Seed may be produced only in fields planted with breeder or foundation seed. No other seed class or generation will be certified.

REGISTRATION OF WL 307 ALFALFA
(Reg. No. 55)
D. F. Beard and I. I. Kawaguchi

'WL 307' alfalfa (Medicago sativa L.) was developed by the Waterman-Loomis Company and initially tested as 67 Cage B. Thirteen of the parent clones used in 'WL 215' were combined with five selected clones from second- and third-cycle polycrosses of alfalfa weevil, Hypera postica (Gyllental), tolerant plants tracing to 'Ranger,' 'Vernal,' and 'Atlantic.'

WL 307 and WL 215 are similar in resistance to bacterial wilt, Corynebacterium insidiosum (McCull) H. L. Jens., and anthracnose, Collectotrichum trifolii, (Bain and Essary). WL 307 is more resistant to the pea aphid, Acyrthosiphon pisum (Harris), and the spotted alfalfa aphid, Therioaphis maculata (Buckton). It is less fall dormant than WL 215 and slightly higher in forage yield. The growth habit of WL 307 is upright and a high percentage of its plants have a strong tendency towards axillary branching. Predominant flower color is purple with 20 to 25% of the plants having blue, bluish purple, or variegated flowers.

WL 307 was favorably reviewed at the December 1971 meeting of the National Certified Alfalfa Variety Review Board and subsequently approved for certification.

Three classes of certified seed will be recognized: breeder, foundation, and certified. Breeder seed is produced by intercrossing the 18 parent clones in isolation. Foundation seed is the product from fields planted with breeder seed between the 37° and 44° parallels. Certified seed may be produced only in fields planted with breeder or foundation seed.

1 Registered by the Crop Science Society of America. Received Oct 10, 1972.
2 Vice President-Research and Research Agronomist, respectively, Waterman-Loomis Company, 1015 Chester Ave., Bakersfield, Calif. 93301.

REGISTRATION OF EL-UNICO ALFALFA
(Reg. No. 57)
M. H. Schonhorst, R. K. Thompson, and M. W. Nielson

'EL-UNICO' alfalfa (Medicago sativa L.) was developed by the Arizona Agricultural Experiment Station and the Agricultural Research Service of the U.S. Department of Agriculture. This cultivar was initially evaluated as Arizona Unico and Unico.

Preliminary production tests were conducted by the Alfalfa Group in Arizona, California, and Nevada. Foundation seed of El-Unico was distributed widely for determination of adaptation. El-Unico is non-winter-dormant and adapted to areas that have mild winter temperatures. This includes the central valley of California and the lower desert areas of southwestern U.S. In forage production tests, El-Unico has consistently out-yielded the check cultivars 'Sonora' and 'Moapa.' In a 2-year field study related to water use conducted at Tucson, Ariz., El-Unico was similar to 'Sonora' but superior to Moapa and Sonora in forage yield and water use efficiency.

El-Unico has higher levels of resistance to the pea aphid, Therioaphis maculata (Buckton) than the cultivars Sonora and Moapa. It has slightly less resistance to the spotted alfalfa aphid, Acyrthosiphon pisum (Harris). It also has more resistance to downy mildew, Peronospora trifoliorum d'By., than Moapa and Sonora.

El-Unico was developed by combining two two-clone selections from different germplasm sources. One two-clone selection was made by crossing two parent clones, C 1025 and C 1026, which were highest in general combining ability for forage production from the cultivar Mesa Sirsa. The other cross was made between the two highest-yielding clones, C 937 and C 938, from the cultivar Sonora. Parent clone selections and officially released to alfalfa breeders by the Crop Science Society of America in 1971. The two selections of seed from these two combinations are classified as breeder.

Breeder seed is planted to produce the first synthetic generation which is classified as foundation seed. Foundation seed is planted to produce the second synthetic generation which is classified as certified seed. There is no registered certification of the Arizona Agricultural Experiment Station.

El-Unico received a favorable review from the certified alfalfa variety review board at its December meeting.

1 Contribution from the Arizona Agricultural Experiment Station, University of Arizona, Tucson 85721. Published as a Journal Article No. 1883.
2 Waterman-Loomis Company, 1015 Chester Ave., Bakersfield, Calif. 93301.