Registration of Crop Cultivars

REGISTRATION OF BLAZER AND PEAK ALFALFA¹
(Reg. No. 92 and 93)

D. E. Brown and R. R. Kalton²

'BLAZER' and 'Peak' alfalfa (Medicago sativa L.) were developed by Land O'Lakes, Inc.

Blazer
Blazer (Reg. No. 92) was tested experimentally as P455 and P455A. It is a 10-clone, winter-hardy synthetic with one clone each from 'Valor,' 'Pacer,' and 'Weevilcheck,' two clones from 'Saranac,' and five clones tracing to 'Titan,' 'Washoe,' 'Buffalo,' Flemish, and a Flemish-'Vernal' intercross. Selection was based on intensive clonal, Sₚ, and polycross progeny tests for forage yield, seed yield, winterhardiness, insect and disease resistance in trials conducted in Iowa, Minnesota, and Idaho.

Blazer is adapted across the northern part of the USA. It has late summer and fall regrowth similar to 'Ranger.' It has produced forage yields in the Upper Midwest equal to or greater than Vernal, Saranac, and 'Agate.' Blazer has a higher level of resistance to bacterial wilt caused by Corynebacterium insidiosum (McCull) H. L. Jens than Vernal, resistance to Phytophthora root rot caused by Phytophthora megasperma Drechs similar to Agate, resistance to pea aphid (Acyrthosiphon pisum (Harris)) equal to Dawson, resistance to stem nematode (Ditylenchus dipsaci (Kuhn) Filipjev) equal to 'Lahontan,' and a moderate level of resistance to Fusarium wilt caused by Fusarium oxysporum f. sp. medicaginis (Weimer) Snyder & Hans similar to Agate. Flower color is mostly purple (60 to 78%) and variegated (22 to 40%) with a small percentage of yellows and whites (0 to 2%).

Peak
Peak (Reg. No. 93) was tested experimentally as LL359 and LL359A. It is a nine-clone, moderately hardy synthetic cultivar with two clones from Saranac, one clone each from Pacer and Valor, and five clones tracing to Buffalo, Titan, 'Alfa,' Weevilcheck, and a Flemish-'Vernal' intercross. Parent clones were selected on the basis of intensive clonal, Sₚ, and polycross progeny tests for forage yield, seed yield, pest resistance, and winterhardiness in trials conducted in Iowa, Minnesota, and Idaho.

Peak is adapted across the northern U.S. It has an upright growth habit and late summer and fall regrowth similar to 'Ranger.' Forage yields of Peak in the Upper Midwest have been equal to or greater than Vernal, Saranac, and 'Agate.' Peak has a higher level of resistance to bacterial wilt than Vernal, resistance to Phytophthora root rot similar to Agate, resistance to pea aphid equal to Dawson, resistance to stem nematode equal to Lahontan, and a low level of resistance to Fusarium wilt equal to 'Narragansett.' Flower color is mostly purple (51 to 74%) and variegated (26 to 49%) with a trace of yellows and whites (0 to 1%).

Breeder seed of both Blazer and Peak was produced by hand-crossing in the greenhouse and by bees in cages at Caldwell, Idaho, using replicated cuttings. Breeders seed is maintained in cold storage and parent clones are being maintained by Land O'Lakes, Inc. Foundation seed fields are planted with breeder seed with a limit of 3 harvest years. Breeder seed was produced under isolation where 200 single-pollen plants of the nine parent clones were intercrossed using replicated cuttings. Breeders seed is maintained by Land O'Lakes, Inc., and tested experimentally as LL159 and assigned Reg. No. 92 and 93.

REGISTRATION OF 120 ALFALFA
(Reg. No. 94)

R. R. Kalton and D. E. Brown²

'120' ALFALFA (Medicago sativa L.) was developed cooperatively by AR, SEA, USDA and the Agricultural Experiment Station and released in 1979. It is a nine-clone, winter-hardy synthetic with one clone each from 'Titan,' 'Valor,' MnPB 1 (GP41) and five clones tracing to 'Shabet,' 'Erbet,' Flemish, and a 'Vernal'-Flemish intercross. Parent clones were selected on the basis of clonal, Sₚ, and polycross progeny tests for forage yield, seed yield, winterhardiness, insect and disease resistance in trials conducted in Iowa, Minnesota, and Idaho.

120 is adapted across the northern U.S. It has late summer and fall regrowth similar to 'Ranger.' Forage yields of 120 in the Upper Midwest have been equal to or greater than Vernal, Saranac, and 'Agate.' It has a higher level of resistance to bacterial wilt caused by Corynebacterium insidiosum (McCuil) H. L. Jens than Vernal, resistance to pea aphids (Acyrthosiphon pisum (Harris)) equal to 'Dawson,' resistance to Phytophthora root rot caused by Phytophthora megasperma Drechs similar to Agate, resistance to pea aphid (Acyrthosiphon pisum (Harris)) equal to 'Dawson,' resistance to stem nematode (Ditylenchus dipsaci (Kuhn) Filipjev) equal to 'Lahontan,' and a moderate level of resistance to Fusarium wilt caused by Fusarium oxysporum f. sp. medicaginis (Weimer) Snyder & Hans similar to Agate. Flower color is mostly purple (45 to 61%) or variegated (38 to 54%), with a small percentage of whites and yellows (0 to 1%).

Breeder seed was produced under isolation where 200 single-pollen plants of the nine parent clones were intercrossed using replicated cuttings. Breeder seed is maintained by Land O'Lakes, Inc., and tested experimentally as LL159 and assigned Reg. No. 94.

120 was favorably reviewed by the National Certified Alfalfa Variety Review Board at the December, 1978 meeting. Application for plant variety protection has not been considered to date for this cultivar.

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REGISTRATION OF ERSHABET
(Reg. No. 166)

E. A. Hockett²

'ERSHABET' barley (Hordeum vulgare L.) was developed cooperatively by AR, SEA, USDA and the Agricultural Experiment Station and released in 1979. It is a selection from the cross 'Shabet'*²/Erbet'. This cross was made in 1969, followed by one backcross to remove a selection for shatter resistance and earliness with the University of Montana at Bozeman, Mont., after both the initial cross and backcross were made. Hockett, E. A., University of Montana. Accepted 31 Dec. 1979. A selection from the cross 'Shabet'*²/Erbet'. This cross was made in 1969, followed by one backcross to remove a selection for shatter resistance and earliness with the University of Montana at Bozeman, Mont., after both the initial cross and backcross were made. Hockett, E. A., University of Montana. Accepted 31 Dec. 1979.