.


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