REGISTRATION OF ‘OK 49’ ALFALFA

‘OK 49’ ALFALFA (Medicago saliva L.) (Reg. no. CV-171, PI 547906) was developed by the Oklahoma Agricultural Experiment Station, Oklahoma State University, Stillwater. This cultivar was tested under the experimental designation OK 49 and was released in October 1990.

OK 49 was synthesized using 94 plants originating from strain crosses of experimental lines selected through recurrent phenotypic selection for resistance to one or more of the following: bacterial wilt [caused by Clavibacter michiganense subsp. insidiosum (McCulloch) Davis et al. 1984], phytophthora root rot (caused by Phytophthora megasperma Drechs. f. sp. medicaginis T. Kuan & D.C. Erwin), fusarium wilt [caused by Fusarium oxysporum Schlechtend. f. sp. medicaginis (J.L. Weimer) W.C. Synder & H.N. Hans.], spotted alfalfa aphid (Theroaphis maculata (Buckton)) collected in Oklahoma, and blue alfalfa aphid (Acythosiphon kondoi Shinji) collected in Oklahoma. Estimated contributions of germplasm sources to OK 49 were 95% Chilean, 1% Turkistan, 1% Flemish, and 3% unknown, tracing back through five Oklahoma Agricultural Experiment Station experimentals (>90% from Oklahoma common strains and <10% from unreleased germplasm from the USDA/North Carolina State Univ. breeding program).

OK 49 is similar to ‘DuPuits’ in fall dormancy. It has resistance to biotypes of the spotted alfalfa aphid collected in Oklahoma and to fusarium wilt; moderate resistance to bacterial wilt, phytophthora root rot, and anthracnose (caused by Colletotrichum trifolii Bain & Essary, Race 1); and low resistance to biotypes of the blue alfalfa aphid collected in Oklahoma. It is susceptible to aphanomyces root rot (caused by Aphanomyces euteiches Drechs.) and evaluated for reaction to verticillium wilt (caused by Fusarium oxysporum f. sp. albo-atrum Reinke & Berthier), pea aphid (Acyrthosiphon pisum (Harris)), or alfalfa stem nematode (Heterodera glycines (Kühn) Filipjev). Flower color is >99% purple and <1% variegated.

Seed increase is limited to Syn. 2 generation for breeder, Syn. 3 for foundation, and Syn. 4 for certified seed. Maximums of 3 and 5 harvest yr are permitted for breeder and producing foundation and certified seed, respectively. Seed shall be sold by cultivar name only as a class of certified seed. OK 49 was reviewed favorably by the National Alfalfa Variety Review Board in 1991. A request shall be made for plant variety protection. Marketing rights were exclusively assigned to the Oklahoma Agricultural Experiment Station to Calvet Ranch, Inc., Bella Vista, OK.

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References and Notes


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REGISTRATION OF ‘CP 70-324’ SUGARCANE

‘CP 70-324’ SUGARCANE (a complex hybrid of Saccharum officinarum L., S. spontaneum L., and S. barberi Jeswiet) (Reg. no. CV-89) (PI 553072) was selected in Louisiana from progeny of the cross CP 61-39 × ‘CP 57-614’ (1), which was made at Canal Point, FL. The seed were germinated at the USDA Sugarcane Field Station at Houma, LA, and seedling selection and early testing were done there. The cultivar CP 70-324 was introduced to Texas variety trials in 1981, developed through cooperative research by Texas A&M University, the USDA-ARS, the Rio Grande Valley Sugar Growers, Inc., and Rio Farms, Inc., and then released in the summer of 1990.

CP 70-324 is an early-maturing sugarcane variety suitable for production of second ratoon cane. In comparisons with the dominant variety, NCo 310, the variety of CP 70-324 had greater yields of both sugar per tonne and sugar per hectare in 9 of 21 comparisons when harvested late. Compared to CP 70-321 in only seven tests, CP 70-324 was superior in sugar per tonne in 22 of 23 comparisons, and equal or greater in 324 was superior in sugar per tonne in a combined analysis of tonnes of cane per acre in one test, greater percent sugar recovery.

Replicated testing of CP70-324 bean in the Rio Grande Valley of Texas in 1981, and in 7 yr was harvested 23 times across 13 locations; harvests included plant, first, and second ratoon cane. In comparisons with the dominant variety NCo 310, being equal to CP 70-321 in this respect.

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