is intended for use in this general area for hay, greencrop and dehydration purposes.

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

Vangard was favorably reviewed by the National Certified Alfalfa Variety Review Board in 1976. It is not covered by a plant variety protection certificate.

Acknowledgement

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REGISTRATION OF WL 221 AND WL 313
ALFALFA CULTIVARS
(Reg. Nos. 112 and 113)

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‘WL 221’ and ‘WL 313’ alfalfas (Medicago sativa L.) were developed by W-L Research, Inc.

WL 221 (Reg. No. 112) was tested experimentally as 75T3 and 76T17. WL 221 was developed by interpollinating 169 parent clones representing approximately equal numbers of each of 10 clones that had been selected for freedom from bacterial wilt [caused by Corynebacterium insidiosum (McCull.) H.L. Jens.], Fusarium wilt [caused by Fusarium oxysporum Schlecht. f. sp. medicaginis (Weimer) Snyd. & Hans.], Leptosphaerulina leaf spot [caused by Leptosphaerulina briosiana (Poll.) Graham & Luttrell], Stemphylium leaf spot (caused by Stemphylium botryosum Wallr.), common leaf spot (caused by Pseudopeziza medicaginis (Lib. Sacc.), and anthracnose (caused by Colletotrichum trifolii Bain). Basic germplasm sources of WL 221 include approximately 19% M. falcata, 11% Ladak, 36% M. varia, 7% Turkistan (largely ‘Atlantic’, ‘Culver’, ‘Narragansett’, ‘Travois’, and ‘Vernal’), 15% Flemish (‘Saranac’), 8% Chilean, 1% Peruvian, and 3% Indian.

The fall-dormancy of WL 221 is similar to that of Vernal. WL 221 is characterized by having resistance to bacterial wilt, pea aphid [Acrystosiphon pisum (Harris)] biotypes occurring in Maryland, and the spotted alfalfa aphid [Therioaphis maculata (Buckton)] biotypes occurring in Kern County, California, and moderate resistance levels to anthracnose and Fusarium wilt. WL 221 has been tested for forage yield from Maryland and Ontario westward to Wisconsin and Nebraska. It is recommended for hay and haylage production in the northern United States and adjacent areas of Canada. Flower color is approximately 40% purple, 58% variegated, 1% yellow, and 1% white.

WL 313 (Reg. No. 113) was tested experimentally as 74 Ca B, 75 Ca B, 76 Ca B, and 74-75-76 Ca B. It was developed by interpollinating 288 plants selected on the basis of controlled inoculation tests and field evaluation for resistance to the following diseases and pests:

- Stemphylium leaf spot (caused by Stemphylium botryosum Wallr.), phytophthora root rot (caused by Phytophthora megasperma Drechs.), leaf spots (caused by Pseudopeziza medicaginis (Lib. Sacc.),), anthracnose (caused by Colletotrichum trifolii Bain), and pea aphid (caused by Acrystosiphon pisum (Harris)).
- Anthracnose (caused by Colletotrichum trifolii Bain), and pea aphid (caused by Acrystosiphon pisum (Harris)).
- Leaf spot (caused by Stophylium botryosum Wallr.), phytophthora root rot (caused by Phytophthora megasperma Drechs.), and leaf spots (caused by Pseudopeziza medicaginis (Lib. Sacc.),).