yr of this selection pressure, 70% of the population was lost. Three hundred vigorous plants were selected from the survivors in April 1987. These 300 plants were moved to isolation and mated using honeybees in the summer of 1987. Seeds from these plants were collected, bulked, and designated AU CYCLE 2 alfalfa.

AU CYCLE 2 alfalfa is quite variable in morphological characters including flower color, leaf size and shape, stem diam., and stem rigidity. It is expected to be superior in persistence in the Southeastern U.S. environment. Seed will be maintained in cold storage and will be distributed in limited quantities (5 g) upon request from the Agronomy and Soils Department, Auburn University, Auburn, AL 36849.

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References and Notes


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REGISTRATION OF K81-7Ve2 ALFALFA GERMPLASM WITH RESISTANCE TO FIVE DISEASES AND FOUR INSECTS

K81-7Ve2 alfalfa (Medicago sativa L.) germplasm, Reg. no. GP-210 (PI 522239) was released by the USDA-ARS and the Kansas and Washington Agricultural Experiment Stations in May 1988. This germplasm provides resistance to anthracnose (caused by Colletotrichum trifolii Bain), bacterial wilt (caused by Clavibacter michiganense subsp. insidiosum Davis et al. 1984), downy mildew (caused by Peronospora trifoliorum d By.), Fusarium wilt (caused by Fusarium oxysporum Schlecht. f. sp. medicaginis (Weimer) Snyd. & Hans.) Verticillium wilt (caused by Verticillium albo-atrum Reinke & Berth.), blue alfalfa aphid (Acyrthosiphon kondoi Shinji), pea aphid [Acyrthosiphon pisum (Harris)], spotted alfalfa aphid [Theroaphis maculata (Buckton)], and potato leafhopper [Empoasca fabae (Harris)].

K81-7Ve2 was derived from a double strain cross (K81-7). Resistance to diseases and insects was developed in each of four alfalfa strains: K79-8 ('Liberty'), K73-19 ('Buffalo', 'Cherokee', 'Kanza', 'Kansas Common', and MSA W4), KSl1 ('Buffalo', 'Cody', 'Kansas Common', 'Culver', and 'Sirs 100'), and KS74 ('Sirs'). The estimated germplasm constitution (1) of K81-7Ve2 is: 68% Chilean, 17% M. varia, 7% Turkistan, 4% Ladak, 3% Flemish, and 1% Indian. The strain crosses (K79-8 x KS11) and (K73-19 x KS74) and the double strain cross were made in the greenhouse by hand pollination. Over 75 plants of the Syn 2 generation of each

aphid were conducted at Manhattan, KS. Percentages of seedlings surviving after infestation with disease and insect isolates include: Anthracnose, Fusarium wilt, Phytophthora root, Downy mildew, Bacterial wilt, and Potato leafhopper. The percentages of seedlings surviving after infestation with disease and insect isolates include: Anthracnose, Fusarium wilt, Phytophthora root, Downy mildew, Bacterial wilt, and Potato leafhopper.

Five grams of K81-7Ve2 seed are available upon written request. It is requested that appropriate recognition of source be given when K81-7Ve2 germplasm contributes to the development of a new cultivar or hybrid. K81-7Ve2 is maintained by the Department of Agronomy, Kansas State University, Kansas State University, Manhattan, KS 66506.

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References and Notes

2. (R) = resistant control; (S) = susceptible control.
3. E.L. Sorensen, USDA-ARS and Dep. of Agronomy of Plant Pathology, and E.K. Horber, Dep. of Agronomy, University, Kansas State University, Manhattan, KS 66506; and R.N. Peaden, Agric. Res. and Ext. Ctr., Prosser, WA 99350. Investigations of the USDA-ARS, the Kansas Agricultural Exp. Stn. and KS207 Alfalfa GERMPLASM WITH RESISTANCE TO FIVE DISEASES AND THREE INSECTS

KS207 alfalfa (Medicago sativa L.) germplasm, Reg. no. GP-211 (PI 522340) was released by the USDA-ARS and the Kansas Agricultural Experiment Stations in May 1988. This germplasm provides resistance to anthracnose, race 1 (caused by 

Riley. K81-7Ve2 was similar to Saranac and Kanza as did the Kansas and Washington Agricultural Experiment Stations in May 1988.

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