REGISTRATION OF ‘WL 605’ ALFALFA

‘WL 605’ alfalfa (Medicago saliva 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-clonal 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 (Thripaphis maculata (Buckton)), Phytophthora root rot (caused by Phytophthora megasperma Drechs. f. sp. medicaginis Kuan & Erwin), and Fusarium wilt (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’, ‘Siriver’, 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 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 (Harris)). The component populations had been screened previously for resistance to root rots, wilts, anthracnose (caused by Colletotrichum trifolii Bain.), and spotted alfalfa aphid (Thripaphis maculata (Buckton)). All populations were included in one cycle for more controlled inoculation tests for resistance to bacterial wilt (caused by Corynebacterium insidiosum (McCull.) H.L. Jens.), anthracnose, and resistant source germplasm from several other cultivar and germplasm sources.

The fall dormancy of WL 320 is similar to that of CUF 101. It has resistance to bacterial wilt (equal to PA-1), spotted alfalfa aphid (equal to Kanza), moderate resistance 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 southwestern 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. Sufficent 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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