Mesilla by 34, 18, and 33% in high moisture stress, intermediate moisture stress, and optimum moisture conditions, respectively.

The Syn. 1 seed was produced by polycrossing the 29 parent clones in replicated, cage isolated crossing blocks with pollination by honeybees (Apis mellifera L.) with equal quantities from each parent composited. The Syn. 2 seed (Breeder seed) was produced from Syn. 1 in geographic isolation. Seed increase is on a four generation basis with certified seed produced from foundation or registered seed classes in New Mexico, Idaho, California, Washington, or Oregon. Stand longevity will be limited to 4 yr for breeders and foundation seed fields and 6 yr for registered or certified seed fields.

Wilson was favorably reviewed by the National Certified Alfalfa Variety Review Board in January 1988. Application will not be made for plant variety protection.

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References and Notes
1. The field stress procedure consists of (i) selecting a uniform, well-drained field, (ii) seeding at 22 to 45 kg/ha using two or three irrigations for seeding establishment, (iii) no further irrigations, (iv) select when approximately 99% of plants appear dead for ability to survive and grow, and (v) selections usually made in mid-summer of second year.


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REGISTRATION OF ‘555’ ALFALFA

‘555’ alfalfa (Medicago sativa L.) (Reg. no. 157) (Pl 522244) was developed by Pioneer Hi-Bred International, Inc. and tested experimentally as XAR53, YAR53, JHR872, and 83SR221. The variety was released 25 February, 1988.

555 is a 14-clone synthetic with parental clones selected for rapid postharvest regrowth, observation of forage yield and resistance to: bacterial wilt (caused by the bacterium Clavibacter michiganense subsp. insidiosum Davis et al. 1984), anthracnose (caused by Colletotrichum trifolii Bain), Phytophthora root rot (caused by Phytophthora megasperma Drechs, f. sp. medicaginis Kuan and Erwin), winter survival and plant vigor at Johnston, IA. Germplasm sources(1) of 555 include approximately 24% ‘Kanza’, 33% M. varia, 12% ‘Ladak’, 11% Turkistan, 17% Chilean, and 24% Flemish tracing back through ‘Kanza’, ‘Saranac’, ‘Culver’, ‘Vernal’, ‘530’, ‘DuPuits’ and ‘MSWT65’.

Fall dormancy of 555 is similar to the variety 555 has resistance to bacterial wilt, Fusarium oxysporum Schlect, f. sp. medicagoe [Fusarium oxysporum Schlect, f. sp. medicagoe] and spotted alfalfa aphid (Acyrthosiphon pisum (Harris)) biotypes from California. 555 has been tested for forage yield in the central and southern regions of the USA. Seed increase is limited to one, two, and one generation for breeder, foundation, and certified seed, respectively. Seed produced from the certified class is not recognized as 555. 555 was favorably reviewed in 1979 by the National Alfalfa Variety Review Board.