REGISTRATION OF CROP CULTIVARS

REGISTRATION OF 'WL 516' ALFALFA

'WL 516' alfalfa (Medicago sativa L.) (Reg. no. 143) (PI 508279) was developed by W-L Research. It was tested under the experimental designation B-10 and released in September 1985.

WL 516 is a 219-clone synthetic cultivar. Parental clones were derived from two experimental cultivars that had exhibited superior persistence and forage yield potential in tests at Bakersfield, CA. The two experimental cultivars were screened for resistance to Phytophthora root rot (caused by Phytophthora megasperma Drechs., f. sp. medicaginis Kuan & Erwin), recombinant, and screened for resistance to anthracnose (caused by Colletotrichum trifolii Bain.). Clones contributing to the two experimental cultivars were selected on the basis of three to four cycles of recurrent phenotypic selection that included screening for resistance to one or more of the following: spotted alfalfa aphid [Theroaphis maculata (Buckton)], pea aphid [Acrythosiphon pisum (Harris)], blue alfalfa aphid [Acrythosiphon kondoi (Shinji)], Fusarium wilt [caused by Fusarium oxysporum Schlecht f. sp. medicaginis (Weimer) Sned. & Hans.], and bacterial wilt [caused by Corynebacterium insidiosum (McCull.) H.L. Jens.]. The original germplasm traces primarily to 'Sonora', 'Lahontan', 'Moapa', 'Buffalo', and Kansas Common, with limited contributions from 'Saranac', 'Ranger', and 'Atlantic'.

The fall dormancy of WL 516 is similar to 'Moapa 69'. It has high resistance to Phytophthora root rot (superior to MnPD-1), spotted alfalfa aphid (equal to 'CUF 101'), pea aphid (superior to PA-1), Fusarium wilt (equal to Moapa 69), and blue alfalfa aphid (equal to CUF 101); moderate resistance to stem nematode [Ditylenchus dipsaci (Kuhn) Filipjev] and bacterial wilt; and low resistance to anthracnose.

WL 516 is a nondormant cultivar adapted for forage use in the southern and southwestern regions of the USA, and in other areas where nondormant cultivars are grown. Essentially all flowers are purple at full bloom, although occasional variants may be observed.

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 516 was reviewed favorably in 1985 by the National Certified Alfalfa Variety Registry, approval for commercial marketing is recognized. Breeder seed was produced under cage isolation at Bakersfield, CA. Sufficient foundation seed was produced at Corcoran, CA for the life of the cultivar. A maximum of 3 and 5 harvest yr are permitted on fields producing foundation, registered, and certified seed, respectively.

WL Southern Special was reviewed favorably in 1982 by the National Certified Alfalfa Variety Registry, approval for commercial marketing is recognized. Breeder seed was produced under cage isolation at Bakersfield, CA. Sufficient foundation seed was produced at Corcoran, CA for the life of the cultivar. A maximum of 3 and 5 harvest yr are permitted on fields producing foundation, registered, and certified seed, respectively.

REGISTRATION OF 'WL SOUTHERN SPECIAL' ALFALFA

'WL SOUTHERN SPECIAL' alfalfa (Medicago sativa L.) (Reg. no. 144) (PI 508280) was developed by W-L Research. The cultivar was tested under the experimental designation B-11 and released in September 1982.

WL Southern Special is a synthetic cultivar produced following controlled screening tests for resistance to bacterial wilt [caused by Corynebacterium insidiosum (McCull.) H.L. Jens.], Phytophthora root rot [Phytophthora megasperma Drechs. f. sp. medicaginis (Weimer) Snyd. & Hans.], and bacterial wilt; and low resistance to anthracnose.

The fall dormancy of WL Southern Special is somewhat comparable to 'DuPuits'. It has resistance to bacterial wilt (equal to Vernal), pea aphid (equal to 'Baker'), and spotted alfalfa aphid [Theroaphis maculata (Buckton)], and limited tolerance to Lepto leaf spot [caused by Leptosphaeria tenui (Poll.) Graham & Luttrell]. The 57 clones contributing to intermediate fall dormancy following one or more nursery plantings for vigor, apparent disease resistance, and persistence. Source material included 'Saranac', 'Kanza', 'Atlantic', 'Ranger', and lesser contributions from several other germplasm.

WL Southern Special is intermediate in fall dormancy and a moderately winter-hardy cultivar adapted from Virginia to Georgia, and westward to the Plains and central California. Approximately 98% of its flowers range from dark purple to light purple, green and 1% white.

One generation each of breeder seed (Syn 1), foundation (Syn 2), registered (Syn 3), and certified (Syn 4) seed is recognized. Breeder seed was produced under cage isolation at Bakersfield, CA. Sufficient foundation seed was produced at Corcoran, CA for the life of the cultivar. A maximum of 2, 3, and 5 harvest yr are permitted on fields producing foundation, registered, and certified seed, respectively.