REGISTRATION OF 'ONEIDA' ALFALFA

ONEIDA alfalfa (Medicago sativa L.) (Reg. no. 159) (PI 524966) was developed by the Cornell University Agricultural Experiment Station, New York State College of Agriculture and Life Sciences, Cornell University, Ithaca, NY and released in 1985. The experimental designation was Iroquois PR Synthetic I.

Parent plants of Oneida were selected from Phytophthora root rot [caused by Phytophthora megasperma (Drechs.) f. sp. medicaginis Kuan & Erwin] screening tests in the greenhouse and/or growth chamber through three to five cycles of selection from 'Iroquois' alfalfa (1). Polycross and S₅ progeny tests were used to evaluate the final cycles of selection for resistance. Selection of parents for Oneida was made in a 2-yr-old replicated field nursery. Selection was based on resistance to bacterial wilt (caused by Clavibacter michiganensis subsp. insidiosum Davis et al. 1984), vigor, freedom of foliage diseases, dark green foliage color, and Iroquois phenotype. Over 900 selected plants from this nursery were interpollinated by honeybees (Apis mellifera L.) in a greenhouse to produce the breeder seed.

Oneida is similar to Iroquois and 'Vernal' in fall dormancy. It has high resistance to Phytophthora root rot, resistance to bacterial wilt and Fusarium wilt [caused by Fusarium oxysporum Schl. f. sp. medicaginis (Weimer) Snyder and Hans.], and susceptibility to anthracnose [caused by Colletotrichum trifolii (Bain.) and Verticillium wilt [caused by Verticillium albo-atrum Reinke and Berth.]]. It was not tested for reaction to pea aphid [Acrystosiphon pisum (Harris)], spotted aphid [Theroaphis maculata (Buckton)] or stem nematode [Ditylenchus dipsaci (Kühn)] Filipjev but is expected to be susceptible.

Seed increase is on a limited generation basis with one generation each of the breeder, foundation, and certified seed classes. Certified seed may be produced only in fields producing foundation or breeder seed. A maximum of 3 and 6 harvest years is permitted in fields producing foundation and certified seed, respectively. Foundation seed is produced by the New York Seed Improvement Cooperative, Inc. in the northern area of adaptation for alfalfa.

Oneida was reviewed favorably by the National Certified Alfalfa Variety Review Board in December 1980. A certificate of Protection no. 8000069 from the USDA Plant Variety Protection Office was granted on 30 Sept. 1986.

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References and Notes

2. Pioneer Hi-Bred Int., Inc., P.O. Box 287, Johnston, IA 50131. Registration by CSSA. Accepted 30 Aug. 1988. *Corresponding author.