REGISTRATION OF ANCHOR ALFALFA1
(Reg. No. 59)

J. R. Thomas and J. B. Moutray

‘ANCHOR’ alfalfa (Medicago sativa L.) is a Flemish-type cultivar developed by W. R. Grace and Company, Rudy-Patrick Seed Division, now the Rudy-Patrick Company. Anchor is a nine-clone synthetic tested experimentally as R.P. 38. Parent clones were selected following extensive progeny testing for bacterial wilt [Corynebacterium insidiosum (McCull) H. L. Jens.] and pea aphid [Acyrthosiphon pisum (Harris)] resistance, seedling vigor, forage yield, seed yield, leaf and stem disease resistance, hardness, fall-growth vigor, and tolerance to yellowing caused by the potato leafhopper [Empoasca fabae (Harris)]. Origin of the nine parent clones is as follows: one clone was selected directly from each of the varieties ‘Apex,’ ‘Alfa,’ and ‘Saranac’ while three clones trace back to DuPuits and three to Alfa that had gone through two cycles of recurrent selection for bacterial wilt resistance.

Anchor is more winter hardy than Apex and Saranac and approaches the winter hardness of 'Vernal.' Bacterial wilt resistance is equal to that of Saranac and Vernal. Anchor has excellent resistance to downy mildew (Peronospora trifoliorum d By.), moderate resistance to the pea aphid, and more tolerance to potato leafhopper yellowing than DuPuits or Apex. Flowers of Anchor are mostly light to dark purple with very few variegated.

Anchor is adapted to the same areas as other Flemish types including the Central and Northern Corn Belt, Northeastern States, and eastern Canada. Because of its improved winter hardiness and bacterial wilt resistance, Anchor is expected to perform well in both short- and long-term stands. Anchor has consistently yielded higher than Vernal throughout its area of adaptation and has shown rapid recovery after each cutting during the growing season.

Breeder seed was produced in an isolated planting of approximately 900 replicates of each of the nine parent clones at Caldwell, Ida. Foundation seed will be produced only from breeder seed in the Pacific Northwest and certified seed may be produced only from fields established from breeder or foundation seed. No other class or stock of seed is recognized as Anchor.

Anchor was favorably reviewed by the National Certified Alfalfa Variety Review Board at its December 1965 meeting. An application for plant variety protection has been filed.

REGISTRATION OF APEX ALFALFA1
(Reg. No. 60)

J. B. Moutray and J. R. Thomas

‘APEX’ alfalfa (Medicago sativa L.) is a Flemish-type cultivar developed by W. R. Grace and Co., Rudy-Patrick Seed Division, now the Rudy-Patrick Company. Apex is an 11-clone synthetic tested experimentally as R.P. 25. Ten of the parent clones were selected on the basis of extensive progeny testing for resistance to bacterial wilt [Corynebacterium insidiosum (McCull) H. L. Jens.] and pea aphid [Acyrthosiphon pisum (Harris)], freedom from leaf and stem diseases, quick recovery after cutting, and excellent fall-growth vigor. 11th clone is from our recurrent selection program. All clones have ‘Vernal’ parentage.

Apex is adapted to the same areas as other Flemish types e.g., North Central, Northeastern, Pacific Northwest States, and eastern Canada compared with other Flemish-types. Apex has shown good winter survival in the North Central and eastern Canada compared with other Flemish-types. Apex is highly resistant to the pea aphid and is superior to Vernal in this trait. Flowers of Apex are predominantly purple.

Apex is adapted to the same areas as other Flemish types. Apex includes the Central and Northern Corn Belt, Northeastern States, and eastern Canada and the Pacific Northwest. Performance has been good under intensive management in short to medium rotations in these areas. Apex yielded as well or better than other Flemish types throughout its area of adaptation. Apex exhibits vigor, rapid spring growth and excellent recovery after all cuttings.

Breeder seed was produced in an isolated plot with 1000 replications of each of the 10 parental clones at Caldwell, Ida. Foundation seed will be produced only in the western United States and eastern Canada compared with other Flemish-types. Apex has good hardiness and bacterial wilt resistance, Apex is well adapted for all types of forage use in both short and long term stands. Apex has yielded better than Vernal in tests throughout its area of adaptation. Flowers of Apex range in color from purple and blue to variegated with a few plants having white or yellow flowers.

Apex is slightly more winter hardy and bacterial wilt resistant than Vernal. Compared with Vernal, Titan is slightly more resistant to yellowing caused by the potato leafhopper and has better late summer vigor. After cutting, and fall-growth vigor was also better. 11th clone is from our recurrent selection program and have ‘Vernal’ parentage.

Titan is slightly more winter hardy and better adapted to growth and fertility under either three or four-cut management. Titan is well adapted for all types of forage use in both short and long term stands. Titan has yielded better than Vernal throughout its area of adaptation. Flowers of Titan range in color from purple and blue to variegated with a few plants having white or yellow flowers.

Titan is adapted to alfalfa-growing areas of winter hardiness and bacterial wilt resistance, e.g., North Central, Northeastern, Pacific Northwest, and in southern Canada.

1 Registered by the Crop Science Society of America. Received Dec. 6, 1972.
2 Vice President - Research Director and Research Agronomist, The Rudy-Patrick Company, respectively, Ames, Iowa 50010.
3 The breeders who developed ‘Anchor’ were R. R. Kalton, D. E. Brown, and Marvin Miller.