Regulation of Crop Cultivars

REGISTRATION OF CLASSIC AND HI-PHY ALFALFA
(Reg. No. 117 and 118)

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‘CLASSIC’ and ‘Hi-Phy’ alfalfa (Medicago sativa L.) were developed by FFR Cooperative.

CLASSIC (Reg. No. 117) tested experimentally as Syn CT, is a nine-clone synthetic. The parent clones trace to ‘Weevlchek’ (4), ‘Tempo’ (2), ‘Saranac’ (2), and ‘Vernal’ (1). The nine parent clones were selected from a space-plant nursery on the basis of persistence, resistance to diseases, and insects. Classic is adapted to central and eastern United States. It has been tested in Indiana, Kentucky, Virginia, Missouri, and Nebraska. The flower color is predominantly purple and blue with a trace of variegated colors. Classic has a greater level of resistance to bacterial wilt, caused by Corynebacterium insidiosum (McCull) H.L. Jens., than Vernal. It has a low level of resistance to Phytophthora root rot, caused by Phytophthora megasperma Drechs. Classic has not been tested for levels of resistance to anthracnose caused by Collectorichum trifolii Bain, pea aphid [Acyrthosiphon pisum (Harris)], spotted alfalfa aphid [Theroaphis maculata (Buckton)], and stem nematode [Ditylenchus dipsaci (Kuhn)] Filipjev. Forage yields of Classic generally have been equal to or greater than Weevlchek and Vernal.

HI-PHY (Reg. No. 118) was tested experimentally as Syn DH. It is a nine-clone synthetic with six clones derived from Weevlchek and three clones from Tempo. Parent clones were selected on the basis of vigor, Phytophthora root rot resistance, bacterial wilt resistance, and persistence.

Hi-Phy is adapted to the central region and the Great Lakes region of the United States where Phytophthora root rot is a problem. It has been tested in Indiana, Kentucky, Michigan, Missouri, and Virginia. The flower color is predominantly purple and blue. Hi-Phy has a high level of resistance to bacterial wilt, greater than Vernal. It has moderate level of resistance to Phytophthora root rot which is less than Agate. It has a low level of resistance to Fusarium wilt caused by Fusarium oxysporum Schlecht f. medicaginis (Weimer) Snyd. and Hans. that is similar to Tempo. Hi-Phy has a high level of resistance to Fusarium wilt, greater than Vernal. It has moderate level of resistance to Phytophthora root rot, caused by Phytophthora megasperma Drechs. Hi-Phy has not been tested for levels of resistance to anthracnose caused by Collectorichum trifolii Bain, pea aphid [Acyrthosiphon pisum (Harris)], spotted alfalfa aphid [Theroaphis maculata (Buckton)], and stem nematode [Ditylenchus dipsaci (Kuhn)] Filipjev. Forage yields of Hi-Phy have been equal to or greater than Weevlchek and Vernal.

Seed increase of both Classic and Hi-Phy are done in a generation sequence with one generation each of a foundation, and certified class. Breeder seed with parent clones with no special location of production. Commercial seed seeded with other than breeder or foundation will not be recognized.

Classic and Hi-Phy were favorably reviewed by the National Certified Alfalfa Variety Review Board in December, 1976. Supplementation will be made for Plant Variety Protection of both varieties.

1 Registered by the Crop Sci. Soc. of Am. Accepted 16 Dec. 1982.
2 Forage research director, and executive vice-president and general manager, respectively, FFR Cooperative, 4112 East State Road 225, West Lafayette, IN 47906.

REGISTRATION OF CUF 101 ALFALFA
(Reg. No. 119)


‘CUF 101’ alfalfa (Medicago sativa L.) was developed by the University of California Agricultural Experiment Station and the USDA-ARS. It was tested experimentally as CUF 101 and released in June, 1977.

CUF 101 was synthesized from 91 plants selected from varieties, germplasm pools, and brands growing in an 8.1-ha., over-irrigated, hay-production field which was 2½ years old and had been severely infested with the blue alfalfa aphid for more than 6 weeks before the parent plants were selected. Germplasm in CUF 101 traces to ‘UC Cargo’ (55%), ‘UC Salton’ (1%), UC 76 (22%), 1972 Breeding Mixture (20%), and Niagara N71 Brand (2%). This parentage can be further traced to the 9 basic germplasm sources in approximately the following percentages:

1. M. varia
2. Peruvian 2
3. Indian 23
4. African 53
5. Mesa Sirsa
6. ‘CLASSIC’ and ‘Hi-Phy’ alfalfa
7. ‘M. falcata’
8. ‘CLASSIC’ and ‘Hi-Phy’ alfalfa
9. ‘M. falcata’

CUF 101 is an upright, purple-flowered, very non-dormant alfalfa. It has moderate resistance to Anthracnose, and persistence. CUF 101 has been adequately tested to establish levels of resistance to Anthracnose, pea aphid, spotted alfalfa aphid, and stem nematode. Forage yields have been equal to or greater than Agate and Vernal.

CUF 101 was favorably reviewed by the National Certified Alfalfa Variety Review Board at its December, 1976 meeting. No maximum eligibility of stand life for seed classes of CUF 101 will be determined by the certifying agency.