Varietal Publication No. 186

A REPORT OF THE

NATIONAL ALFALFA AND MISCELLANEOUS LEGUMES VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

MARCH 2001

National Alfalfa & Miscellaneous Legumes
Variety Review board

Association of Official Seed Certifying Agencies
January 2001

The Association of Official Seed Certifying Agencies (AOSCA) National Alfalfa and Miscellaneous Legumes Variety Review Board reviewed the following varieties, January 4th and 5th, 2001, in Las Vegas, Nevada. The Board recommended the inclusion of these varieties for certification. Seed of these varieties may be certified, providing production meets all standards of the Certifying Agency of the state in which the seed is grown.

All variety information, including descriptions, claims and research data to support any claim was supplied to the National Alfalfa and Miscellaneous Legumes Variety Review Board by the applicants. The National Alfalfa and Miscellaneous Legumes Variety Review Board makes judgment regarding recommendation of varieties for inclusion in certification based on the data supplied. Beyond this, the National Alfalfa and Miscellaneous Legumes Variety Review Board takes no position on the accuracy or truthfulness of any description or claim made by the applicants.

Further information on current procedures, application forms and details regarding the National Alfalfa and Miscellaneous Legumes Variety Review Board may be obtained from:

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Respectively Submitted,

Mike Moore

Mike Moore
Chair, National Alfalfa and Miscellaneous Legumes Variety Review Board

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Salado (Amended)
November 20,2000

1. Salado is a synthetic variety with 200 parent clones. Parent clones trace to two populations selected for increased germination and forage yield under saline (NaCl) stress. The basis of selection was a modification of the procedures outlined in the development of AZ-Germ Salt II (Crop Science vol. 29:0493 (1989)) and AZ90NDC-ST (Crop science vol. 31, p 1098 (1991)). The modification being that the two procedures were used in tandem, with increasing levels of salinity for each successive generation.

   Phenotypic recurrent selection was used. Final selections were made from greenhouse plants subjected to germination and post-germination salt stress.

   Parentage traces to Mesa Sirsa (50%) and other non-dormant experimental cultivars (50%).

   Approximate germplasm source contributions are:
   M. falcata (0%), Ladak (0%), M. varia (0%), Turkistan (0%), Flemish (0%), Chilean (0%), Peruvian (0%), Indian (50%), African (0%), Arabian (0%) and unknown (50%). Breeder seed (Syn 1) was produced under field isolation near Kingsburg, CA in 1994.

2. Area of intended use is Central and Southern California, and the lower elevations of Arizona and New Mexico. Area of adaptation is southwest regions of U.S.

3. Fall dormancy is similar to Cuf 101. Flower color is approximately 98% purple and 1% variegated with less than 1% yellow, 0% cream and white.

4. Salado has high resistance to Fusarium wilt, blue alfalfa aphid, and southern root knot nematode; resistance to spotted alfalfa; moderate resistance to pea aphid, stem nematode and lepto leaf spot; low resistance to anthracnose (race 1) and Phytophthora root rot, tolerant to salt (NaCl) at germination; **and tolerant for forage production under salt (NaCl) stress**; and susceptible to Verticillium wilt. Salado has not been tested for resistance to bacterial wilt, aphanomyces and other species of root knot nematode.

5. Seed increase is limited to one generation each of breeder (Syn 1), foundation (Syn 2) and certified (Syn 3) seed classes. Certified may be produced from either breeder or foundation classes. A 1, 3 and 5 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Foundation seed production, outside the area of adaptation is limited to single-season production (non-overwintering). Second year of production may be allowed with inspection and approval by breeder prior to second year production. Breeder seed was produced in 1993. ABI will maintain sufficient stocks for the projected life of the variety.

6. Certified seed will be available in 1998

7. Plant variety protection has been applied for.

8. This information can be forwarded to the PVP office.

9. Variety Name: Salado Date submitted November 21,2000

   Experimental designations: ZS 9491

Ruccus
November 21,2000

1. Ruccus is a synthetic variety with 300 parental clones. Parent clones trace one population selected for resistance to phytophthora root rot, anthracnose, bacterial wilt, fusarium wilt, verticillium wilt, blue alfalfa aphid, spotted alfalfa aphid, pea aphid, stem nematode, and northern root knot nematode

   Recurrent phenotypic selection was used. Final selections were made from two and three year old nurseries near Nampa, Idaho based on overall root and crown health.

   Parentage traces to experimental closely related to the variety Archer (80%), Lobo (10%), and Nemagone (10%). Breeder seed (Syn 1) was produced on cuttings of the parental clones near Nampa, Idaho, in 1993. Breeder seed was produced under field isolation.

   Approximate germplasm source contributions are:

   M. falcata (6%), Ladak (6%), M. varia (19%), Turkistan (13%), Flemish (30%), Chilean (9%), Peruvian (2%), Indian (2%), African (1%), Arabian (0%) and (12%) unknown sources

2. Ruccus appears to be adapted to and is intended for use in Winterhardy Intermountain region of the U.S. It has been tested in Idaho, and Washington.

3. Fall dormancy of Ruccus is similar to Dupuits. Flower color is approximately 88% purple and 12% variegated with a trace of cream, yellow and white.

4. Ruccus has high resistance to fusarium wilt, and phytophthora root rot; resistant to bacterial wilt, verticillium wilt, spotted alfalfa aphid, pea aphid, and stem nematode; moderate resistant to anthracnose (race 1), and northern root knot nematode; and low resistance to blue alfalfa aphid.

5. Seed increase is limited to one generation of breeder seed (Syn 1), two generations of foundation and two to three generations of certified seed. Certified seed may be produced from either breeder or foundation classes. A 1, 3, and 6 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Foundation seed production, is limited to the Pacific Northwest. Breeder seed was produced in 1993. ABI will maintain sufficient stocks for the projected life of the variety.

6. Certified seed will be available in 2001

7. Plant variety protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety Name: Ruccus Date submitted November 21,2000

   Experimental designations: ZX 9353, ABI 9353

Hayday
November 21,2000

1. Hayday is a synthetic variety with 250 parental clones. Parent clones trace one population selected for resistance to phytophthora root rot, anthracnose, bacterial wilt, fusarium wilt, verticillium wilt, blue alfalfa aphid, spotted alfalfa aphid, pea aphid, stem nematode, and northern root knot nematode

   Recurrent phenotypic selection was used. Final selections were made from 2 and 3 year nurseries near Nampa, Idaho based on overall root and crown health.

   Parentage traces to an experimental closely related to the variety Archer (25%), Arrow (25%), Ultra (38%), and unknown (12%). Breeder (Syn 1) was produced on cuttings of the parental clones near Nampa, Idaho in 1993, under field Isolation.

   Approximate germplasm source contributes are:
   M. falcata (15%), Ladak (5%), M. varia (25%), Turkistan (4%), Flemish (48%), Chilean (3%), Peruvian (0%), Indian (0%), African (0%), Arabian (0%) and Unknown (0%).

2. Hayday appears to be adapted to and is intended for use in Winterhardy Intermountain region of the U.S. It has been tested in Idaho, Washington, and Montana

3. Fall dormancy of Hayday is similar to Saranac. Flower color is approximately 72% purple and 28% variegated with a trace of cream, yellow and white.

4. Hayday has high resistance to bacterial wilt, verticillium wilt, fusarium wilt, and stem nematode; resistant to anthracnose (race 1), and pea aphid; low resistance to the spotted alfalfa aphid, and the blue alfalfa aphid.

5. Seed increase is limited to one generation of breeder seed (Syn 1), two generations of foundation and two to three generations of certified seed. Certified seed may be produced from either breeder or foundation classes. A 1, 3, and 6 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Foundation seed production, is limited to the Pacific Northwest. Breeder seed was produced in 1993. ABI will maintain sufficient stocks for the projected life of the variety.

6. Certified seed will be available in 2001

7. Plant variety protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety Name: Hayday Date submitted November 21,2000

   Experimental designations: ZX 9344, ABI 9344

AmeriStand 801S
November 20, 2000

1. AmeriStand 801S is a synthetic variety with 250 parent clones. Parent clones trace to one population selected for increased germination and forage yield under saline (NaCl) stress. The basis of selection was a modification of the procedures outlined in the development of AZ-Germ Salt II (Crop Science vol. 29:0493 (1989)) and AZ90NDC-ST (Crop science vol. 31, p 1098 (1991)).

   Phenotypic recurrent selection was used. Final selections were made from salinity trials in Arizona and California.

   Parentage traces to Salado (100%)

   Approximate germplasm source contributions are:
   M. Falcata (0%), Ladak (0%), M. varia (0%), Turkistan (0%), Flemish (0%), Chilean (0%), Peruvian (0%), Indian (50%), African (0%), Arabian (0%) and unknown (50%). Breeder seed (Syn 1) was produced under field isolation near Kingsburg, CA in 1997.

2. Area of intended use is Central and Southern California, and the lower elevations of Arizona and New Mexico. Area of adaptation is Southwest Regions of U.S.

3. Fall dormancy is similar to Pio 5715. Flower color is approximately 98% purple, 1% variegated, and 1% yellow.

4. AmeriStand 801S has high resistance to Fusarium wilt, blue alfalfa aphid, spotted alfalfa aphid, and southern root knot nematode; resistance to bacterial wilt, anthracnose (race 1) and Aphanomyces (race 1); moderate resistance to Verticillium wilt, pea aphid, and stem nematode.

5. Seed increase is limited to one generation each of breeder (Syn 1), foundation (Syn 2) and certified (Syn 3) seed classes. Certified may be produced from either breeder or foundation classes. A 1, 3 and 5 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Foundation seed production, outside the area of adaptation is limited to single-season production (non-over wintering). Second year of production may be allowed with inspection and approval by breeder prior to second year production. Breeder seed was produced in 1997. ABI will maintain sufficient stocks for the projected life of the variety.

6. Certified seed will be available in 2001

7. Plant variety protection will be applied for.

8. This information can be forwarded to the PVP office.

9. Variety Name: AmeriStand 801S Date submitted November 20,2000

   Experimental designations: ZS 9890

Baralfa 42 IQ

1. Baralfa 42 IQ had 305 parent plants tracing to the varieties TMF 4464 (185) and ABI 9142 (120). These varieties were seeded into replicated (6) plots at Warrensburg, MO in September 1992. Plots were grazed continuously for approximately 145 days in 1993, 1994 and 1995. Plots were undercut in September 1995 with the healthiest plants with large symmetrical crowns saved. Breeder seed (syn 1) was produced in the greenhouse on the 305 parent plants and harvested in bulk in the spring of 1996. Additional breeder seed was produced in the field near Nampa, ID in 1996 from the original parent plants plus approximately 20 cuttings of each clone transplanted at random and harvested in bulk

2. Baralfa 42 IQ appears to be adapted to the North Central and East Central regions of the U.S.. It is intended for use in the North Central and East Central regions of the U.S.. It has been tested in Iowa, Wisconsin, Illinois, Kansas and Pennsylvania.

3. Fall dormancy of Baralfa 42 IQ is similar to Saranac, the FD 4 check. Flower color of syn 2 generation is approximately 70% purple, and 30% variegated with a trace of cream. white and yellow. ZG 9641 tolerance to intensive grazing is similar to Alfagraze.

4. Baralfa 42 IQ has high resistance to bacterial wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot, Aphanomyces root rot (race 1) and Fusarium wilt, and resistance to pea aphid. It has not been tested for reaction to blue alfalfa aphid, spotted alfalfa aphid, stem nematode, and root knot nematode.

5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1996. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 1999.

7. Plant Variety Protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety name Baralfa 42 IQ
   Experiment designations ZG 9641
   Date NA&MLVRB first accepted this variety January 1999
   Dates previous amendments were accepted November 1999
   Date this amendment submitted September 2000

18. A 30-06 was selected for tolerance to continuous grazing by cattle, hay yield, leafhopper yellowing resistance, color, regrowth, winter survival, fall dormancy reaction and leafspot resistance.

19. A 30-06 appears to be adapted to the North Central and East Central Regions of the U.S.. It is intended for use in the North Central and East Central Regions of the U.S. as a grazing crop as well as for producing stored feed. It has been tested in Iowa, , Wisconsin and Illinois

20. Fall dormancy of A 30-06 is similar to the FD 3 check Ranger. Flower color is approximately 65% purple and 35% variegated with a trace of white, cream and yellow. Tolerance to continuous grazing is superior to Alfagraze.

21. A 30-06 has high resistance to bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (race 1), Phytophthora root rot, and Aphanomyces root rot (race 1) and resistance to pea aphid. It has not been tested for reaction to stem nematode, spotted alfalfa aphid, blue alfalfa aphid and root knot nematode.

22. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1997. ABI will maintain sufficient seed stocks for the life of the variety.

23. Certified seed will be available in 2000

24. Plant Variety Protection will not be applied for.

25. This information can be forwarded to the PVP office.

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9. Variety name A 30-06
   Experiment designations ZG 9734
   Date NA&MLVRB first accepted this variety January 2000
   Dates previous amendments were accepted
   Date this amendment submitted September 14, 2000

WinterMax

1. WinterMax has 324 parent plants tracing to Quantum 72% and ABI 9031 28%. Both Quantum and ABI 9031 were seeded into replicated grazing trials near Warrensburg, MO in March of 1991. Plots were grazed continuously for 70 days in 1991 and 155 days each in 1992 and 1993. In October of 1993 when stands had declined to about 10% plots were dug with the healthiest plants having large symmetrical crowns saved. Breeder seed (syn 1) was produced in the greenhouse on the original 324 plants and harvested in bulk in the spring of 1994. Additional breeder seed was produced in the field near Nampa, ID in 1994 from the original parent plants and approximately 15 cuttings of each clone transplanted at random and harvested in bulk.

2. WinterMax appears to be adapted to and is intended for use in the North Central Region of the U.S. It is intended for use as a grazing crop as well as for making stored feed.

3. Fall dormancy of WinterMax is similar to Vernal. Flower color is approximately 68% purple and 31% variegated with a trace of cream, white and yellow. Tolerance to intensive grazing is better than Alfagraze.

4. WinterMax has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1) and Phytophthora root rot, resistance to Aphanomyces root rot (race 1) and stem nematode, and moderate resistance to pea aphid. It has not been tested for reaction to spotted alfalfa aphid, blue alfalfa aphid and root knot nematode.

5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1994. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 1997.

7. Plant variety protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety name WinterMax
   Experiment designations ZG 9429
   Date NA&MLVRB first accepted this variety January 1997
   Dates previous amendments were accepted
   Date this amendment submitted November 2000

Rebel

1. **Rebel** was selected for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1) and Aphanomyces (race 1) plus two additional isolates. Phenotypic recurrent selection was used. Final selections were made form two-year old space plant selection nurseries near Napier, IA, Livingston and Marshfield, WI based on yield, winter survival, degree of leafhopper yellowing and stunting, freedom from leaf diseases, fall dormancy reaction and stem protein.

   Breeder seed (syn 1) was produced in 1996 on approximately 25 cuttings of each clone transplanted at random and harvested in bulk.

2. **Rebel** appears to be adapted to the North Central, East Central and Great Plains Regions of the U.S. It is intended for use in the North Central, East Central and Great Plains Regions of the U.S. It has been tested in Iowa, Illinois, Indiana, Wisconsin, Pennsylvania and Kansas.

3. Fall dormancy of **Rebel** is similar to the FD 4 check Saranac. Flower color of syn 2 generation is approximately 72% purple and 28% variegated with a trace of cream, yellow and white.

4. **Rebel** has high resistance to bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (race 1), Phytophthora root rot, pea aphid, and Aphanomyces (race 1). It has moderate resistance to blue alfalfa aphid. It has not been tested fore reaction to spotted alfalfa aphid, stem nematode or root knot nematode.

5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1996. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2000.

7. Plant Variety Protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety name **Rebel**
   Experiment designations ZN 9646
   Date NA&MLVRB first accepted this variety January 2000
   Dates previous amendments were accepted
   Date this amendment submitted November 2000

Payday

2 Payday was selected for resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, Phytopthora root rot, anthracnose (race 1), stem nematode, root lesion nematode and Aphanomyces root rot (race 1) using phenotypic recurrent selection. Final selections were based on winter survival, degree of leafhopper burn, freedom from leaf diseases and fall dormancy reaction

2. Payday appears to be adapted to the Great Plains, North Central and East Central regions of the U.S. It is intended for use in the Great Plains, North Central and East Central regions of the U.S. It has been tested in Kansas, Iowa, Illinois, Idaho and Pennsylvania.

3. Fall dormancy of Payday is similar to Saranac the FD 4 check. Flower color of syn 2 generation is approximately 72%, purple, and 28% variegated with a trace of cream, yellow and white.

4. Payday has high resistance to bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (race 1) and Phytophthora root rot, resistance to Aphanomyces root rot, pea aphid and root lesion nematode and low resistance to spotted alfalfa aphid and blue alfalfa aphid. It has not been tested for reaction to root knot nematode.

5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1996. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2000.

7. Plant Variety Protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety name Payday
   Experiment designations ZC 9640A
   Date NA&MLVRB first accepted this variety January 2000
   Dates previous amendments were accepted
   Date this amendment submitted November 2000

AmeriStand 403T

1. AmeriStand 403T was selected for tolerance to continuous grazing (two cycles of recurrent phenotypic selection) by cattle while maintaining a healthy, large crown and root system.

2. AmeriStand 403T appears to be adapted to the North Central and East Central Regions of the U.S.. It is intended for use in the North Central and East Central Regions of the U.S. as a grazing crop as well as for producing stored feed. It has been tested in Iowa, Wisconsin and Illinois.

3. The fall dormancy of AmeriStand 403T is similar to the FD 4 check Saranac. Winter survival is similar to the WS 2 check Vernal. Flower color of syn 2 generation is approximately 69% purple and 31% variegated with a trace of white, cream and yellow. Tolerance to continuous grazing is superior to Alfagraze.

4. AmeriStand 403T has high resistance to bacterial wilt, Verticillium wilt, Fusarium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (race 1), resistance to Aphanomyces (race 2) and pea aphid, moderate resistance to spotted alfalfa aphid and stem nematode. It has not been tested for reaction to blue alfalfa aphid and root knot nematode.

5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1998. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2001.

7. Plant Variety Protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety Name: AmeriStand 403T Date submitted November 2000

   Experimental designations: ZG 9840

NutriMax

1. NutriMax is a 28 clone synthetic cultivar. Parent clones trace to 12 populations selected fro resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1) and Aphanomyces (race 1) plus two additional isolates. Phenotypic recurrent selection was used. Final selections were made from two-year old space plant selection nurseries near Napier, Iowa based on yield, winter survival, degree of leafhopper yellowing and stunting, freedom from leaf diseases, fall dormancy reaction and multileaf expression.

   Breeder seed (syn 1) was produced in 1995 on approximately 25 cuttings of each clone transplanted at random and harvested in bulk

2. NutriMax appears to be adapted to the North Central and East Central regions of the U.S.. It is intended for use in the North Central and East Central regions of the U.S. for hay and haylage production. It has been tested in Iowa, Wisconsin and Illinois.

3. Fall dormancy of NutriMax is similar to the FD 4 check Saranac. Flower color is approximately 75% purple and 25% variegated with a trace of white, cream and yellow.

4. NutriMax has high resistance to bacterial wilt, Verticillium wilt, Fusarium wilt, Phytophthora root rot and anthracnose (race 1) and resistance to Aphanomyces (race 1) and pea aphid. It has not been tested for reaction to blue alfalfa aphid, spotted alfalfa aphid, stem nematode and root knot nematode.

5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed may be produced from either breeder or foundation classes. A 2, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1995. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2001.

7. Plant Variety Protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety Name: NutriMax Date submitted November 2000

   Experimental designations: ZM 9537

Root 66

1. Root 66 was selected for tolerance to continuous grazing (two cycles of recurrent phenotypic selection) by cattle while maintaining a healthy, large crown and root system.

2. Root 66 appears to be adapted to the North Central and East Central Regions of the U.S.. It is intended for use in the North Central and East Central Regions of the U.S. as a grazing crop as well as for producing stored feed. It has been tested in Iowa, Wisconsin and Illinois.

3. The fall dormancy of Root 66 is similar to the FD 4 check Saranac. Flower color of syn 2 generation is approximately 71% purple and 29% variegated with a trace of white, cream and yellow. Tolerance to continuous grazing is superior to Alfagraze.

4. Root 66 has high resistance to bacterial wilt, Verticillium wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), and anthracnose (race 1) and resistance to pea aphid. It has not been tested for reaction to stem nematode, spotted alfalfa aphid, blue alfalfa aphid and root knot nematode.

5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1997. ABI will maintain sufficient seed stocks for the life of the variety

6. Certified seed will be available in 2001.

7. Plant Variety Protection will not be applied for.

8. This information can be forwarded to the PVP office?

9. Variety Name: Root 66 Date submitted November 2000

   Experimental designations: ZG 9741

YieldMax

1. YieldMax was selected for tolerance to continuous grazing (one cycle of phenotypic selection) while maintaining a healthy large crown and root system.

2. YieldMax appears to be adapted to the North Central and East Central regions of the U.S.. It is intended for use in the North Central and East Central regions of the U.S. as a grazing crop as well as for producing stored feed.

3. Fall dormancy of YieldMax is similar to the FD 4 check variety Saranac. Flower color of syn 2 generation is approximately 71% purple, and 29% variegated with a trace of cream, white and yellow. Tolerance to intensive grazing is similar to Alfagraze.

4. YieldMax has high resistance to bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot (race 1), and resistance to pea aphid. It has not been tested for reaction to blue alfalfa aphid, spotted alfalfa aphid, stem nematode and root knot nematode.

5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) sed classes. Certified seed may be produced from either breeder or foundation classes. A 2, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced on 1996. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2001.

7. Plant Variety Protection will not be applied for.

8. This information can be forwarded to the PVP office.

9. Variety Name: YieldMax Date submitted November 2000

   Experimental designations: ZG 9642

1. RedGold is an advanced generation synthetic variety of red clover with 589 parent plants. Parent plants were selected for resistance to northern anthracnose and southern anthracnose in the greenhouse followed by culling in the field seed increase block for susceptibility to Fusarium wilt and powdery mildew, poor vegetative vigor, and poor flowering intensity. RedGold was derived from the following varieties: Quinequili (60%), Estanzuela 116 (20%), Cherokee (10%), and Red Star (10%). Breeder seed (Syn.1) was produced under field isolation near Woodland, California in 1995. Seed was bulk harvested from all parent plants.

2. RedGold is adapted to the Southwest region of the U.S., Argentina, and South Africa and is intended for use in Argentina, Chile, and South Africa. RedGold has been tested in California, Argentina, and South Africa. The intended use of RedGold is for hay, haylage, greenchop, or pasture.

3. RedGold has resistance to southern anthracnose and moderate resistance to northern anthracnose and Aphanomyces root rot (race 1). RedGold is a nondormant red clover variety with a winter active growth habit in areas with mild winter climate. RedGold is significantly more nondormant than the variety Cherokee which is currently the only commercial red clover variety considered to be nondormant or semi nondormant. Maturity of RedGold is later than Cherokee. Flower color of RedGold is predominantly medium pink but nearly one third of the plants have light pink flowers. Leaf color is predominantly medium green and growth habit is erect to semi-erect. Leaf markings are present on 65 to 70% of the plants.

4. Seed increase of RedGold is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under field isolation near Woodland, California in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 years.

5. Certified seed of RedGold will be available in 1999.

6. No decision has been made regarding Plant Variety Protection.

7. This information can be forwarded to the PVP office.

8. Variety Name: RedGold.

   Experimental Designation: CW 9504.

   Date NA&MLVRB first accepted this variety: January 1999.

   Date previous amendments were accepted: _____

   Date this amendment submitted: November 15, 2000.

1. Duration is adapted to the North Central, East Central, and Moderately Winterhardy Intermountain areas of the U.S. and is intended for use in the North Central and East Central areas of the U.S., Canada, and Europe. Duration has been tested in Wisconsin, Pennsylvania, and California.

2. Duration has high resistance to Fusarium wilt and Southern anthracnose (Colletotrichum trifolii), resistance to Aphanomyces root rot (race 1), and moderate resistance to Northern anthracose (Kabatiella caulivora). Maturity of Duration is similar to the variety Marathon. Leaf markings are present on 65% of the plants.

3. Seed increase of Duration is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 years.

4. Certified seed of Duration will be available in 2000.

5. No decision has been made regarding Plant Variety Protection.

6. This information can be forwarded to the PVP office?

7. Variety Name: Duration.

   Experimental Designation: CW 5049.

   Date NA&MLVRB first accepted this variety: January 2000.

   Date previous amendments were accepted: _____

   Date this amendment submitted: November 15, 2000.

1. StarFire is an advanced generation synthetic variety of red clover with 262 parent plants. Parent plants were selected from various populations for resistance to Fusarium wilt and powdery mildew and for vegetative vigor and persistence in a four year old Wisconsin spaced-plant nursery. Source populations were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: southern anthracnose, northern anthracnose, powdery mildew, and Fusarium wilt. StarFire was derived from the following varieties: Acclaim (30%), RedStar (20%), Red Baron (20%), Redland II (10%), and miscellaneous Cal/West Seeds breeding populations (20%). Breeder seed (Syn.1) was produced under cage isolation near Woodland, California in 1993. Seed was bulk harvested from all parent plants.

2. StarFire is adapted to the North Central and East Central regions of the U.S. and is intended for use in the North Central and East Central regions of the U.S., Canada, and Europe. StarFire has been tested in Wisconsin, Pennsylvania, and California. The intended use of StarFire is for hay, haylage, greenchop, or pasture.

3. StarFire has high resistance to Fusarium wilt, resistance to southern anthracnose and northern anthracnose, and moderate resistance to Aphanomyces root rot (race 1). StarFire has improved persistence compared to Marathon, RedStar, and some other cultivars of red clover. Maturity of StarFire is similar to the variety Marathon. Flower color of StarFire is predominantly medium pink and plant color dark green. Growth habit of StarFire is semi-erect to erect. Leaf markings are present on 55 to 60% of the plants.

4. Seed increase of StarFire is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1993. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 years.

5. Certified seed of StarFire will be available in 1999.

6. No decision has been made regarding Plant Variety Protection.

7. This information can be forwarded to the PVP office.

8. Variety Name: StarFire.

   Experimental Designation: CW 3002.

   Date NA&MLVRB first accepted this variety: January 1999.

   Date previous amendments were accepted: _____

   Date this amendment submitted: November 15, 2000.

1. Perfect is a synthetic variety with 225 parent plants which were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from three year old Wisconsin, Minnesota, and Iowa yield tests and selections from three year old Wisconsin nurseries. Nursery selections were made from various populations which were developed by phenotypic recurrent selection for high relative feed value (using Near Infrared Reflectance Spectroscopy), and for resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Perfect traces to the following germplasm sources: WinterKing, Maximum I, 9326, BigHorn, Hunter, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.falcata (8%), Ladak (5%), M.varia (26%), Turkistan (4%), Flemish (48%), and Chilean (9%).

2. Perfect is adapted to the North Central area of the U.S. and is intended for use in the North Central, East Central, and Great Plains areas of the U.S.. Perfect has been tested in Wisconsin, Minnesota and Iowa.

3. Perfect is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, 1% variegated, with a trace of white, cream, and yellow.

4. Perfect has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1), with resistance to spotted alfalfa aphid, pea aphid, and stem nematode. Reaction to blue alfalfa aphid and root knot nematode has not been adequately tested.

5. Seed increase of Perfect is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed of Perfect will be available in 1999.

7. No decision has been made regarding Plant Variety Protection.

8. This information can be forwarded to the PVP office.

9. Variety Name: Perfect.

Experimental Designation: CW 64008.

Date NA&MLVRB first accepted this variety: January 2000.

Date previous amendments were accepted: _____

Date this amendment submitted: November 15, 2000.

1. GH 700 is a synthetic variety with 250 parent plants which were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from 1995 breeder seed cages and from crosses between selections from three year old Wisconsin nurseries and selections from 1995 breeder seed cages. Nursery selections were made from various populations which were developed by phenotypic recurrent selection for high relative feed value (using Near Infrared Reflectance Spectroscopy), and for resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of GH 700 traces to the following germplasm sources: WinterGold, 9429, Alliant, BigHorn, Hunter, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.falcata (8%), Ladak (6%), M.varia (27%), Turkistan (4%), Flemish (47%), and Chilean (8%).

2. GH 700 is adapted to the North Central area of the U.S. and is intended for use in the North Central, East Central, and Great Plains areas of the U.S.. GH 700 has been tested in Wisconsin and Minnesota.

3. GH 700 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, 1% variegated, with a trace of white, cream, and yellow.

4. GH 700 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), and pea aphid, with resistance to spotted alfalfa aphid and stem nematode. Reaction to blue alfalfa aphid and root knot nematode has not been adequately tested.

5. Seed increase of GH 700 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed of GH 700 will be available in 1999.

7. No decision has been made regarding Plant Variety Protection.

8. This information can be forwarded to the PVP office.

9. Variety Name: GH 700.

   Experimental Designation: CW 64025.

   Date NA&MLVRB first accepted this variety: January 2000.

   Date previous amendments were accepted: _____

   Date this amendment submitted: November 15, 2000.

1. CW 69117 is a synthetic variety with 41 parent plants which were selected for high seed yield from nurseries near Woodland, California. Parent plants were selected from various populations which were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, blue alfalfa aphid, and stem nematode. Parentage of CW 69117 traces to Altiva, DK 191, ACA 900, Super Supreme, Topacio, 5929, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.varia (2%), Turkistan (9%), Flemish (3%), Chilean (6%), Peuvian (2%), Indian (24%), African (53%), and Unknown (1%).

2. CW 69117 is adapted to the Southwestern area of the U.S. and Mexico and is intended for use in the Southwestern U.S., Mexico, and Argentina. CW 69117 has been tested in California and Mexico.

3. CW 69117 is a very nondormant variety with fall dormancy similar to FD9 checks. Flower color observed in the Syn.2 generation is greater than 99% purple, with a trace of variegated, cream, white, and yellow.

4. CW 69117 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, and spotted alfalfa aphid, with resistance to stem nematode and blue alfalfa aphid. Reaction to bacterial wilt, Verticillium wilt, pea aphid, Aphanomyces root rot (race 1), and root knot nematode has not been adequately tested.

5. Seed increase of CW 69117 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under open isolation near Woodland, California in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed of CW 69117 will be available in 2000.

7. No decision has been made regarding Plant Variety Protection.

8. This information can be forwarded to the PVP office.

9. Variety Name:_____ Date submitted: November 16, 2000

Experimental Designation: CW 69117.

1. DK 194 is a synthetic variety with 128 parent plants which were selected for aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parent plants were selected from various populations which were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, blue alfalfa aphid, and stem nematode. Parentage of DK 194 traces to Topacio, DK 192, Grasis, ACA 900, Super Supreme, Mecca, F969, DK 191, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.varia (2%), Turkistan (11%), Flemish (3%), Chilean (8%), Peuvian (3%), Indian (23%), African (45%), and Unknown (5%).

2. DK 194 is adapted to the Southwestern area of the U.S. and Argentina and is intended for use in the Southwestern U.S. and Argentina. DK 194 has been tested in California and Argentina.

3. DK 194 is a very nondormant variety with fall dormancy similar to FD9 checks. Flower color observed in the Syn.2 generation is greater than 99% purple, with a trace of variegated, cream, white, and yellow.

4. DK 194 has high resistance to anthracnose (race 1), Fusarium wilt, spotted alfalfa aphid, and blue alfalfa aphid, with resistance to Phytophthora root rot, stem nematode, pea aphid, and northern root knot nematode. Reaction to bacterial wilt, Verticillium wilt, and Aphanomyces root rot (race 1) has not been adequately tested.

5. Seed increase of DK 194 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Mendoza, Argentina in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed of DK 194 will be available in 2000.

7. No decision has been made regarding Plant Variety Protection.

8. This information can not be forwarded to the PVP office.

9. Variety Name: DK 194 Date submitted: November 16, 2000

Experimental Designation: CW 79123.

1. Endurance is a synthetic variety with 225 parent plants which were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from Wisconsin clonal nurseries where clones were selected from various populations which were developed by phenotypic recurrent selection for high relative feed value (using Near Infrared Reflectance Spectroscopy), and for resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Endurance traces to the following germplasm sources: BigHorn , Award, DK 142, Gold Plus and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.falcata (8%), Ladak (6%), M.varia (25%), Turkistan (4%), Flemish (48%), and Chilean (9%).

2. Endurance is adapted to the North Central, East Central, and Great Plains areas of the U.S. and is intended for use in the North Central, East Central, and Great Plains areas of the U.S.. Endurance has been tested in Wisconsin, Minnesota, Kansas, Michigan, Pennsylvania, and Nebraska.

3. Endurance is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 95% purple, 5% variegated, with a trace of white, cream, and yellow.

4. Endurance has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), spotted alfalfa aphid, pea aphid, and blue alfalfa aphid, with resistance to stem nematode. Reaction to root knot nematode has not been adequately tested.

5. Seed increase of Endurance is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed of Endurance will be available in 1999.

7. No decision has been made regarding Plant Variety Protection.

8. This information can be forwarded to the PVP office.

9. Variety Name: Endurance.

Experimental Designation: CW 54006.

Date NA&MLVRB first accepted this variety: January 2000.

Date previous amendments were accepted: _____

Date this amendment submitted: November 15, 2000.

Paragon BR

1. Paragon BR is a 50 clone synthetic variety. One half of the parent plants were selected out of saturated soils near Marshfield, WI. Plants were selected for the branch rooted trait and excellent herbage growth. Source material trace back to 5373, 5472, Nordic, Zenith, Quest, 645, Precedent, Legacy, BlazerXL, Magnum III-Wet and Dairyland Experimental. The other half of the parent plant were selected out of disease nurseries and progeny tested for one or more of the following traits: forage yield, persistence, seed yield, forage quality, resistance to Phytophthora root rot, Aphanomyces root rot(Race 1), Verticillium wilt, bacterial wilt, Fusarium wilt, and spotted alfalfa aphid. This source material trace back to MNB-P1, Answer, RamRod and Dairyland Experimental. The percent of germplasm sources are: Turkistan(21), Flemish(38), Chilean(10) and unknown(31).

2. Paragon BR is adapted to the North Central and East Central Region of the United States and intended for use in the Northern half of the United States. The states were it has been tested are Iowa, Minnesota, Nebraska, Pennsylvania and Wisconsin.

3. Paragon BR is a dormant, fall dormancy 3 variety. Flower color in the Syn. 2 generation is 86% purple, 14% variegated with trace amounts of cream, white and yellow. In poorly drained soils, Paragon BR expresses branch rootedness.

4. Paragon BR has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, stem nematode: resistance to anthracnose(Race 1), Verticillium wilt, pea aphid, Aphanomyces root rot(Race 1), northern root-knot nematode(M. halpa) and moderate resistance to blue alfalfa aphid. Its reaction to spotted alfalfa aphid has not been tested.

5. Breeder seed was produced from bulking seed of parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA. in 1993. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research International.

6. Certified seed will be available spring of 1998.

7. No decision has been made concerning Plant Variety Protection.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Paragon BR
Experimental designations: BPR374
Date NA&MLVRB first accepted this variety: January, 1998
Dates previous amendments were accepted: November 25, 1998
Date this amendment was submitted: November 28, 2000

GoldLeaf

1. GoldLeaf is a 10 clone synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1), and spotted alfalfa aphid. The percent of germplasm sources are: Ladak(15), M. varia(12), Turkistan(15), Flemish(35), Chilean(8), and Unknown(15).

2. GoldLeaf is adapted to and intended for use in the North Central, Great Plains and East Central Region of the United States. The states where it has been tested are Minnesota, Iowa, Nebraska and Wisconsin.

3. GoldLeaf is a dormant variety similar to the fall dormancy 3 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

4. GoldLeaf has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot and northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), pea aphid, stem nematode, Verticillium wilt and anthracnose(Race 1). It has not been tested for spotted alfalfa aphid and blue alfalfa aphid.

5. Breeder seed(Syn. 1) was produced from bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1993-94. Seed from parental clones were equally bulked and seed lots were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2or3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research International.

6. Certified Seed will be available fall of 2000.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: GoldLeaf
Experimental designations: BPR378
Date Amended: November 28, 2000
Date Submitted November 29, 1999

Abundance

1. Abundance is a strain crossed synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race1), Verticillium wilt, Aphanomyces root rot (Race1), and spotted alfalfa aphid. Parent plants trace back to Thor and Teweles Multistrain. Percentage of germplasm sources are: Turkistan (50) and Flemish (50).

2. Abundance is adapted to the North Central and East Central regions of the United States. It is intended for use in the Central and Northern half of the United States. The states in which it has been tested are: Wisconsin and Illinois.

3. Abundance is moderately dormant, fall dormancy 4 variety. Flower color in the Syn.2 generation is 94% purple, 6% variegated, and trace amounts of cream, white, and yellow.

4. Abundance has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, northern root-knot nematode (M. halpa), resistance to anthracnose (Race1), Aphanomyces root rot (Race1), Verticillium wilt, pea aphid, spotted alfalfa aphid, stem nematode; moderate resistance to blue alfalfa aphid.

5. Breeder seed was produced from cuttings of the parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA in 1990-92. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn. 2) was produced from Breeder seed and Certified seed (Syn. 3) from Foundation seed. One generation each of Breeder Foundation, and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified seed was available spring of 1997.

7. Application for Plant Variety Protection is anticipated.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Abundance
Experimental designations: DS9410
Date NA&MLVRB first accepted this variety: January 1996
Dates previous amendments were accepted: November 25, 1998
Dates previous amendments were accepted: November 29, 1999
Date this amendment was submitted: November 28, 2000

Arrowhead

1. Arrowhead is a 58 clone synthetic variety. One half of the parent plants were selected from the variety MagnaGraze out of forage yield plots near Clinton, WI. Plants were selected for deep-set crowns, resistance to bacterial wilt, Fusarium wilt, crown health and herbage growth. The other half of the parent plants were selected out of saturated soils near Marshfield, WI. Plants were selected for resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1or2) and leaf disease. This source material trace back to Evolution and Defiant. The percent of germplasm sources are: Ladak(28), M. varia(12), Turkistan(35), Flemish(25).

2. Arrowhead is adapted in the North Central Region of the United States and intended for use in the Northern half of the United States. The state where it has been tested is Wisconsin.

3. Arrowhead is a dormant, fall dormancy 2 variety. Flower color in the Syn. 2 generation is 85% purple, 15% variegated, trace amounts of cream, white and yellow.

4. Arrowhead has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot; resistance to anthracnose (Race 1), Aphanomyces root rot (Race 1), Verticillium wilt, pea aphid and moderate resistance to northern root-knot nematode (M. halpa) and stem nematode. It has not been tested for blue alfalfa aphid and spotted alfalfa aphid.

5. Breeder seed was produced from bulking seed of parent plants planted in field isolation to produce Syn. 1 seed near Sloughhouse, CA in 1994. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed was available fall of 1998.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Arrowhead
Experimental designations: DS9852
Date NA and MLVRB first accepted this variety November 25, 1998
Date previous amendments were accepted
Date this amendment was submitted November 28, 2000

Forecast 1001

1. Forecast 1001 is a 16 clone synthetic variety. Parent plants were selected from Forecast 1000 for three cycles for the early maturity trait in space planted clonal nurseries. Parent plants were concurrently selected for persistence, spring vigor and forage yield along with resistance to bacterial wilt, Fusarium wilt and Phytophthora root rot, Aphanomyces root rot (Race 1or2) and Verticillium wilt. Percentage of germplasm sources are: Turkistan(25), Flemish(40) and Unknown(35).

2. Forecast 1001 is adapted to the North Central region of the United States. It is intended for use in the North and Central regions of the United States. The state and province in which it has been tested are: Wisconsin and Ontario, Canada.

3. Forecast 1001 is moderately dormant, fall dormancy 4 variety. Flower color in the Syn.2 generation is 85% purple, 15% variegated, and trace amounts of cream, white, and yellow.

4. Forecast 1001 has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, northern root-knot nematode (M. hapla), resistance to anthracnose (Race1), Verticillium wilt, Aphanomyces root rot (Race1), pea aphid and stem nematode. Its reaction to spotted alfalfa aphid and blue alfalfa aphid has not been tested.

5. Breeder seed was produced from bulking seed of parent plants hand-crossed in greenhouse near Clinton, WI to produce Syn.1 in 1994. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified seed will be available spring of 2000.

7. Application for Plant Variety Protection is anticipated.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Forecast 1001
Experimental designations: SMA9579
Date NA&MLVRB first accepted this variety: November 25, 1998
Dates previous amendments were accepted: November 29,1999
Date this amendment was submitted: November 28, 2000

Jade II

1. Jade II is a 16 clone synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race1), Verticillium wilt, Aphanomyces root rot (Race1), and spotted alfalfa aphid. Parent plants trace back to Jade, Apollo Supreme, Answer, WL312, Teweles Multistrain, and Dairyland Experimentals which trace back to Vernal, Ranger and Iroquois. Percentage of germplasm sources are: M.varia(15), Turkistan(25), Flemish(35) and Chilean(25).

2. Jade II is adapted to the North Central and Great Plains regions of the United States. It is intended for use in the Central and Northern half of the United States. The states in which it has been tested are: Wisconsin, Minnesota, Iowa, Nebraska and Kansas.

3. Jade II is similar to Saranac in fall dormancy. It expresses high forage quality similar to the high forage quality check variety. Flower color in the Syn.2 generation is 89% purple, 11% variegated, and trace amounts of cream, white, and yellow.

4. Jade II has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, resistance to anthracnose (Race1), Verticillium wilt, pea aphid, spotted alfalfa aphid, stem nematode; moderate resistance to Aphanomyces root rot (Race1), blue alfalfa aphid, and northern root-knot nematode (M. hapla).

5. Breeder seed was produced from cuttings of the parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA in 1990-92. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation, and two generations of Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified seed will be available spring of 1996.

7. Application for Plant Variety Protection is anticipated.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Jade II
   Experimental designations: BPR369
   Date NA and MLVRB first accepted this variety November, 1995
   Date this amendment was submitted November 28, 2000

Magna 901

1. Magna 901 is a 250 clone synthetic variety. Parent plants were selected out of forage yield plots near Visallia, CA. These parent plants were evaluated for Fusarium wilt, stem nematode, root-knot nematode, spotted alfalfa aphid resistance; crown health, fall dormancy and seed production. The percent of germplasm sources are: M. falcata(1), Ladak(1), M. varia(1), Turkistan(3), Flemish(1), Chilean(8), Peruvian(4), Indian(24), African(48) and Arabian(4) and Unknown(5).

2. Magna 901 is adapted to and intended for use in the Southwestern Region of the United States. The states where it has been tested are California and Wisconsin.

3. Magna 901 is a very non-dormant variety similar to the fall dormancy 9 check. Flower color in the Syn. 2 generation is 85% purple, 15% variegated with trace amounts of cream, white and yellow.

4. Magna 901 has high resistance to Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid and northern root-knot nematode; resistance to blue alfalfa aphid, stem nematode and southern root-knot nematode; moderate resistance to bacterial wilt and anthracnose (Race 1). It has not been tested for Aphanomyces root rot (Race 1) and Verticillium wilt.

5. Breeder seed (Syn. 1) was produced from bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1993. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed was available fall of 1999.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Magna 901
Experimental designations: DS691
Date NA and MLVRB first accepted this variety: November 29, 1999
Date this amendment was submitted November 28, 2000

Mariner II

1. Mariner II is a 94 clone synthetic variety. Parent plants were selected out of forage yield plots near Marshfield, Wisconsin for resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, Aphanomyces root rot; crowns free of crown rot and expression of branch roots. The percent of germplasm sources are: Ladak (13), M. varia (18), Turkistan (10), Flemish (41), and Unknown (18).

2. Mariner II is adapted to and intended for use in the North Central and East Central Region of the United States. The states where it has been tested are Minnesota, Indiana and Wisconsin.

3. Mariner II is a dormant variety similar to the fall dormancy 2 check. Flower color in the Syn. 2 generation is 87% purple, 13% variegated with trace amounts of cream, white and yellow.

4. Mariner II has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot and northern root-knot nematode; resistance to Aphanomyces root rot (Race1), pea aphid, stem nematode, Verticillium wilt and anthracnose (Race 1). It has not been tested for spotted alfalfa aphid and blue alfalfa aphid.

5. Breeder seed (Syn. 1) was produced from bulking seed of greenhouse hand crossing parent plants near Clinton, Wisconsin in 1994. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed was available fall of 1999.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Mariner II
Experimental designations: DS9803
Date NA and MLVRB first accepted this variety November 28, 1999
Date previous amendments were accepted
Date this amendment was submitted November 29, 1999

Stampede

1. Stampede is a synthetic variety with 228 parent clones. One hundred twelve parents were selected out of three year old forage yield plots for the deep set crown trait. This source material traces back to Answer, Apollo, and Dairyland experimentals. Dairyland experimentals trace back to Ranger and Vernal. One hundred sixteen parents were selected out of disease nurseries in Clinton and Marshfield, Wisconsin. This source material traces back to RamRod, ProCut II, Aggressor, Legacy, Precedent, Blazer XL, Starmaster, Zenith, DK122, Answer, MNP-D1, and Webfoot. Parent plants of the two germplasms were interplanted in cage isolation to produce Breeder seed. The percent of germplasm sources are Ladak(25), M.varia(15), Turkistan(25), and Flemish(40).

2. Stampede is adapted to the North Central, East Central, and Great Plains regions of the United States. It is intended for use in the Central and Northern half of the United States. The states in which it has been tested are: Wisconsin, Kansas, New York, and Pennsylvania.

3. Stampede similar to Ranger in fall dormancy. Flower color in the Syn.2 generation is 88% purple, 12% variegated, and trace amounts of cream, white, and yellow. Stampede has a deeper set crown than Magnum III, Alfagraze, and Vernal.

4. Stampede has high resistance to Phytophthora root rot, bacterial wilt, spotted alfalfa aphid, resistance to Fusarium wilt, Verticillium wilt, anthracnose (Race 1), pea aphid, Aphanomyces root rot (Race 1) and stem nematode. Its reaction to northern root-knot nematode and blue alfalfa aphid have not been tested.

5. Breeder seed was produced from bulking seed of parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA in 1991. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation, and two generations of Certified seed (Syn.2 or 3) classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.

6. Certified seed will be available spring of 1995.

7. Application for Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Stampede
   Experimental designations: DS9311
   Date NA and MLVRB first accepted this variety November 23, 1994
   Date this amendment was submitted November 28, 2000

WinterCrown

1. WinterCrown is a 51 clone synthetic variety. Twenty-six parent plants were selected from the variety MagnaGraze out of forage yield plots near Clinton, WI. Plants were selected for deep-set crowns, resistance to bacterial wilt, Fusarium wilt, crown health and herbage growth. Twenty-five parent plants were selected from the germplasm MNP-D1 (Syn. 2) out of disease nurseries. These parent plants were progeny tested for the following traits: forage yield, stand persistence, forage quality; resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: M. falcata (10), Ladak(18), M. varia(12), Turkistan(40), Flemish(20).

2. WinterCrown is adapted in the North Central Region of the United States and intended for use in the Northern half of the United States. The state where it has been tested is Wisconsin.

3. WinterCrown is a dormant, fall dormancy 3 variety. Flower color in the Syn. 2 generation is 82% purple, 17% variegated, 1% cream, 1%white and 1%yellow.

4. WinterCrown has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot; resistance to anthracnose (Race 1), Aphanomyces root rot (Race 1), Verticillium wilt, pea aphid and moderate resistance to northern root-knot nematode (M. halpa) and stem nematode. It has not been tested for blue alfalfa aphid and spotted alfalfa aphid.

5. Breeder seed was produced from bulking seed of parent plants planted in field isolation to produce Syn. 1 seed near Sloughhouse, CA in 1994. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed was available spring of 1999.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: WinterCrown
Experimental designations: DS9853
Date NA and MLVRB first accepted this variety November 25, 1998
Date previous amendments were accepted
Date this amendment was submitted November 28, 2000

DS681FQ

1. DS681FQ is a 120 clone synthetic variety. One half of the parent plants were selected out of forage yield plots and/or disease nurseries. These parent plants were evaluated for Fusarium wilt, stem nematode, root-knot nematode, spotted alfalfa aphid resistance; crown health, fall dormancy and seed production. The other half of the parent plants were selected for visual forage quality characteristics, plant vigor and seed production. The percent of germplasm sources are: M. varia(2), Turkistan(5), Flemish(4), Chilean(12), Peruvian(10), Indian(20), African(15) and Unknown(32).

2. DS681FQ is adapted and intended for use in the Southwestern Region of the United States. The states where it has been tested are California and New Mexico.

3. DS681FQ is a non-dormant variety similar to the fall dormancy 8 check. Flower color in the Syn. 2 generation is 85% purple, 15% variegated with trace amounts of cream, white and yellow.

4. DS681FQ has high resistance to Fusarium wilt, northern root-knot nematode (M. hapla), southern root-knot nematode (M. incognita); resistance to bacterial wilt, stem nematode, pea aphid and moderate resistance to anthracnose (Race 1) and Verticillium wilt. DS681FQ has not been tested against spotted alfalfa aphid, blue alfalfa aphid, Phytophthora root rot and Aphanomyces root rot (Race1).

5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1995. Seed from parental clones were equally bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2or3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed will be available fall of 2000.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: _____ Date Submitted November 28, 2000
Experimental designations: DS681FQ

Badger

1. Badger is a 24 clone synthetic. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: M. varia(15), Turkistan(25), Flemish(40) and Unknown(20).

2. Badger is adapted to and intended for use in the North Central and East Central Region of the United States. The states where it has been tested are Minnesota, Iowa, Pennsylvania and Wisconsin.

3. Badger is a dormant variety similar to the fall dormancy 3 check. Flower color in the Syn. 2 generation is 88% purple, 12% variegated with trace amounts of cream, white and yellow.

4. Badger has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, pea aphid, and northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), stem nematode, Verticillium wilt, anthracnose (Race 1), spotted alfalfa aphid and blue alfalfa aphid.

5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1992-93. Seed from parental clones were equally bulked and seed lots from each year were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2or3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed will be available fall of 2000.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Badger Date Submitted November 28, 2000
Experimental designations: BPR380

BPR379

1. BPR379 is a 40 clone synthetic. Parent clones were selected out of forage yield plots for deep crown placement and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: M. varia(20), Turkistan(10), Flemish(36), Chilean(12) and Unknown(22).

2. BPR379 is adapted to the North Central, Great Plains and East Central Region of the United States and intended for use in the Northern half of the United States. The states where it has been tested are Minnesota, Iowa, Pennsylvania, Nebraska and Wisconsin.

3. BPR379 is a dormant variety similar to the fall dormancy 3 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

4. BPR379 has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), stem nematode, Verticillium wilt, anthracnose (Race 1), pea aphid. BPR379 has not been tested against spotted alfalfa aphid and blue alfalfa aphid.

5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1995. Seed from parental clones were equally bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2or3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed will be available fall of 2001.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: _____ Date Submitted November 28, 2000
Experimental designations: BPR379

Reward II

1. Reward II is an 18 clone synthetic. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: M. varia(15), Turkistan(15), Flemish(40) and Unknown(30).

2. Reward II is adapted to the North Central, Great Plains and East Central Region of the United States and intended for use in the Northern half of the United States. The states where it has been tested are Michigan, Kansas, Nebraska, Iowa and Wisconsin.

3. Reward II is a moderate dormant variety similar to the fall dormancy 4 check. Flower color in the Syn. 2 generation is 85% purple, 15% variegated with trace amounts of cream, white and yellow.

4. Reward II has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, and northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), stem nematode, Verticillium wilt, anthracnose (Race 1), pea aphid, spotted alfalfa aphid and blue alfalfa aphid.

5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1992-93. Seed from parental clones were equally bulked and seed lots from each year were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2or3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed will be available fall of 2000.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Reward II Date Submitted November 28, 2000
Experimental designations: PGI4372

Harvestar 812HY

1. Harvestar 812HY is a 12 clone synthetic. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: Ladak(10), M. varia(18), Turkistan(16), Flemish(35), Chilean(10) and Unknown(11).

2. Harvestar 812HY is adapted to the North Central, Great Plains and East Central Region of the United States and intended for use in the Northern half of the United States. The states where it has been tested are Minnesota, Iowa, Pennsylvania, Nebraska and Wisconsin.

3. Harvestar 812HY is a moderate dormant variety similar to the fall dormancy 4 check. Flower color in the Syn. 2 generation is 92% purple, 8% variegated with trace amounts of cream, white and yellow.

4. Harvestar 812HY has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot; resistance to Aphanomyces root rot (Race1), stem nematode, Verticillium wilt, anthracnose (Race 1), pea aphid, spotted alfalfa aphid, blue alfalfa aphid and northern root-knot nematode.

5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1992-93. Seed from parental clones were equally bulked and seed lots from each year were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2or3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

6. Certified Seed will be available fall of 2000.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Harvestar 812HY Date Submitted November 28, 2000
Experimental designations: DS9501

Atomic

1. Atomic is an18 clone synthetic. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: M. varia(22), Turkistan(12), Flemish(31), Chilean(15) and Unknown(20).

2. Atomic is adapted to and intended for use in the North Central Region of the United States and Western Canada. The state and provinces where it has been tested are Wisconsin, United States; Alberta, Saskatchewan and Manitoba Canada.

3. Atomic is moderately dormant variety similar to the fall dormancy 4 check. Flower color in the Syn. 2 generation is 91% purple, 9% variegated with trace amounts of cream, white and yellow.

4. Atomic has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot; resistance to stem nematode, northern root-knot nematode (M. hapla), Verticillium wilt, anthracnose (Race 1), pea aphid; moderate resistance to Aphanomyces root rot (Race 1). DS9315 has not been tested against spotted alfalfa aphid and blue alfalfa aphid.

5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1991-92. Seed from parental clones were equally bulked and seed lots from each year were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2or3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety

6. Certified Seed will be available fall of 2001.

7. Application for the Plant Variety Protection is undecided.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Atomic Date Submitted November 28, 2000
Experimental designations: DS9315

Good as Gold II

1. Good as Gold II is a 16 clone synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, maturity, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1), and spotted alfalfa aphid. Parent plants trace back to Tempo, Apollo Supreme, Thor, WL312, Answer, Teweles Multistrain, and Dairyland Experimentals which trace back to Ranger and Iroquois. Percentage of germplasm sources are: Turkistan(32), Flemish(40) and Chilean(28).

2. Good as Gold II is adapted in the North Central and Great Plains regions of the United States. It is intended for use in the North and Central region of the United States. The states in which it has been tested are: Wisconsin, Nebraska, Kansas and Oklahoma.

3. Good as Gold II is moderately dormant, fall dormancy 4 variety. Flower color in the Syn.2 generation is 90% purple, 10% variegated, and trace amounts of cream, white, and yellow.

4. Good as Gold II has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, northern root-knot nematode(M. hapla); resistance to Verticillium wilt, pea aphid, anthracnose(Race1); moderate resistance to stem nematode and Aphanomyces root rot(Race1). Its reaction to spotted alfalfa aphid and blue alfalfa aphid have not been tested.

5. Breeder seed was produced from cuttings of the parent plants planted in cage isolation to produce Syn.1 seed at Sloughhouse, CA in 1988-90. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed(Syn.2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation, and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.

6. Certified seed will be available spring of 1999.

7. Application for Plant Variety Protection is anticipated.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Good as Gold II
Experimental designations: DSS5106
Date NA&MLVRB first accepted this variety: November 25, 1998
Dates previous amendments were accepted: November 29, 1999
Date this amendment was submitted: January 16, 2001

Value Plus 1

1. Value Plus 1 is a synthetic variety with 13 parent clones. Parents were selected for forage yield, persistence, forage quality, rapid recovery after cutting, and multifoliolate expression from two-and three-year-old Wisconsin breeding nurseries. Parents trace to breeding populations selected for multifoliate expression and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), Verticillium wilt, anthracnose (Race 1), Leptosphaerulina leaf spot, pea aphid and spotted alfalfa aphid. Recurrent phenotypic selection was used. Germplasm sources used in developing Value Plus 1 were: DK 127 (25%), Lightning (20%), LegenDairy 2.0 (15%), Rushmore (10%), Excalibur II (10%), 5262 (10%), Magnum III (5%) and G2852 (5%). Syn1 was produced near Nampa, ID in 1995, harvested in total and bulked to form breeder seed. Approximate germplasm source contributions are: *M. falcata* (6%), Ladak (4%), *M. varia* (32%), Turkistan (3%), Flemish (52%), and Chilean (3%).

2. This variety is adapted to the North Central United States and intended for use in the North Central United States. It has been tested in Wisconsin, Iowa and Minnesota.

3. Fall dormancy of this variety is similar to the FD4 checks and winter survival of this variety is similar to WS1 checks. Flower color in the Syn2 is 72% purple and 28% variegated, with a trace of cream, white, and yellow. Value Plus 1 has high multifoliate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, and Phytophthora root rot; resistance to Verticillium wilt, pea aphid, spotted alfalfa aphid, and Aphanomyces root rot (Race 1); and moderate resistance to stem nematode. Reaction to blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn1), foundation (Syn2 or Syn3), and certified (Syn3 or Syn4) classes will be recognized. Production of Syn3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 5 years, respectively.

6. Certified seed will be marketed in 1999.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application can not be forwarded to the Plant Variety Protection office.

9. Variety name Value Plus 1

   Experimental designations FG 3G56

   Date NA&MLVRB first accepted this variety January 1999

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2000

INTRIGUE

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central and East Central U.S. regions. This variety has been tested in Wisconsin, Minnesota and Iowa and is intended for use in the North Central and East Central U.S. regions.

3. Test variety is a moderately dormant variety, similar to FD4 checks. Test variety is very winterhardy, similar to WS2 checks. Flower color (Syn2) is 99% purple, 1% white, with a trace of yellow, variegated and cream.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, and Aphanomyces root rot (Race 1), and resistance to alfalfa stem nematode. Reaction to blue alfalfa aphid and root-knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn1), foundation (Syn2 or Syn3), and certified (Syn3 or Syn4), classes will be recognized. Production of Syn3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2000.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application can not be forwarded to the PVP Office.

9. Variety name INTRIGUE

   Experimental designations FG 3G61

   Date NA&MLVRB first accepted this variety January 2000

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2000

Somerset

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to North Central and East Central U. S. regions. This variety has been tested in Wisconsin and Illinois and is intended for use in the North Central and East Central U. S. regions.

3. Test variety is a dormant variety, similar to FD3 checks. Test variety is very winterhardy, similar to WS2 checks. Flower color (Syn2) is 93% purple, 6% variegated, 1% white, with a trace of yellow and cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Aphanomyces root rot (Race 1), Verticillium wilt, and Phytophthora root rot, and resistance to spotted alfalfa aphid and alfalfa stem nematode. Reaction to pea aphid, blue alfalfa aphid and root-knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn1), foundation (Syn2 or Syn3), and certified (Syn3 or Syn4), classes will be recognized. Production of Syn3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2000.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application can not be forwarded to the PVP Office.

9. Variety name Somerset

   Experimental designations FG 3R58

   Date NA&MLVRB first accepted this variety January 2000

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2000

TruTest

1. The selection criteria used in the development of this variety include forage yield potential, persistence, multifoliolate leaf expression and resistance to one or more of the following pests: Verticillium wilt, Phytophthora root rot and spotted alfalfa aphid.

2. This variety is adapted to the Southwest and the Moderately Winterhardy Intermountain U.S. regions. This variety has been tested in Idaho and California and is intended for use in the Southwest and the Moderately Winterhardy Intermountain U.S. regions.

3. Test variety is moderatley dormant, similar to FD6 checks. Flower color (Syn2) is 99% purple, 1% variegated with a trace of white, yellow and cream. Test variety has moderate multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid and blue alfalfa aphid; resistance to Verticillium wilt and root-knot nematode (Southern), and moderate resistance to bacterial wilt, stem nematode and root-knot nematode (Northern). Reaction to Aphanomyces root rot has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2000.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application can not be forwarded to the PVP Office.

9. Variety name TruTest

   Experimental designations FG 6R632

   Date NA&MLVRB first accepted this variety January 2000

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2000

CutMor

1. CutMor is a synthetic variety with 134 parent plants. Plants were selected for one or more of the following traits; Phytophthora root rot, Verticilium wilt, anthracnose (race 1), blue alfalfa aphid, pea aphid and spotted alfalfa aphid. Germplasm sources used in developing CutMor were DK189(60%), Condor (30%) and Tahoe (10%). Breeder seed (Syn 1) was produced near Nampa, Idaho in 1994. Seed was harvested in total on all parents and bulked to form breeder seed. Approximate germplasm source contributions are: *M.falcata* (1%), Ladak (5%), *M.varia* (6%), Turkistan (20%), Flemish (7%), Chilean (6%), Peruvian (3%), Indian (17%), African (30%) and unknown (5%).

2. This variety is adapted to California. This variety has been tested in Idaho and California. It will be used in the southwest and high desert west.

3. This variety has fall dormancy similar to FD8 checks. Flower color (Syn2) is 100% purple.

4. This variety has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid and blue alfalfa aphid, resistance to stem nematode, Verticilium wilt and root knot nematode (Northern). Reaction to bacteria wilt and Aphanomyces root rot has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1994. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 year, respectively.

6. Certified seed will be marketed in 1998.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety name CutMor

Experimental designations FG 8L418

Date NA&MLVRB first accepted this variety Jan 1, 1998

Dates previous amendments were accepted None

Date this amendment submitted November 1, 2000

MultiPlier 3

1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Wisconsin and Illinois and is intended for use in the North Central and East Central regions.

3. Test variety is a dormant variety, similar to FD3 checks. Test variety is Very Winterhardy, similar to WS2 checks. Flower color (Syn2) is 90% purple, 8% variegated, 2% white, with a trace of yellow and cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Aphanomyces root rot (Race 1) and Phytophthora root rot; resistance to Verticillium wilt, pea aphid and spotted alfalfa aphid; with moderate resistance to stem nematode. Reaction to blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn1), foundation (Syn2 or Syn3), and certified (Syn3 or Syn4) classes will be recognized. Production of Syn3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: MultiPlier 3 Date Submitted November 1,2000

   Experimental designations: FG 3R53

5-Star

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot, spotted alfalfa aphid and Aphanomyces root rot (Race 1).

2. This variety is adapted to North Central, Winterhardy Intermountain and Great Plains regions. This variety has been tested in Idaho, Wisconsin and Oklahoma and is intended for use in the North Central, Winterhardy Intermountain and Great Plains regions.

3. Test variety is moderately fall dormant, similar to FD5 checks. Test variety is Moderately Winterhardy, similar to WS3 checks. Flower color (Syn2) is 96% purple, 4% variegated with a trace of yellow, white and cream.

4. This variety has high resistance to Fusarium wilt; with resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), pea aphid, spotted alfalfa aphid, blue alfalfa aphid, Verticillium wilt and stem nematode. Reaction to root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: 5-Star Date submitted November 1,2000

   Experimental designations: FG 5R81

FG 6R87

1. The selection criteria used in the development of this variety include multiple pest resistance and mid-western, moderately-dormant types selected for multiple pest resistance and winterhardiness. The F1 population was selected for late fall dormancy, vigor and resistance to one or more of the following: bacterial wilt, Fusarium wilt, Phytophthora and anthracnose (Race 1).

2. This variety is adapted to Winterhardy Intermountain and Great Plains regions. This variety has been tested in Idaho, Wisconsin and Oklahoma and is intended for use in the Winterhardy Intermountain and Great Plains regions.

3. Test variety is moderately fall dormant, similar to FD6 checks. Test variety is Winterhardy, similar to WS5 checks. Flower color (Syn2) is 97% purple, 3% variegated with a trace of yellow, white and cream.

4. This variety has resistance to anthracnose (Race 1), Verticillium wilt, Fusarium wilt, Phytophthora root rot, pea aphid, and stem nematode; with moderate resistance to Aphanomyces root rot (Race 1) and blue alfalfa aphid. Reaction to bacterial wilt, spotted alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 6R87

FG 5R105

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: Verticillium wilt, Phytophthora root rot, stem nematode, root knot nematode and Aphanomyces root rot (Race 1).

2. This variety is adapted to the Winterhardy Intermountain region. This variety has been tested in Idaho and Washington and is intended for use in the Winterhardy Intermountain region.

3. Test variety is moderately dormant, similar to FD5 checks. Flower color (Syn2) is 84% purple, 14% variegated, 1% yellow, 1% cream with a trace of white. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt and Fusarium wilt; resistance to Phytophthora root rot, Verticillium wilt, stem nematode, pea aphid and spotted alfalfa aphid; with moderate resistance to Aphanomyces root rot (Race 1). Reaction to blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 5R105

FG 3R123

1. The selection criteria used in the development of this variety include multifoliolate leaf expression, forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: stem nematode, root knot nematode, Fusarium wilt and Verticillium wilt.

2. This variety is adapted to the Winterhardy Intermountain region. This variety has been tested in Idaho, Colorado and Washington and is intended for use in the Winterhardy Intermountain region.

3. Test variety is a moderately dormant variety, similar to FD4 checks. Flower color (Syn2) is 77% purple, 17% variegated, 4% yellow, 2% white with a trace of cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to Fusarium wilt, anthracnose (Race 1), Phytophthora root rot, pea aphid, spotted alfalfa aphid and stem nematode; resistance to Verticillium wilt, root knot nematode (Northern), bacterial wilt and Aphanomyces root rot (Race 1); with moderate resistance to blue alfalfa aphid.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 3R123

FG 3R129

1. The selection criteria used in the development of this variety include multifoliolate leaf expression, forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: Verticillium wilt, Fusarium wilt, root knot nematode and stem nematode.

2. This variety is adapted to the Winterhardy Intermountain regions. This variety has been tested in Idaho, Colorado and Washington and is intended for use in the Winterhardy Intermountain regions.

3. Test variety is a moderately dormant variety, similar to FD4 checks. Flower color (Syn2) is 91% purple, 7% variegated, 1% white, 1% yellow with a trace of cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to bacterial wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot, pea aphid and stem nematode; with resistance to Verticillium wilt, spotted alfalfa aphid and blue alfalfa aphid. Reaction to Aphanomyces root rot and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 3R129

FG 7R631

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: Verticillium wilt, anthracnose (Race 1), Phytophthora root rot, blue alfalfa aphid, pea aphid and spotted alfalfa aphid.

2. This variety is adapted to the Southwest and Moderately Winterhardy Intermountain regions. This variety has been tested in Idaho and California and is intended for use in the Southwest and Moderately Winterhardy Intermountain regions.

3. Test variety is non-dormant, similar to FD7 checks. Flower color (Syn2) is 100% purple with a trace of variegated, white, yellow and cream.

4. This variety has high resistance to anthracnose (Race 1), Phytophthora root rot, pea aphid and spotted alfalfa aphid; resistance to Verticillium wilt, stem nematode, Fusarium wilt, blue alfalfa aphid and root knot nematode (Northern); with moderate resistance to bacterial wilt. Reaction to Aphanomyces root rot has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 7R631

FG 4A75

1. The selection criteria used in the development of this variety include multifoliolate leaf expression, forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central and Great Plains regions. This variety has been tested in Minnesota, Nebraska and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains regions.

3. Test variety is moderately fall dormant, similar to FD4 checks. Test variety is Extremely Winterhardy, similar to WS1 checks. Flower color (Syn2) is 93% purple, 6% variegated, 1% white, with a trace of yellow and cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to Aphanomyces root rot (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot and anthracnose (Race 1); with resistance to stem nematode and spotted alfalfa aphid. Reaction to pea aphid, blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 4A75

FG 4A78

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central region. This variety has been tested in Minnesota and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains regions.

3. Test variety is fall dormant, similar to FD3 checks. Test variety is Extremely Winterhardy, similar to WS1checks. Flower color (Syn2) is 89% purple, 9% variegated, 1% cream, 1% white with a trace of yellow. This variety has moderate multifoliolate leaf expression.

4. This variety has high resistance to Aphanomyces root rot (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid and anthracnose (Race 1); with resistance to Verticillium wilt and stem nematode. Reaction to pea aphid, blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 4A78

FG 4A79

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central region. This variety has been tested in Minnesota and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains regions.

3. Test variety is fall dormant, similar to FD3 checks. Test variety is Extremely Winterhardy, similar to WS1checks. Flower color (Syn2) is 87% purple, 9% variegated, 2% cream, 1% yellow and 1% white. This variety has moderate multifoliolate leaf expression.

4. This variety has high resistance to Aphanomyces root rot (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid and anthracnose (Race 1); with resistance to Verticillium wilt and stem nematode. Reaction to pea aphid, blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 4A79

HYTEST 410

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central region. This variety has been tested in Minnesota and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains regions.

3. Test variety is moderately fall dormant, similar to FD4 checks. Test variety is Extremely Winterhardy, similar to WS1checks. Flower color (Syn2) is 90% purple, 5% variegated, 4% yellow, 1% white with a trace of cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to Aphanomyces root rot (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid, Verticillium wilt and anthracnose (Race 1); with resistance to stem nematode. Reaction to pea aphid, blue alfalfa aphid and root knot nematode.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: HYTEST 410 Date submitted November 1, 2000

   Experimental designations: FG 4A80

WL 342

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central and Great Plains regions. This variety has been tested in Minnesota, Nebraska and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains regions.

3. Test variety is moderately fall dormant, similar to FD4 checks. Test variety is Extremely Winterhardy, similar to WS1 checks. Flower color (Syn2) is 87% purple, 9% variegated, 2% white,1% yellow and 1% cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to Aphanomyces root rot (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid, pea aphid, Verticillium wilt and anthracnose (Race 1); with resistance to stem nematode. Reaction to blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: WL 342 Date submitted November 1, 2000

   Experimental designations: FG 4A83

FG 4A84

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central region. This variety has been tested in Minnesota and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains regions.

3. Test variety is moderately fall dormant, similar to FD4 checks. Test variety is Extremely Winterhardy, similar to WS1 checks. Flower color (Syn2) is 92% purple, 3% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to Aphanomyces root rot (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, pea aphid, Verticillium wilt and anthracnose (Race 1); with resistance to spotted alfalfa aphid and stem nematode. Reaction to blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 4A84

FG 5A103

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: Verticillium wilt, stem nematode, root knot nematode, Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the Winterhardy Intermountain region. This variety has been tested in Idaho and Washington and is intended for use in the Winterhardy Intermountain region.

3. Test variety is moderately dormant, similar to FD5 checks. Flower color (Syn2) is 83% purple, 11% variegated, 1% yellow, 4% cream and 1% white. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, and spotted alfalfa aphid; with resistance to Verticillium wilt, stem nematode, pea aphid, blue alfalfa aphid and Aphanomyces root rot (Race 1). Reaction to root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 5A103

FG 4A135

1. The selection criteria used in the development of this variety include forage yield potential, forage quality potential, persistence, and resistance to one or more of the following pests: Phytophthora root rot, Verticillium wilt, stem nematode, root knot nematode and Aphanomyces root rot (Race 1).

2. This variety is adapted to the Winterhardy Intermountain region. This variety has been tested in Idaho and Washington and is intended for use in the Winterhardy Intermountain region.

3. Test variety is moderately fall dormant, similar to FD5 checks. Flower color (Syn2) is 90% purple, 7% variegated, 2% yellow, 1% cream, with a trace of white. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), pea aphid and stem nematode; with resistance to Verticillium wilt, spotted alfalfa aphid, Fusarium wilt and root knot nematode (Northern). Reaction to blue alfalfa aphid has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 4A135

FG 9A216

1. The selection criteria used in the development of this variety include forage yield, persistence, and resistance to one or more of the following pests: Verticillium wilt, Phytophthora root rot, spotted alfalfa aphid and Aphanomyces root rot (Race 1).

2. This variety is adapted to the Southwest region. This variety has been tested in California and is intended for use in the Southwest region.

3. Test variety is very non-dormant, similar to FD9 checks. Flower color (Syn2) is 100% purple with traces of variegated, cream, yellow and white.

4. This variety has high resistance to Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid and blue alfalfa aphid; resistance to bacterial wilt, root knot nematode and Verticillium wilt; with moderate resistance to anthracnose (Race 1) and stem nematode. Reaction to Aphanomyces root rot has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

Experimental designations: FG 9A216

FG 8A220

1. The selection criteria used in the development of this variety include forage yield, persistence, and resistance to one or more of the following pests: Verticillium wilt, Phytophthora root rot, spotted alfalfa aphid and Aphanomyces root rot (Race 1).

2. This variety is adapted to the Southwest region. This variety has been tested in California and intended for use in the Southwest region.

3. Test variety is non-dormant, similar to FD8 checks. Flower color (Syn2) is 100% purple with a trace of cream, yellow, variegated and white. This variety has moderate multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid and blue alfalfa aphid; resistance to Verticillium wilt, and root knot nematode (Northern); with moderate resistance to bacterial wilt and stem nematode. Reaction to Aphanomyces root rot has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 8A220

FG 4M31

1. The selection criteria used in the development of this variety include potato leafhopper resistance, late fall dormancy, forage yield, forage quality, persistence and resistance to one or more of the following pests: potato leafhopper, bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Indiana, Iowa and Wisconsin and is intended for use in the North Central, East Central and Southeast regions.

3. Test variety is moderately fall dormant, similar to FD4 checks. Test variety is Very Winterhardy, similar to WS2 checks. Flower color (Syn2) is 41% variegated, 29% purple, 17% yellow, 7% white and 6% cream.

4. This variety has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt and anthracnose (Race 1); resistance to Aphanomyces root rot (Race 1) and spotted alfalfa aphid; with moderate resistance to stem nematode. Reaction to blue alfalfa aphid, pea aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1998. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: _____ Date submitted November 1, 2000

   Experimental designations: FG 4M31

AV3420

1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence, and resistance to one or more of the following pests: bacterial wilt, Verticillium wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot and Aphanomyces root rot (Race 1).

2. This variety is adapted to the North Central region. This variety has been tested in Iowa, Minnesota and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains regions.

3. Test variety is moderately fall dormant, similar to FD4 checks. Test variety is Very Winterhardy, similar to WS2 checks. Flower color (Syn2) is 90% purple, 10% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to Aphanomyces root rot (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot and anthracnose (Race 1); with resistance to Verticillium wilt, spotted alfalfa aphid and stem nematode. Reaction to pea aphid, blue alfalfa aphid and root knot nematode has not been tested.

5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2001.

7. No decision has been made concerning Plant Variety Protection Act.

8. The information in this application may not be forwarded to the PVP office.

9. Variety Name: AV3420 Date submitted November 1, 2000

   Experimental designations: FG 4G67

Key 2 Alfalfa

1. The breeding method involved recurrent phenotypic selection for less fall dormancy and greater vigor within the Key alfalfa variety.

2. Areas of adaptation for Key 2 are East Central, Southeast and moderately winter-hardy Intermountain regions. The variety has been tested in California and North Carolina. The intended purposes for the variety are hay, haylage, greenchop, and dehydration.

3. The fall dormancy of Key 2 is similar to FD 5 check. Flower color is 85% purple and 15% variegated as measured in the Syn 2.

4. Key 2 has high resistance to Anthracnose (Race 1), Bacterial Wilt, Fusarium Wilt, Verticillium Wilt, Phytophthora Root Rot, Pea Aphid, and Spotted Alfalfa Aphid; and moderate resistance to Blue Alfalfa Aphid, Aphanomyces Root Rot (Race 1), Stem nematode, and southern root-knot nematode (M. incognita).

5. Seed increase is on a limited generation basis with one generation each of breeder, foundation and certified seed classes: i.e. breeder (Syn 1), foundation (Syn 2), certified (Syn 3). Breeder seed was produced under isolation in Cary, NC. Foundation and certified classes are produced by Great Plains Research Company, Inc., under contract with seed growers. Age of stand for seed production for breeder, foundation and certified seed is 1, 2 and 6 years, respectively. Breeder and foundation seed stocks are maintained by Great Plains Research Company, Inc. Breeder seed was produced in 1997.

6. Certified seed will be marketed in 2001.

7. Application will be made for Plant Variety Protection under the Act. The certification option will be requested.

8. This information may be forwarded to the PVP office.

9. Variety Name: Key 2 Date submitted: Nov.1, 2000
   Experimental designation: NS-98-02.

58N58

1. 58N58 is a synthetic variety of 175 parental plants tracing to seven (7) half-sib progeny lines. The lines were selected based on polycross (half-sib) progeny tests for relative feed value (RFV) and forage yield. The original seven female parents were selected for anthracnose (race 1) or Phytophthora from six different germplasm: MNPD-1, Pierce and four (4) Pioneer experimental lines. 58N58 traces to MNPD-1 (14%), Pierce (14%), CUF101 (12%), BAA-20(5%), UCPX (5%), UC Cargo (4%), Moapa 69(3%), WL512(3%), WL318(3%), UC Salton (3%), FO285 (3%), WL600 (2%), Matador (2%), Lahontan (1%), Apollo (1%) with 25% contributions from Nevada SynXX, Condura 73, El Camino, N71, Sonora, Bonanza, Moapa, Caliverde, SW44, El Unico, Sirsa, Anchor, Citation, Vernal, Titan, Weevlchek, Nugget, Temp, Kanza, Aphidor. Germplasm sources are approximately: *Medicago falcata* (1.8%), Ladak (1.8%), *M. varia* (2.2%), Turkistan (7.4%), Flemish (0.9%), Chilean (4.3%), Peruvian (1.2%), Indian (5.1%), African (28.3%) and unknown (47.0%).

2. 58N58 is intended for use in South America. It has been tested for yield in Argentina.

3. 58N58 is a nondormant cultivar with a fall dormancy similar to Moapa 69. Flower color of the Syn 2 generation is 91% purple, 9% variegated with traces of cream, yellow and white.

4. 58N58 has high resistance to Fusarium wilt, Phytophthora root rot, pea aphid, blue aphid, northern root knot nematode; resistance to anthracnose (race 1), and spotted alfalfa aphid; low resistance to stem nematode, and bacterial wilt; and susceptible to Verticillium wilt. 58N58 has not been tested for resistance to southern root knot nematode.

5. Breeders seed (Syn 1) was produced in 1993 on parent plants in "cage isolation" and bulked. Seed classes will be breeder, foundation (Syn 2 or Syn 3) and certified (Syn 2, Syn 3, or Syn 4). Foundation seed may be produced from breeder or foundation. The second generation foundation (Syn 3) may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations on age of stand will be one, three, and five years respectively for breeder, foundation seed and certified seed. Breeder seed must be produced in California. Sufficient breeder and/or foundation seed for the projected life of the variety will be maintained by Pioneer Hi-Bred International, Inc.

6. Certified seed will be marketed in 1998 in Argentina.

7. Application for Plant Variety Protection will be made, and the certification option will not be requested.

8. As a means of added varietal protection, information included with the application for Review of Alfalfa Varieties for Certification may be provided to the PVP office.

9. Variety name: 58N58 Date submitted: November 26, 1997.

10. Experimental designations: X58N58, Y58N58.

59N49

1. 59N49 is population intercross of 180 parents originating from two Pioneer nondormant experimental populations. In the last cycle of selection, plants were selected for Phytophthora root rot and stem nematode resistance.

2. 59N49 is adapted to southwest region of the United States, Argentina, and Australia and intended for use in the southwest region of the United States, Argentina, Australia, Mexico and southern Europe.

3. 59N49 is a nondormant cultivar with a fall dormancy similar to FD-9 check. Flower color of the Syn 2 generation is 96% purple, 4% variegated with a trace of yellow, cream and white.

4. 59N49 is highly resistant to Phytophthora root rot, spotted alfalfa aphid, pea aphid, northern and southern root knot nematode.. It has resistance to Anthracnose (race 1), Fusarium wilt, and blue alfalfa aphid; moderate resistance to Verticillium wilt; low resistance to stem nematode and bacterial wilt; and is susceptible to Aphanomyces root rot (race 1).

5. Breeders seed (Syn 1) was produced in 1994 and 1995 on parent plants in "cage isolation" and bulked. Seed classes will be breeder, foundation (Syn 2 or Syn 3) and certified (Syn 2, Syn 3, or Syn 4). Foundation seed may be produced from breeder or foundation. The second generation foundation (Syn 3) may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations on age of stand will be one, three, and five years respectively for breeder, foundation seed and certified seed. Sufficient breeder and/or foundation seed for the projected life of the variety will be maintained by Pioneer Hi-Bred International, Inc.

6. Certified seed will first be offered for sale in 2002.

7. Will application be made for protection under the Plant Variety Protection Act, and if so, will the certification option be requested? Yes

8. As a means of added varietal protection, are you willing to have the information in this application turned over to the PVP office? Yes.

9. Variety Name:59N49

Date submitted November 27, 2000
Revised January 25, 2001

Experimental designations: X59N49, Y59N49

'53H81'

1. 53H81 is a 13 clone synthetic cultivar tracing to three Pioneer experimentals and one University of Minnesota germplasm. Parents were selected phenotypically for one or more of the following: resistance to Aphanomyces root rot, Phytophthora root rot, Verticillium wilt, Fusarium Wilt, bacterial wilt, and potato leafhopper; field appearance, spring and fall growth. Parents were also selected through progeny testing for resistance to potato leafhopper, and field appearance in Platteville and Arlington, WI. Syn. 1 breeder seed was produced by intercrossing replicated stem cuttings of the 13 parent clones and bulking all seed

2. 53H81 is adapted to and intended for use primarily in the East central, and North central, regions of the United States. 53H81 has been tested in Hilbert, Arlington, WI; Princeton, IL and Chatham and Tavistock, Ontario, Canada

3. 53H81 is a dormant cultivar with an expected fall dormancy similar to FD-3 check. Flower color in the Syn. 2 generation is approximately 42% purple, 51% variegated and 7% yellow, with traces of white and cream

4. 53H81 is highly resistant to Aphanomyces root rot, anthracnose (race 1), Verticillium wilt, Fusarium wilt, bacterial wilt, and potato leafhopper; resistant to Phytophthora root rot, stem nematode and pea aphid; moderately resistant to spotted alfalfa aphid. Blue alfalfa aphid and root knot nematode were not tested.

5. Breeders seed (Syn 1) was produced on 103 plants (representing approximately equal numbers from each parent clone) in the greenhouse in Arlington, WI and bulked during the winter of 97-98. Seed classes will be breeder, foundation (Syn 2 or 3), and certified (Syn 2, 3 or 4). Foundation seed may be produced from breeder or foundation. The second generation foundation seed may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations of age of stand will be three and five years, respectively, for foundation and certified seed.

6. Certified seed will first be offered in the year 2000.

7. Application has been made for protection under the Plant Variety Protection Act and the certification option will not be requested.

8. As a means of added varietal protection, are you willing to have the information in this application turned over to the PVP office? Yes

9. Variety Name: 53H81 Date submitted: November 27, 2000
Revised January 25, 2001

Experimental designations: Y53H81, W97CM81

VARIETY DESCRIPTION SUMMARY
FOR
SW 9720 ALFALFA

1. SW 9720 is a synthetic variety with 90 parent clones. Final selections were made from green house grown plants irrigated with a 130 mM NaCl solution during the three regrowth cycles. Parent clones were selected from three populations (SW 14, SW 8112, SW 9301) for increased forage yield under saline (NaCl) stress. The basis of selection was a modification of the procedures outlined in the development of AZ90NDC-ST (Crop Science – Vol. 31, p. 1098-[1991]).

2. SW 9720 is adapted to areas in the Southern Sacramento Valley, San Joaquin Valley and Imperial Valley of California and to areas of Arizona where non-dormant varieties are grown. These are the areas of intended use and location of yield tests.

3. Fall dormancy of SW 9720 is similar to the FD9 check variety. Flower color is 97% purple and 3% variegated in the syn 3 generation. SW 9720 has tolerance to salt stress when measured by forage yield similar to tolerance check AZ-90NDC-ST.

4. SW 9720 is highly resistant to the Pea aphid, Spotted alfalfa aphid and Southern Root Knot nematode (M.incognita); resistant to Blue alfalfa aphid, Phytophthora Root Rot, and Fusarium Wilt; and has moderate resistance to Bacterial Wilt and Stem Nematode (Ditylenchus dipsaci). SW 9720 was not tested for resistance to Verticillium wilt; Aphanomyces root rot (Race 1), or Anthracnose (Race1).

5. Breeder's seed was produced in 1997. S & W Seed Company will maintain seed stocks of this variety. Under certification the classes of seed will be Breeder, Foundation and Certified. Foundation seed will be produced from Breeder seed and/or Foundation seed. Foundation seed will be used to produce Certified seed. Length of stand life allowed for Foundation and Certified seed is four and six years respectively.

6. Certified seed will be available for sale in the Fall of 2001.

7. No decision has been made regarding Plant Variety Protection.

8. This information may be sent to the P.V.P. office.

9. Variety name: SW 9720 Date submitted: November 1, 2000. Experimental designations: SW 9720, SW 9907.

Standout

1. The selection criteria used in the development of Standout included vigor, freedom from crown and root rots, resistance to Aphanomyces (Race 1), Phytophthora root rot and anthracnose (Race 1).

2. Standout is adapted and intended for use in the North and East Central United States. It has been tested in New York, Michigan, Nebraska, and Minnesota.

3. Standout is dormant, similar to FD 3 check. Flower color in the Syn 2 is about 55% purple and 45% variegated with traces of cream, white or yellow.

4. Standout has resistance to bacterial wilt, Fusarium wilt; Phytophthora root rot, anthracnose (race 1) and pea aphid; moderate resistance to Aphanomyces (Race 1) and Verticillium wilt. Reaction to stem nematode, spotted alfalfa aphid, blue alfalfa aphid and root knot nematode has not been determined.

5. Sufficient breeder seed was produced in 1994 and is being maintained by Green Genes, Inc. to last the projected life of the variety. One generation each of breeders (Syn 2), foundation (Syn 3), and two generations on all certified (Syn 3 or Syn 4) is recognized. Foundation seed production will be permitted in Nevada, Oregon, or Idaho with no restriction on the area of production of certified seed. Stands of foundation and certified seed fields are limited to 3 and 6 years respectively.

6. Certified seed will be available in 2000.

7. Plant variety protection will not be applied for.

8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety Name: Standout Date submitted: November 22, 1999

Experimental designations: 4315

UC-Impalo-WF

1. This cultivar is a broad based germplasm pool developed by four cycles of among and within half-sib family selection from within a breeding population designated UC-356. UC-356 was developed from nine different source pools in the University of California alfalfa breeding program. The component populations had previously been selected for resistance to saline soil conditions, root knot nematode (*Meloidogyne* sp.), Phytophthora root rot (*Phytophthora megasperma*), bacterial wilt (*Clavibactor insidiosum*), and Fusarium root rot (*Fusarium oxysporum*), blue alfalfa aphid (*Acyrthosiphon kondoi*), Pea aphid (*Acyrthosiphon pisum*), spotted alfalfa aphid (*Threioaphis maculata*), and forage yield and adaptation in the low desert production area of California and Arizona. The primary selection criterion in developing this cultivar were adaptation to low desert production conditions, resistance to and the silverleaf whitefly (*Bemisia argentifolii*) and high seed yield. This germplasm pool is composed of: 0%, *M. falcata*: 0%, Ladak; 1%, *M. varia*; 8%, Turkistan; 0%, Flemish; 7%, Chilean; 1%, Peruvian; 15%, Indian; 35%, African; 10%, Arabian; and 23%, unknown sources of germplasm.

2. This cultivar is adapted to Low Desert irrigated production areas. It has been tested in the Imperial San Joaquin Valleys of California, and Central Arizona. It is intended for hay, haylage, greenchop, or dehydration. The target market area will be the Low Desert irrigated alfalfa production areas of California and Extreme South Western Arizona.

3. This cultivar is very nondormant FD9. Flower color is predominantly purple (>99%) with a trace of Variegated types ($\leq$ 1%) and a trace of Cream (< 1%). Flower color data were determined on Syn. 4 (UC-2681).

4. It is highly resistant to Fusarium wilt (*Fusarium oxysporum*) and spotted alfalfa aphid (*Threioaphis maculata*). It is resistant to Phytophthora root rot (*Phytophthora megasperma*), blue alfalfa aphid (*Acyrthosiphon kondoi*), pea aphid (*Acyrthosiphon pisum*), and southern root knot nematode (*Meloidogyne incognita*). It is moderately resistant to bacterial wilt (*Clavibactor insidiosum*) and has low resitance to southern anthracnose (*Colletotrichum trifolii*) (Race 1). Resistance of this cultivar to Verticillium wilt (*Verticillium albo-atrum*), Aphanomyces root rot (Race 1) (*Aphanomyces euteiches*) and stem nematode (*Ditylenchus dispasaci*) is unknown.

5. Seed classes of this cultivar will be Breeder (produced in a field isolation in 1998), Foundation and Certified. The University of California Foundation Seed Project, Davis or its designee, will maintain breeder and Foundation seed classes. Foundation and Certified seed production are each limited to a 3-year stand life. Seed production of both Foundation and Certified classes is limited to the San Joaquin Valley of California south of 37°25'N latitude and Riverside and Imperial counties of California south of 34°00'N latitude.

6. If approved for certification, Certified seed will first be offered for sale in 2000.

7. Application for Plant Variety Protection will be made. Request for the certification option will be made.

8. As a means of added varietal protection, are you willing to have the information in this application turned over to the PVP office? YES

9. Variety name: UC-Impalo-WF Date Submitted: November 12, 2000
   Experimental Designations: UC-2458 (pre-breeder, Syn-1), UC-2531 (breeder, Syn-2), UC- 2598 (foundation, Syn-3), UC-2681 (certified, Syn-4)