Narragansett, REG. NO. 4

Narragansett alfalfa is a new variety developed at the Rhode Island Agricultural Experiment Station by T. E. Odland and associates. It is a very winter-hardy variety. Stands are readily established and it ranks high in yields where bacterial wilt does not decimate the stands. The greatest single weakness of the variety is its susceptibility to bacterial wilt disease. At the Wisconsin Agricultural Experiment Station, Narragansett was more susceptible to artificial inoculations of bacterial wilt in 1951 than Cossack alfalfa. In another field trial begun at the same station in 1949, Narragansett was more susceptible to bacterial wilt during an epidemic in 1950 than Williamsburg (a selection from Kansas common alfalfa) but less susceptible than Rhizoma alfalfa.

Where wilt was not prevalent, the yields of Narragansett have been at or near the top in several trials. At the Rhode Island Agricultural Experiment Station, Narragansett produced an average yield of 5.01 tons of hay per acre for a period of four years (1946-49) compared with 4.77 tons for Atlantic and 4.57 tons for Ranger. At eight locations in New York the yields of Narragansett for the first year after seeding averaged 3.32 tons per acre compared with 2.80 tons for Atlantic and 2.53 tons for Ranger. The second year; yields of Narragansett, Atlantic and Ranger at seven locations in New York ranked similarly.

The foliage of Narragansett alfalfa has a dark green color. It has shown a substantial degree of tolerance to leaf diseases. In one trial at Tully, N. Y., the score on leaf spot diseases in 1948 was 4.2 for Narragansett, 6.8 for Ranger, 7.2 for Atlantic, 8.1 for Grimm, and 9.0 for Kansas Common. These ratings were on the basis of 1 for the least evidence of leaf spot and 10 for the most. Ratings on the prevalence of leaf spot based on the same scale, at Ithaca, N. Y., in 1949 were as follows: Narragansett, 6.3; Ranger, 8.0; Atlantic, 7.5; Grimm, 7.2; and Kansas Common, 8.6.

The crowns of Narragansett alfalfa are relatively wide and stems are for the most part erect. In trials at Wisconsin, the recovery of Narragansett alfalfa after cutting was somewhat like that of Cossack being less rapid than Ranger, Grimm, Atlantic, or Buffalo alfalfa but more rapid than Rhizoma.

The flowers of Narragansett are highly variegated in color and when heavily in blossom this characteristic distinguishes Narragansett from varieties like Common, Grimm and others whose flowers show less diversity of color.

Narragansett alfalfa should fill a need in the areas of the north-eastern states and elsewhere in northern United States where wilt disease is not a serious factor. When seed is plentiful and relatively cheap it may be used for short rotations even on soils where infections of bacterial wilt in susceptible alfalfa are moderate in occurrence.

There is a very wide diversity of plant types in Narragansett. This characteristic may help to give Narragansett a wide range of culture in the northern half of the United States.