REGISTRATION OF AURORA ALSIKE CLOVER

C. R. Elliott

"AURORA" alsike clover (Trifolium hybridum L.) was produced to ensure adequate supplies of pedigreed seed of a Canadian variety of alsike clover for specific domestic and foreign markets. Aurora was given Canadian license No. 813, in September 1961. Eight indigenous seed lots were selected in 1960 from areas in Western Canada where the alsike clover seed had been grown commercially for periods exceeding 20 years. These lots were designated as Regional Strains and evaluated in uniform comparative trials conducted by the Research Station, Beaverlodge, Alberta, during 1961-1965. Trials were conducted at six locations extending from Prince George, British Columbia to Normandin, Quebec. All strains, with the exception of Strain 11 (Prince George), were similar thus were mixed in equal quantities and propagated in isolation at Beaverlodge to produce Breeder seed of the variety Aurora.

Aurora is typical for the diploid form of the species Trifolium hybridum L. in all plant characters. It is superior to 'Alon' and the Swedish variety "Tetra" in hardiness and seed yield. In forage production it was superior to Alon and equal to 'Ky. 51' tall fescue at Lexington, Ky. The difference between Kenwell and other commercial varieties in maturity, palatability, and competitive ability offers a better opportunity for maintaining associated legumes.

Relative palatability of Kenwell and 'Ky. 51' varieties was determined in one test during 1959 and 1960 by sampling a portion of the varieties before and after grazing to obtain dry matter consumption. Results from the test, repeated grazed for a 2-year period, showed that cattle consumed 44% more dry matter of Kenwell than of Ky. 51 when the animals were given free-choice of both varieties.

Kenwell, which is less robust and less competitive than Ky. 51, is considered satisfactory in those characteristics. Kenwell has greater tolerance to certain leaf diseases and, consequently, maintains better color during dry periods and into winter.

The variety is approximately 5 to 10 days later maturing than 'Alta,' 'Fawn,' 'Gois,' and Ky. 51 tall fescue at Lexington, Ky.

REGISTRATION OF BOREAL RED FESCUE

C. R. Elliott

"BOREAL" red fescue, Festuca rubra L., was produced by the Canada Department of Agriculture, Grass Seed Production, Beaverlodge, Alberta. It was licensed for sale in Canada, February 1966.

Boreal was developed as a general purpose variety for turf and pasture. Original selections were made in 1956 from rejuvenated commercial seed fields in Northern Alberta which had been seeded 10 to 15 years earlier to the 'Olds' red fescue. The 36 parent clones were selected on poly-cross progeny performance for seed and forage yields, maturity, and height. Syn 1 seed, used to establish the breeder seed plot, is constituted by mixing equal amounts of polycross seed from each parent clone. The parent clones are maintained at Beaverlodge and will be used to reconstitute the variety as required.

Boreal was superior to Olds, 'Duraturf,' 'Penlawn,' and 'Illahee' red fescue in seed and forage yields and seedling vigor in comparative tests in Western Canada. It is more winter hardy than Penlawn or Ilahee and equal to Olds and Duraturf. It tends to have a stronger creeping root system than these varieties. Boreal has a high degree of uniformity in the mature seed stand thus facilitating straight-combine harvesting in most seasons.

Seed of Boreal is increased on a three generation basis; breeder, foundation and certified. Breeder seed will be maintained at Beaverlodge by the Canada Department of Agriculture. Foundation seed is available through the Canadian Forage Seeds Station and the Crops Research Division Agricultural Research Service, U. S. Department of Agriculture.