Registration of Crop Cultivars

REGISTRATION OF NUGGET ALFALFA¹
(Reg. No. 106)

J. B. Moutray and J. R. Thomas²

‘NUGGET’ alfalfa (Medicago sativa L.) was developed by the Rudy-Patrick Company, now North American Plant Breeders³. It was tested as RP DC-5.

Nugget is a 4-clone cultivar. Two parental clones were derived from ‘Vernal’ and one each from ‘Alfa’ and ‘Tuna’. Source materials were screened for bacterial wilt caused by Corynebacterium insidiosum (McCull) H. L. Jens and/or pea aphid Acyrthosiphon pisum (Harris) resistance and winter survival. Parental clones were evaluated in clonal, S₁, polycross and single cross tests for winter survival and resistance to bacterial wilt and pea aphid, and were tested for general and specific combining ability for forage and seed yield. Breeder seed was produced in Washington and Idaho by interpollinating the two single crosses (Vernal X Vernal) and (Alfa X Tuna) in isolation with leafcutter bees [Megachile rotundata (F.)].

Nugget is similar in fall dormancy to Vernal. Nugget combines resistance to bacterial wilt (similar to Vernal) with moderate resistance to pea aphid. Resistance to potato leafhopper yellowing caused by Empoasca fabae (Harris) is similar to Vernal. Nugget has been tested for forage yield throughout the North Central region and is intended for use in this general area for hay, greenchop and dehy production.

Seed increase is limited to one generation each of breeder, foundation and certified seed classes. Certified seed may be grown from breeder or foundation seed. Seed produced from certified is not recognized as Nugget. There is no restriction on the area of production of foundation or certified seed.

Nugget was favorably reviewed by the National Certified Alfalfa Review Board in 1974. A plant variety protection certificate was issued in July 1979.

¹ Registered by the Crop Sci. Soc. of Am. Accepted 20 Sept. 1982
² Director of Forage Research, North American Plant Breeders, R.R. #3 Ames, IA 50010, and former research director, North American Plant Breeders (now self employed), respectively.
³ R.R. Kalton and D.E. Brown contributed substantially to the early development of Nugget.

REGISTRATION OF CITATION ALFALFA¹
(Reg. No. 107)

J. B. Moutray²

‘CITATION’ alfalfa (Medicago sativa L.) was developed by North American Plant Breeders at Ames, Iowa. The experimental designation was RP 103.

Citation is a 7-clone synthetic. Two parental clones trace to ‘Harris’ and ‘Weim’ respectively. Citation has been favorably reviewed by the National Certified Alfalfa Review Board in 1974. A plant variety protection certificate was issued in November 1980.

REGISTRATION OF APOLLO ALFALFA²
(Reg. No. 108)

J. B. Moutray²

‘APOLLO’ alfalfa (Medicago sativa L.) was developed by North American Plant Breeders at Ames, Iowa. The experimental designation was NAPB 44.


Beginning in 1971, source materials were subjected to three cycles of selection for resistance to Phytophthora root rot, caused by Phytophthora megasperma Drechs. Cycles one and two were conducted in greenhouse sand benches and cycle three in a field nursery. Breeder seed was produced in Ames, Iowa with pollination by leafcutter bees [Megachile rotundata (F.)].

Apollo is similar in fall dormancy to ‘Ranger’. Apollo has resistance to bacterial wilt (similar to Vernal), Corynebacterium insidiosum (McCull) H.L. Jens, Phytophthora megasperma Drechs. (similar to ‘Agate’) and Fusarium wilt caused by Colletotrichum trifolii Bain. Apollo has been tested for forage yield throughout the northern, central and southeastern areas and is intended to be used in these general areas for hay, greenchop and dehy production.

Seed increase is limited to one generation each of breeder, foundation and certified seed classes. Certified seed may be grown from breeder or foundation seed. Seed produced from certified is not recognized as Apollo. There is no restriction on the area of production of foundation or certified seed.