Registration of Germplasms

REGISTRATION OF ALFALFA GERMPLASM, NMP-9
(Reg. No. G.P. 93)

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NEVADA MP-9 alfalfa (Medicago sativa L.) was developed by the SEA, USDA and the Nevada Agricultural Experiment Station. The Syn 2 generation was released as germplasm to scientists in April 1977.

It is expected that this germplasm will be useful for development of multiple pest resistant cultivars. For studies of the effects of northern root-knot nematode (Meloidogyne hapla Chittwood) on alfalfa production, and for source material in developing a higher level of resistance to northern root-knot nematode by genotypic selection.

Nevada MP-9 was developed by recurrent phenotypic selection in several winterhardy cultivars under heavy root-knot nematode infestations. A mixed collection of nematodes from Utah and Oregon was used in the resistance screening. Root-knot nematode resistant selections from the cultivars '123' (90 selections), 'Vernal' (60 selections), 'WL 210' (35 selections), '525' (17 selections), 'WL 214' (14 selections), 'Progress' (12 selections), and 'Scout' (5 selections) were intercrossed by honeybees under cage isolation at Reno, Nev. in 1975. The Syn 2 generation was released under strict isolation at Reno in 1976.

Nevada MP-9 had high resistance to three regional collections of northern root-knot nematode in greenhouse tests at Reno, Nev. Nevada MP-9 had 80% resistant plants compared to 100% resistant plants in Nevada Syn XX and 4.5% for 'Lahontan', both semi-winterhardy cultivars. Nevada MP-9 had 31.9% resistant plants and an Average Severity Index (ASI) of 2.48 compared with 38.2 and 2.15 for Vernal in the 1976 Minnesota bacterial wilt (Corynebacterium insidiosum (McCulloch) Jensen) evaluation study. The 1976 Phytophthora root-rot (Phytophthora megasperma Drechsler) evaluation at Minnesota showed 3.8% resistant plants and an ASI of 4.03 for Nevada MP-9 compared with 3.0 and 2.87 for 'Agate'.

Seed stocks of Nevada MP-9, Syn 2 will be maintained by the SEA, USDA, College of Agriculture, Room 323A, University of Nevada, Reno, NV 89557. Up to 6 g of seed will be sent to alfalfa scientists on request.

REGISTRATION OF 72/3764 RICE GERMPLASM
(Reg. No. G.P. 35)

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The experimental strain 72/3764, designated a pure line of rice Oryza sativa L., selected from the introduction represented seed from an F₄ plant 456-3-2-1 that was selected at the International Institute from the cross 'Dawn'/CI 9534 developed in Texas and released in 1966. 'Century Patna 23' was developed at the Texas A&M University and released in 1951. SLO 17 is an Indian variety.

PI 321161 was first grown at Biggs, Calif. in 1971 from it for seedling vigor and resistance to cold (blanking) were grown in 1971 and 1972. The seed (72/3764) was selected for further testing because of good performance and particularly because it was from other long-grain materials in the nursery.

72/3764 has large, long grains which average 2.61 mm wide for the rough rice (paddy) and...