Registration of ‘5246’ Alfalfa

‘5246’ ALFALFA (Medicago saliva L.) (Reg. no. CV-183, PI561715) was developed by Pioneer Hi-Bred International, Inc. and tested experimentally as XAE92 and YAE92. The cultivar was released 11 Feb. 1992.

5246 is a 315-plant synthetic cultivar with parents selected for aphanomyces root rot (caused by Aphanomyces euteiches Drechs., Race 1) from progeny of a strain cross involving selected plants originating equally from ‘5262’ and ‘5373’. Strain cross parents from 5262 were field selected under extreme high moisture conditions for aphanomyces root rot and phytophthora root rot (caused by Phytophthora medicaginis E.M. Hans. & Maxwell) (1). Strain cross parents from 5373 were field selected for phytophthora root rot under controlled irrigation conditions. Germplasm sources of 5246 include: 7% M. falcata, 9% Ladak, 26% M. varia, 4% Turkistan, 47% Flemish, and 7% Chilian.

5246 is a dormant cultivar with fall dormancy similar to that of a standard check cultivar Ranger. The cultivar has high resistance to anthracnose (caused by Colletotrichum trifolii Bain & Essary, Race 1), bacterial wilt [caused by Clavibacter michiganense subsp. insidiosum (McCull.) Davis et al.], fusarium wilt [caused by Fusarium oxysporum Schlechtend.:Fr. f. sp. medicaginis (J.L. Weimer) W.C. Snyder and H.N. Hans.], and phytophthora root rot; resistance to verticillium wilt (caused by Verticillium albo-atrum Reinke & Berthier), spotted alfalfa aphid [Theroioaphis maculata (Buckton)], and pea aphid [Theroioaphis pisum (Harris)]; moderate resistance to aphanomyces root rot (Race 1) and stem nematode [Ditylenchus dipsaci (Kühn) Filipjev]. 5246 has been tested for yield throughout the northern region of the USA and Canada. Flower color is approximately 73% purple and 27% variegated with traces of yellow, white, and cream.

Seed increase is limited to one, two, and one generation for breeder, foundation, and certified seed classes, respectively. Limitation of age of stand is 3 and 5 yr, respectively, for foundation and certified seed. Seed produced from this cultivar is not recognized as 5246. 5246 was favorably reviewed in 1991 by the National Alfalfa Variety Review Board and registration for plant variety protection was submitted on 19 Mar 1991 for 5246.


References and Notes

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Registration of ‘KY 8959’ Burley Tobacco

‘KY 8959’ burley tobacco (Nicotiana tabacum L.) (Reg. no. CV-107, PI564848) was developed by the Kentucky Agricultural Experiment Station and released in 1992 for its high yield, large leaves, and multiple disease resistance. KY 8959 was developed using the pedigree breeding method and was derived from a single plant selection in the F5 generation from the cross KY8529 × ‘TN 86’. KY8529 is a burley tobacco breeding line with a complex parentage that includes Tobacco Introduction (T.I.) 1406 (also known as Virgin A Mutant), five burley cultivars (KY 10, KY 16, KY 15, KY 17, and Burley 49), and two burley tobacco breeding lines (Ex 4 and 290A). Individual plant selections for resistance to tobacco etch virus (TEV) and tobacco vein mottling virus (TVMV) were made in the F2 and F3 generations and for leaf size and desirable burley tobacco phenotype the next two generations. Breeder seed was in the F5 generation at the time of release.

KY 8959 has high resistance to black root rot, caused by Thielaviopsis basicola (Berk. & Broome) Ferraris; TVMV; and wildfire, caused by Pseudomonas syringae pv. tabaci (Wolf & Foster) Young et al. It has medium resistance to Phytophthora adult rot, caused by Phytophthora capsici Ellis & Everh., and limited resistance to Verticillium wilt, caused by Verticillium dahliae Keissler; and Fusarium wilt, caused by Fusarium oxysporum Schlechtend.:Fr. f. sp. medicaginis (J.L. Weimer) W.C. Snyder and H.N. Hans. It has medium resistance to anthracnose (caused by Colletotrichum trifolii Bain & Essary), bacterial wilt (caused by Clavibacter michiganense subsp. insidiosum (McCull.) Davis et al.), fusarium wilt (caused by Fusarium oxysporum Schlechtend.:Fr. f. sp. medicaginis (J.L. Weimer) W.C. Snyder and H.N. Hans.), and phytophthora root rot (caused by Verticillium albo-atrum Reinke & Berthier), spotted alfalfa aphid [Theroioaphis maculata (Buckton)], and pea aphid [Theroioaphis pisum (Harris)]; moderate resistance to aphanomyces root rot (Race 1) and stem nematode [Ditylenchus dipsaci (Kühn) Filipjev]. 5246 has been tested for yield throughout the northern region of the USA and Canada. Flower color is approximately 73% purple and 27% variegated with traces of yellow, white, and cream.

Seed increase is limited to one, two, and one generation for breeder, foundation, and certified seed classes, respectively. Limitation of age of stand is 3 and 5 yr, respectively, for foundation and certified seed. Seed produced from this cultivar is not recognized as 5246. 5246 was favorably reviewed in 1991 by the National Alfalfa Variety Review Board and registration for plant variety protection was submitted on 19 Mar 1991 for 5246.


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