In greenhouse tests at Las Cruces, N. Mex., the percentages of resistant plants to the pea aphid (Acyrthosiphon pisum (Harris)) were 18, 39, 2 and 15 for EUAN-5, 'Mesilla,' 'Buffalo' and El Unico, respectively. Percentages of plants resistant to the spotted alfalfa aphid (Theroaphis maculata (Buckton)) were 21, 31, 1, and 19 for EUAN-5, Mesilla, Buffalo and El Unico, respectively. EUAN-5 is susceptible to the blue alfalfa aphid (Acyrthosiphon kondoi Shinji). In tests conducted at St. Paul, Minn., percentages of resistant plants to bacterial wilt caused by Corynebacterium insidiosum (McCull.) H.L. Jens. were 9, 21, 3, 40, and 2 for EUAN-5, Mesilla, El Unico, 'Vernal' and Narragansett, respectively. Percentages of resistant plants to Fusarium wilt caused by Fusarium oxysporium Schlecht. f. sp. medicaginis (Weimer) Synn. and Hans. were 54, 52, and 55 for EUAN-5, El Unico and 'Moapa 69.' Percentages of plants resistant to Phytophthora root rot caused by Phytophthora megasperma Drechs. f. sp. medicaginis Kuan and Erwin were 14, 1 and 30 for EUAN-5, El Unico and 'Agate', respectively.

Forage yield was similar to the parent cultivar, El Unico, at Las Cruces.

Seed stocks of EUAN-5 are maintained by the Crop and Soil Sciences Dep., New Mexico State Univ., Las Cruces, NM, 88003. Five gram seed samples will be supplied upon request and agreement to acknowledge its source when it contributes to the development of a new cultivar, hybrid or breeding line.

BILL MELTON, DON MILLER, LARRY THEBER, AND MARK WALTON

References and Notes

1. Professor, graduate student, and former graduate students, respectively, Dep. of Crop and Soil Sciences, New Mexico State Univ., Las Cruces, NM, 88003. Registration by Crop Sci. Soc. of Am. Contribution from the New Mexico Agric. Exp. Stn. Journal Article No. 987. Accepted 22 Mar. 1983.

EUPH-5 ALFALFA GERMPLASM

EUPH-5 alfalfa (Medicago sativa L.) (Reg. No. GP130) germplasm was released by the New Mexico Agricultural Experiment Station in September 1982. It was released primarily as a non-dormant source of resistance to Phytophthora root rot caused by Phytophthora megasperma Drechs. f. sp. medicaginis Kuan and Erwin, but also has useful levels of resistance to other pests.

EUPH-5 was developed by five cycles of phenotypic recurrent selection for resistance to Phytophthora root rot in the cultivar 'El Unico' (Crop Sci. 13:1973). Mixed cultures of highly virulent isolates from New Mexico and other areas of the United States were used as inoculum. From 60 to 140 plants were selected in each cycle and intercrossed by honeybees (Apis mellifera L.) in screen wire cages. EUPH-5 was released as the Syn. 1 generation.

In tests conducted at Beltsville, Md., percentage resistant to anthracnose race 1 were 45, 1, 80, 74, and 1 for MAN-5, Mesilla, 'Saranac', 'Arc', and 'Moapa 69', respectively. MAN-5 was released as the Syn. 1 generation.

In greenhouse tests at Las Cruces, N. Mex., percentages of plants resistant to the pea aphid (Acyrthosiphon pisum (Harris)) were 19 for EUPH-5, Mesilla, Buffalo and El Unico. EUPH-5 is susceptible to the blue alfalfa aphid (Acyrthosiphon kondoi Shinji). Percentages of plants resistant to bacterial wilt caused by Colletotrichum trifolii Bain were 10, 1, 2, 5, El Unico, 'Saranac', and 'MSA-CW3-A', respectively.

Forage yield was similar to the parent cultivar in greenhouse tests at Las Cruces, N. Mex.

Seed stocks of EUPH-5 are maintained by the Crop and Soil Sciences Dep., New Mexico State Univ., Las Cruces, NM, 88003. Five gram seed samples will be supplied upon request and agreement to acknowledge its source when it contributes to the development of a new cultivar, hybrid or breeding line.

BILL MELTON, DON MILLER, LARRY THEBER, AND MARK WALTON

References and Notes

1. Professor, graduate student, and former graduate students, respectively, Dep. of Crop and Soil Sciences, New Mexico State Univ., Las Cruces, NM, 88003. Registration by Crop Sci. Soc. of Am. Contribution from the New Mexico Agric. Exp. Stn. Journal Article No. 987. Accepted 22 Mar. 1983.

MAN-5 ALFALFA GERMPLASM

MAN-5 alfalfa (Medicago sativa L.) (Reg. No. GP131) germplasm was released by the New Mexico Agricultural Experiment Station in September 1982. It was released primarily as a non-dormant source of resistance to races 1 and 2 of anthracnose, caused by Colletotrichum trifolii Bain, but also has useful levels of resistance to other pests.

MAN-5 was developed from the cultivar EUPH-5 (Crop Sci. 8:639, 1968) by five cycles of phenotypic recurrent selection for anthracnose resistance. Mixed cultures of local isolates and isolates obtained from other parts of the United States were used as inoculum. From 60 to 140 plants were selected in each cycle and intercrossed by honeybees (Apis mellifera L.) in screen wire cages. MAN-5 was released as the Syn. 1 generation.

In tests conducted at Beltsville, Md., percentage resistant to anthracnose race 1 were 45, 1, 80, 74, and 1 for MAN-5, Mesilla, 'Saranac', 'Arc', and 'Moapa 69', respectively.

In greenhouse tests at Las Cruces, N. Mex., percentages of plants resistant to the pea aphid (Acyrthosiphon pisum (Harris)) were 47, 45, and 2 for MAN-5, Mesilla and 'Saranac', respectively. Percentages of plants resistant to spotted alfalfa aphid (Theroaphis maculata (Buckton)) biotypes in New Mexico were 33, 35, and 19 for MAN-5, Mesilla, and 'Moapa 69', respectively. MAN-5 is susceptible to the blue alfalfa aphid (Acyrthosiphon kondoi Shinji). Percentages of plants resistant to bacterial wilt caused by Corynebacterium insidiosum (McCull.) H.L. Jens. were 38, 38, and 55 for MAN-5, Mesilla, and 'Moapa 69', respectively. MAN-5 was released as the Syn. 1 generation.

In tests conducted at Beltsville, Md., percentages of plants resistant to the pea aphid (Acyrthosiphon pisum (Harris)) were 47, 45, and 2 for MAN-5, Mesilla and 'Saranac', respectively. Percentages of plants resistant to spotted alfalfa aphid (Theroaphis maculata (Buckton)) biotypes in New Mexico were 33, 35, and 19 for MAN-5, Mesilla, and 'Moapa 69', respectively. MAN-5 is susceptible to the blue alfalfa aphid (Acyrthosiphon kondoi Shinji). Percentages of plants resistant to bacterial wilt caused by Corynebacterium insidiosum (McCull.) H.L. Jens. were 38, 38, and 55 for MAN-5, Mesilla, and 'Moapa 69', respectively.

In tests conducted at Beltsville, Md., percentages of plants resistant to the pea aphid (Acyrthosiphon pisum (Harris)) were 47, 45, and 2 for MAN-5, Mesilla and 'Saranac', respectively. Percentages of plants resistant to spotted alfalfa aphid (Theroaphis maculata (Buckton)) biotypes in New Mexico were 33, 35, and 19 for MAN-5, Mesilla, and 'Moapa 69', respectively. MAN-5 is susceptible to the blue alfalfa aphid (Acyrthosiphon kondoi Shinji). Percentages of plants resistant to bacterial wilt caused by Corynebacterium insidiosum (McCull.) H.L. Jens. were 38, 38, and 55 for MAN-5, Mesilla, and 'Moapa 69', respectively.

In tests conducted at Beltsville, Md., percentages of plants resistant to the pea aphid (Acyrthosiphon pisum (Harris)) were 47, 45, and 2 for MAN-5, Mesilla and 'Saranac', respectively. Percentages of plants resistant to spotted alfalfa aphid (Theroaphis maculata (Buckton)) biotypes in New Mexico were 33, 35, and 19 for MAN-5, Mesilla, and 'Moapa 69', respectively. MAN-5 is susceptible to the blue alfalfa aphid (Acyrthosiphon kondoi Shinji). Percentages of plants resistant to bacterial wilt caused by Corynebacterium insidiosum (McCull.) H.L. Jens. were 38, 38, and 55 for MAN-5, Mesilla, and 'Moapa 69', respectively.

In tests conducted at Beltsville, Md., percentages of plants resistant to the pea aphid (Acyrthosiphon pisum (Harris)) were 47, 45, and 2 for MAN-5, Mesilla and 'Saranac', respectively. Percentages of plants resistant to spotted alfalfa aphid (Theroaphis maculata (Buckton)) biotypes in New Mexico were 33, 35, and 19 for MAN-5, Mesilla, and 'Moapa 69', respectively. MAN-5 is susceptible to the blue alfalfa aphid (Acyrthosiphon kondoi Shinji). Percentages of plants resistant to bacterial wilt caused by Corynebacterium insidiosum (McCull.) H.L. Jens. were 38, 38, and 55 for MAN-5, Mesilla, and 'Moapa 69', respectively.