clones were stem nematode resistant after 3 years in a spaced planting in the field at Prosser, Wash.; their polygeny progeny yielded well there in single-row trials. W1S1 was developed from an intercross of 91 plants tracing to 'Washoe' (10), 'Aplachee' (5), 'Williamsburg' (7), DuPutts (3), 'Cherokee' (6), Vernal (2), Texas (2), 'Dawson' (1), and to experimental Nebraska lines (55) that were selected for stem nematode resistance and good fall and spring growth from single-row and multiple-row plots at Prosser, Wash.

W1S1 was developed from an intercross of 9 plants tracing to 'Syn V', 'Scano' (5), 'Ararat' (5), 'Scano', 'Williamsburg' (1), 'Talent' (2), 'DuPutts' (5), PI 141462 (1), 'Nev. Syn EE' (5), 'Neuntal' (3), Apalachee (5), and Lahontan (1) that were selected for stem nematode resistance, good fall and spring growth, and high stem number after 2 years in a spaced-plant field nursery at Prosser, Wash. W1S1 was developed from an intercross of 73 plants tracing to Apalachee (43) and Saranac (30) which had demonstrated high stem nematode resistance after repeated inoculations in the greenhouse. W800 was developed by blending equal quantities of seed of WASS, WCSS, WDS3, WES3 (developed from root knot nematode resistant 'N. Syn WW'), WFS3, WGS3, WHSS, and WISS, planting, and intercrossing for seed increase.

The selection process for BYDV tolerance started in 1975 with two alfalfa (Medicago sativa L.) populations, WDS3P1 (Reg. No. GP 91) and WIS1P1 (Reg. No. GP 92), with resistance to stem nematode (Ditylenchus dipsaci (Kühn) Filipjev), Phytophthora root rot (Phytophthora megasperma Freytag et Drechs.), and bacterial wilt (Pseudomonas syringae Mcguil.) H. L. Jens.) resistance and five for Phytophthora root rot (Phytophthora megasperma Freytag et Drechs.) resistance in standard field evaluations at St. Paul, Minn. Results of those evaluations are presented in Table 1. All 18 populations had high levels of stem nematode resistance (72 to 86%), root-knot nematode resistance ranged from 0 to 30%, percentages of bacterial wilt-resistant plants in the populations ranged from 1 to 31; percentages of Phytophthora root rot-resistant plants ranged from 9 to 14.

Seed stocks are maintained at the IAREC, P. O. Box 30, Prosser, WA 99350. While supplies last, up to 20 g of seed from each population will be supplied upon written request.

**REGISTRATION OF WDS3P1 AND WIS1P1 ALFALFA GERMPLASM**

J. H. Elgin, Jr. and D. W. Evans

Two alfalfa (Medicago sativa L.) populations, WDS3P1 (Reg. No. GP 91) and WIS1P1 (Reg. No. GP 92), with resistance to stem nematode (Ditylenchus dipsaci (Kühn) Filipjev), Phytophthora root rot (Phytophthora megasperma Freytag et Drechs.), and bacterial wilt (Pseudomonas syringae (Mcguil.). H. L. Jens.) were released by the SEA, USDA, and Washington State Univ. in 1974. WDS3P1 is developed by blending equal quantities of seed of WAS3, Syn EE (5), 'Nematol' (3), Apalachee (5), and Lahontan (1) and to experimental Nebraska lines (55) that were selected for stem nematode resistance and good fall and spring growth from single-row and multiple-row plots at Prosser, Wash. WDS3P1 was developed from an intercross of 91 plants tracing to 'Washoe' (10), 'Aplachee' (5), 'Williamsburg' (7), DuPutts (3), 'Cherokee' (6), Vernal (2), Texas (2), 'Dawson' (1), and to experimental Nebraska lines (55) that were selected for stem nematode resistance and good fall and spring growth from single-row and multiple-row plots at Prosser, Wash. WIS1P1 was developed from an intercross of 9 plants tracing to 'Syn V', 'Scano' (5), 'Ararat' (5), 'Scano', 'Williamsburg' (1), 'Talent' (2), 'DuPutts' (5), PI 141462 (1), 'Nev. Syn EE' (5), 'Neuntal' (3), Apalachee (5), and Lahontan (1) that were selected for stem nematode resistance, good fall and spring growth, and high stem number after 2 years in a spaced-plant field nursery at Prosser, Wash. W1S1 was developed from an intercross of 73 plants tracing to Apalachee (43) and Saranac (30) which had demonstrated high stem nematode resistance after repeated inoculations in the greenhouse. W800 was developed by blending equal quantities of seed of WASS, WCSS, WDS3, WES3 (developed from root knot nematode resistant 'N. Syn WW'), WFS3, WGS3, WHSS, and WISS, planting, and intercrossing for seed increase.

**REGISTRATION OF OAT COMPOSITE NY I-VR GERMPLASM**

A. Comeau and N. F. Jensen

N.Y. Oat Composite I-VR (NY I-VR) was developed to combine resistance to leaf rust (Puccinia coronata Cda. var. avenae Fraser and Led.) and tolerance to barley yellow dwarf virus (BYDV) in barley cultivars. It is derived from 'Tassie' Syn X 'I-VR' Syn with some additional resistance to BYDV. 'I-VR' Syn was produced at IAREC and 'Tassie' Syn was developed by R. C. Griffith and associates at the University of Arizona. 'I-VR' Syn was selected for high levels of stem nematode resistance in a greenhouse screening, followed by one cycle of selection for Phytophthora root rot resistance. Approximately 3,000 seedlings were screened for Phytophthora root rot resistance and 76 resistant plants were selected. Seed was produced, the progeny were tested in a replicated trial, and the parents of the best 12 S lines were selected for intercrossing in a field cage at Prosser, Wash. Seed subsequently produced was designated WIS1P1.

In standard evaluations conducted in the greenhouse at Prosser, Wash., WDS3P1 and WIS1P1 had high levels of resistance to stem nematode. Percentages of resistant plants were WDS3P1 = 81%, WIS1P1 = 76%, 'Washoe' = 64%, 'Apalachee' = 85%, Saranac = 92%, Vernal = 17%, and 'Ranger' = 15%. In evaluations of the SEA, USDA, and Washington State Univ., College of Agric. Res. Ctr. Scientific Paper No. 4775. Proiect 1917. Accepted 12 Dec. 1977.