Registration of Crop Cultivars

NOTICE

The format of Registration articles in this issue has been slightly changed to improve efficiency in page makeup. All of the information in the articles remains intact, but the order of items is different. Future issues of Crop Science will reflect the new format. Further information can be obtained from the editorial offices at 677 South Segoe Road, Madison, WI 53711.

WEEVLCHEK AND TEMPO ALFALFA

"WEEVLCHEK" and "Tempo" alfalfa (Medicago sativa L.) (Reg. Nos. 120 and 121) were developed by FFR Cooperative.

Weevlchek (Reg. No. 120), tested experimentally as Syn W, is a six-clone synthetic cultivar. Five parental clones were selected from Medicago sativa and one from Medicago falcata. Selection was based on clonal and open-pollinated progeny tests for disease and insect resistance. Weevlchek is a winter-hardy, persistent cultivar with dark green leaves and variable flower color. Winter-hardiness and area of adaptation are similar to those of 'Vernal.' It has been tested in Indiana, Illinois, Iowa, Maryland, Nebraska, Virginia, and Wisconsin. Forage yield is equal to or better than that of Vernal. Weevlchek has high resistance to bacterial wilt (Corynebacterium insidiosum (McCull.) H.L. Jens.), potato leafhopper (Empoasca fabae (Harris)) and measurable resistance to the alfalfa weevil (Hypera postica (Gyllenhal)).

Weevlchek has not been tested for levels of resistance to anthracnose caused by Colletotrichum trifolii (Bain and Essary), pea aphid (Acyrthosiphon pisum (Harris)), spotted alfalfa aphid (Theroaphis maculata (Buckton)), and stem nematode (Ditylenchus dipsaci (Kühn) Filipj).

Tempo (Reg. No. 121), tested experimentally as FFR DC-2, is a blend of two two-clone synthetic cultivars. One of the two-clone synthetics traces to selections from the cultivars, 'Ranger' and 'Buffalo.' The other two parents trace to a Flemish × 'Vernal' cross. The parental clones were selected for vigor and resistance to bacterial wilt. Tempo is moderately winter hardy, similar to 'Saranac,' and appears to be well adapted to the Midwest and the middle Atlantic states. Tempo has predominantly purple and blue flower color. It has high resistance to bacterial wilt and is similar to Vernal in leafhopper resistance. Forage yields of Tempo are equal to or better than those of Vernal and Saranac. Tempo has not been tested for levels of resistance to anthracnose, Phytophthora root rot (Phytophthora megasperma (Drechs.)), pea aphid, spotted alfalfa aphid or stem nematode.

Seed increase of Weevlchek and Tempo will be on a limited generation basis with one generation each of breeder, foundation and certified seed classes. Certified seed may be grown from breeder seed. A maximum of 2 to 5 harvest years is permitted on stands before dehydration, and greenchop production.

Voris A-77 is similar to 'Saranac' in fall dormancy. It has high resistance to bacterial wilt caused by Corynebacterium insidiosum (McCull.) H.L. Jens., Fusarium oxysporum f. sp. medicaginis, pea aphid, bacterial wilt (similar to 'Vernal'), caused by Colletotrichum trifolii Bain, and seed yield.

References and Notes

1. Executive vice president and general manager, forage research director and alfalfa breeder, respectively, FFR Cooperative, 4112 East State Road 225, West Lafayette, IN 47906. Registration by the Crop Sci. Soc. of Am. Accepted 12 Jan. 1983.

VORIS A-77 ALFALFA

'VORIS A-77' alfalfa (Medicago sativa L.) (Reg. No. 122) was developed by North American Plant Breeders at Ames, Iowa. The experimental designation was NAPB 51. It was developed by North American Plant Breeders in 1972 and 1973. In the final stages of development, we selected for resistance to anthracnose caused by Colletotrichum trifolii Bain, and seed yield.

References and Notes

1. Director of Forage Research, North American Plant Breeders, Central region and is intended for use in this general area for hay, dehydration, and greenchop production.

Answer alfalfa was selected for lack of root damage by Phytophthora root rot, caused by Phytophthora megasperma Drechs. f. sp. medicaginis. Seed increase is limited to one generation each of breeder, foundation and certified seed. Certified seed may be grown from breeder seed. A maximum of 2 to 5 harvest years is permitted on stands before dehydration, and greenchop production.

Breeder seed was produced in isolation on ramets of the parental clones. Leafcutters (Desmocera tundata (F.)) were used for pollination. Seed is produced in one generation each of breeder, foundation and certified seed classes. Certified seed may be grown from breeder seed. A maximum of 2 to 5 harvest years is permitted on stands before dehydration and greenchop production.

Answer A-77 was favorably reviewed by the Alfalfa Variety Review Board in 1978. A plant variety protection certificate was issued in May 1981.

References and Notes


ANSWER ALFALFA

'ANSWER' alfalfa (Medicago sativa L.) (Reg. No. 123) was developed by North American Plant Breeders in 1972 and 1973. In the final stages of development, we selected for resistance to anthracnose caused by Colletotrichum trifolii Bain, and seed yield.

References and Notes