REGISTRATION OF ‘WL 605’ ALFALFA

‘WL 605’ alfalfa (Medicago sativa L.) (Reg. no. 145) (PI 508281) was developed by W-L Research. It was tested under the experimental designation B-57 and released in September 1985.

WL 605 is a 177-clone synthetic cultivar. Parental clones were selected following a cycle of recurrent phenotypic selection for resistance to the blue alfalfa aphid [Acyrthosiphon kondoi (Shinji)] and one cycle for tolerance to anthracnose (caused by Colletotrichum trifolii Bain.). The component populations had been screened previously for resistance to spotted alfalfa aphid [Theroaphis maculata (Buckton)], Phytophthora root rot (caused by Phytophthora megasperma Drechs. f. sp. medicaginis Kuan & Erwin), and Fusarium wilts (caused by Fusarium oxysporum Schlecht. f. sp. medicaginis (Weimer) Snyd. & Hans.). Source germplasm includes plants selected for resistance to downy mildew (caused by Peronospora trifoliorum d By.) within field plots of two WL experimental cultivars, plus germplasm tracing to 'CUF 101', 'Siriwer', and three releases from the University of California, namely, UC 123, UC 143, and A77-10B.

The fall dormancy of WL 605 is similar to that of CUF 101. It has high resistance to Phytophthora root rot (superior to MnPD-1), spotted alfalfa aphid (equal to PA-1), Fusarium wilt (equal to ‘Moapa 69’), blue alfalfa aphid (superior to CUF 101), and pea aphid [Acyrthosiphon pisum (Harris)] (equal to PA-1); and moderate resistance to stem nematode [Ditylenchus dipsaci (Kuhn) Filipjev]. It is susceptible to anthracnose and bacterial wilt (caused by Corynebacterium insidiosum (McCull.) H.L. Jens.).

WL 605 is a very nondormant cultivar adapted for forage use in the southern USA, particularly in the southern portion of the southwestern region. The flower color is purple (100%) with occasional variants.

One generation each of breeder seed (Syn 1), foundation (Syn 2), and certified (Syn 3) seed classes is recognized. Breeder seed was produced under cage isolation at Bakersfield, CA. Sufficient foundation seed was produced in the lower San Joaquin Valley, CA, for the life of the cultivar. A maximum of 3 and 5 harvest yr are permitted on fields producing foundation and certified seed, respectively.

WL 605 was reviewed favorably in 1985 by the National Certified Alfalfa Variety Review Board. Seed of WL 605 must be sold by cultivar name only as a class of certified seed, under provisions of U.S. Plant Variety Certificate 8600042.

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References and Notes

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