GRANADA ALFALFA

'Granada' alfalfa (Medicago sativa L.) (Reg. No. 136) was developed by North American Plant Breeders. The experimental designation was NAPB 91.

Granada was selected from 'Cuf 101' after two cycles of field screening for resistance to Phytophthora root rot caused by Phytophthora megasperma Drechs. f. sp. medicaginis Kün and Erwin, and one cycle of greenhouse screening for resistance to blue alfalfa aphid (Acrystosiphon kondoi Shinji).

Granada is similar in fall dormancy to Cuf 101. Granada has a high level of resistance to pea aphid [Acrystosiphon pismum (Harris)], blue alfalfa aphid, spotted alfalfa aphid [Theroioaphis maculata (Buckton)], and Fusarium wilt caused by Fusarium oxysporum Schlecht f. sp. medicaginis (Weimer) Snyd. and Hans. (all similar to Cuf 101) and resistance to Phytophthora root rot (similar to 'Agate'). Granada is susceptible to bacterial wilt caused by Corynebacterium insidiosum (McCull.) H. L. Jens. and anthracnose caused by Colletotrichum trifolii Bain. Granada has been tested in California, Arizona, and New Mexico, and is recommended for use in the lower elevations of these states for hay, dehydration, and greenchop purposes.

Breeder seed was produced at Nampa, Idaho on 2106 isolated plants. Leafcutter bees [Megachile rotundata (F.)] were used for pollination. Seed increase is limited to one generation each of breeder, foundation and certified seed classes. Certified seed may be produced from either breeder or foundation seed. A maximum of 3 and 5 harvest years is permitted on stands producing foundation and certified seed, respectively. Foundation seed production is limited to the southern region of adaptation.

Granada was favorably reviewed by the National Certified Alfalfa Variety Review Board in 1982. A plant variety protection certificate was issued in May 1982.

J. B. Moutray, W. G. Hartman, and J. C. Haight

References and Notes


BARON ALFALFA

'Baron' alfalfa (Medicago sativa L.) (Reg. No. 137) was developed by North American Plant Breeders. The experimental designation was NAPB 92.

Baron is a 654-plant cultivar. It was derived from a cross between two populations: 1) parentage traces to 'El Unico' (nine clones), 'Mesa Sirsa' (three clones), 'Mesilla' (three clones), 'Zia' × 'Turkistan' cross (three clones), 'Acco' (two clones), Miller synthetic (two clones), 'WL504' (two clones), and one clone each from 'WL501', 'AT520', 'Acco 657', 'Hayden' and 'Kansa'; and 2) 'WL518'.

The two populations were screened independently for Phytophthora root rot caused by Phytophthora megasperma Drechs. f. sp. medicaginis Kün and Erwin (four cycles), and spotted alfalfa aphid biotype H [Theroioaphis maculata (Buckton)] (one cycle). Population 1 was screened also for resistance to Anthracnose caused by Colletotrichum trifolii Bain (one cycle). Following the cross, the material was screened for resistance to the blue alfalfa aphid Acrystosiphon kondoi Shinji, (one cycle).

Baron is similar in fall dormancy to 'Caliverde 65'. Baron has a high level of resistance to pea aphid [Acrystosiphon pismum (Harris)], blue alfalfa aphid and spotted alfalfa aphid (each similar to 'Cuf 101'), resistance to Phytophthora root rot (similar to 'Agate'), and Fusarium wilt caused by Fusarium oxysporum Schlecht f. sp. medicaginis (Weimer) Snyd. and Hans. (similar to 'Saranac AR') and moderate resistance to bacterial wilt (similar to 'Ranger') caused by Corynebacterium insidiosum (McCull.) H. L. Jens. and Anthracnose.

Baron was tested in California, Arizona, and New Mexico. It is intended for use in the San Joaquin, Sacramento, central and southern coastal valleys, and high desert valleys of California, and the southern half of New Mexico and Arizona for hay, dehydration, and greenchop purposes.

Breeder seed was produced at Nampa, Idaho on 654 isolated plants. Leafcutter bees [Megachile rotundata (F.)] were used for pollination. Seed increase is limited to one generation each of breeder, foundation and certified seed classes. Certified seed may be produced from either breeder or foundation seed. A maximum of 3 and 5 harvest years is permitted on stands producing foundation and certified seed, respectively. Foundation seed production is limited to the southern region of adaptation.

Baron was favorably reviewed by the National Certified Alfalfa Variety Review Board in 1982. A plant variety protection certificate was issued in March 1982.

J. B. Moutray, W. G. Hartman, and J. C. Haight

References and Notes

1. The authors are grateful to Dr. Bill Melton of New Mexico State University, who provided population one in 1974.


NORCEN BIRDSFOOT TREFOIL

'Norcen' birdsfoot trefoil (Lotus corniculatus L.) (Reg. No. 6) was developed through the cooperative efforts of members of the NC-83 Technical Committee, "Seed Production of Breeding Lines of Insect Pollinated Legumes". It was released jointly by the Illinois, Iowa, Michigan, Minnesota, Missouri, New York, and Wisconsin Agricultural Experiment Stations in 1981. It was tested experimentally as NC-83 Syn. The name Norcen refers to the cooperation among the North Central states in cultivar development and to the North Central Regional adaptation of the cultivar.

The availability of birdsfoot trefoil seed has been poor, and varietal availability has been limited to cultivators with restricted adaptation. Therefore, there is a need for an improved cultivar with wide adaptation and an adequate seed supply. The cooperative breeding and research efforts of the NC-83 project sought to correct this problem by evaluating 30 superior clones from breeding programs at the Agricultural Experiment Stations of Illinois, Iowa, Minnesota, and Missouri for several agronomic traits. The 30 clones were established in replicated tests at Urbana, Ill. Ames, Iowa; Rosemont, Minn.; Columbia, Mo.; Fargo, N. Dak.; and Corvallis, Ore. (1) Based on clonal and open-pollination progeny performance for persistence, forage yield, plant characteristics, and seed yield, nine clones were selected as the parents of Norcen. The clones were IA E12-1, IA R9-5, IA R14-7; IL 9, IL 10, IL 13, MO 9, MO 25, and MO 75.

Norcen is a broadleaved, intermediate growth habit