A REPORT OF THE

NATIONAL ALFALFA AND MISCELLANEOUS LEGUMES

VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

STATE OF WASHINGTON
DEPARTMENT OF AGRICULTURE
COMMODITY INSPECTION DIVISION, SEED PROGRAM
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NATIONAL ALFALFA & MISC. LEGUMES
VARIETY REVIEW BOARD

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JANUARY, 2004

The Association of Official Seed Certifying Agencies (AOSCA), National Alfalfa & Misc. Legumes Variety Review Board reviewed the following varieties, January 5th, 2004 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 Misc. Legumes Variety Review Board by the applicants. The National Alfalfa and Misc. 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 Misc. 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 Misc. Legumes Variety Review Board can be obtained from:

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Respectively submitted,

Randy Knight

Randy Knight,
Chair National Alfalfa and Misc. Legumes Variety Review Board

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Ladak DL

1. Ladak DL is a 59 clone synthetic cultivar selected from an 8-year-old field of Ladak, 15 miles southwest of Casper Wyoming. Selections were based on vigor, size of crown and root, health of crown and root, seed production and leafiness.

2. Ladak DL appears to be adapted to the Winterhardy Intermountain Region of the U.S. It is intended for use in the Winterhardy Intermountain Region of the U.S. It has been tested in Montana, Wisconsin, Iowa, Kansas and Idaho.

3. Fall dormancy of Ladak DL is similar to the FD 3 check. Flower color of syn 2 generation is approximately 60% purple, 37% variegated and 1% yellow, 1% white and 1% cream.

4. Ladak DL has resistance to bacterial wilt, Fusarium wilt, Verticillium wilt and Phytophthora root rot, moderate resistance to anthracnose (race 1) and Aphanomyces root rot (race 2) and low resistance to Aphanomyces root rot race 1. It has not been evaluated for resistance to pea aphid, spotted alfalfa aphid, blue 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 (syn 2 or 3) 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 areas North of 42 degrees North Latitude. Breeder seed was produced in 2001. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name: Ladak DL Date submitted November 2003

   Experimental designations: ZD 0130

1. Integrity was selected for tolerance to continuous grazing and for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2). Phenotypic recurrent selection was used.

2. Integrity appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.

3. Fall dormancy of Integrity is similar to the FD 4 check. Flower color of Syn 2 generation is approximately 64% purple and 36% variegated with a trace of yellow, white and cream.

4. Integrity has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot (race 1) and resistance to Aphanomyces root rot (race 2). It has not been evaluated for resistance to pea aphid, spotted alfalfa aphid, blue 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 (syn 2 or 3) 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 2001. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name: Integrity Date submitted November 2003

   Experimental designations: ZG 0145

1. ZG 0146A was selected for tolerance to continuous grazing and for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2). Phenotypic recurrent selection was used.

2. ZG 0146A appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.

3. Fall dormancy of ZG 0146A is similar to the FD 4 check. Winter survival is similar to the WS 1 check. Flower color of Syn 2 generation is approximately 72% purple and 28% variegated with a trace of yellow, white and cream.

4. ZG 0146A has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot races 1 and 2. It has not been evaluated for resistance to pea aphid, spotted alfalfa aphid, blue 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 (syn 2 or 3) 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 2001. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name:_____ Date submitted ____November 2003_____

   Experimental designations: _____ZG 0146A_____

1. ZL 0141A was selected for winter survival, tolerance to continuous grazing and for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2). Phenotypic recurrent selection was used.

2. ZL 0141A appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.

3. Fall dormancy of ZL 0141A is similar to the FD 4 check. Flower color of Syn 2 generation is approximately 75% purple and 25% variegated with traces of yellow, white and cream.

4. ZL 0141A has high resistance to bacterial wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot (race 1) and resistance to Verticillium wilt and Aphanomyces (race 2). It has not been evaluated for resistance to pea aphid, spotted alfalfa aphid, blue 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 (syn 2 or 3) 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 2001. ABI will maintain sufficient seed stocks for the life of the variety.

6. Certified seed will be available in 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name:_____ Date submitted ___November 2003____

   Experimental designations: _____ZL 0141A_____

1. 6200HT was selected for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2), lesion nematode, high stem digestibility, high stem protein and winter survival. Phenotypic recurrent selection was used. Final selections were made from 2-3 year old space plant selection nurseries near Napier, Iowa, Livingston, Wisconsin and Marshfield, Wisconsin based on yield, winter survival, fall dormancy, leafhopper yellowing and leaf disease.

2. 6200HT appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.

3. Fall dormancy of 6200HT is similar to the FD 2 check. Flower color of Syn 2 generation is approximately 73% purple and 27% variegated with traces of yellow, white and cream.

4. 6200HT has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot (race 1) and pea aphid, resistance to Aphanomyces root rot (race 2), moderate resistance to stem nematode and is susceptible to spotted alfalfa aphid,. It has not been evaluated for resistance 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 (syn 2 or 3) 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 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name: 6200HT Date submitted November 2003

   Experimental designations: ZN 9833

Fertilac 804

1. Fertilac 804 is a synthetic variety with 250 parent clones. Parent clones trace to four populations selected for resistance to Verticillium wilt, anthracnose (Race 1), spotted alfalfa aphid, blue alfalfa aphid, and pea aphid. Phenotypic recurrent selection was used. Final selections were made from a space planted nursery near Kingsburg, California. Parentage traces UC 176 (25%), UC 196 (25%), UC 226 (25%), and CUF 101 (25%). Approximate germplasm source contributes are: M. falcata (2%), Ladak (1%), M. varia (1%), Turkistan (20%), Flemish (1%), Chilean (10%), Peruvian (1%), Indian (14%), African (50%). Breeder seed (Syn 1) was produced under field isolation near Nampa, Idaho in 1993..

2. Fertilac 804 is intended for use in central and Southern California, and lower elevations of Arizona and New Mexico. This variety has been tested in California.

3. Fall dormancy is similar to CUF 101. Flower color in Syn 2 generation is 99% purple with less than 1% each of variegated cram, white and yellow.

4. Fertilac 804 has high resistance to Fusarium Wilt, Spotted Alfalfa Aphid, and Blue Alfalfa Aphid, resistance to Anthracnose (Race 1), Phytophthora Root Rot, Pea Aphid, Southern Root Knot Nematode; moderate resistance to Bacterial Wilt, Verticillium Wilt, 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 seed may be produced from either breeder or foundation classes. A 1,3 an 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 2004

7. Plant variety protection will not be applied for.

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

9. Variety name Fertilac 804

   Experiment designation ZX 9393 ABI9393

   Date NA&MLVRB first accepted this variety January 1998

   Dates previous amendments were accepted _____

   Date amendment submitted January 2, 2004

1. FK 345 is a 91 clone synthetic variety. Parental clones trace to the variety Concorde which was subjected to two cycles of phenotypic recurrent selection for tolerance to continuous grazing. Final selections were based on plant size and relative freedom from crown rot. Breeder seed was produced on approximately 13 cuttings of each clone transplanted at random and harvested in bulk near Nampa, Idaho in 1999.

2. FK 345 will be recommended for use in the North Central U.S. It has been tested in Iowa, Wisconsin and Ohio.

3. FK 345 is a multicut variety with approximately 42% of the plants flowering in the seeding year and flowers about 1 day earlier than Marathon. Approximately 79% of the plants have central leaf marks with 21% having no markings. Flower color is approximately 70% medium pink, 18% dark pink and 12% light pink with a trace of white.

4. FK 345 has resistance to northern and southern anthracnose and moderate resistance to powdery mildew.

5. Breeder Seed (syn 1) was produced in isolation near Nampa, Idaho in 1999, with a sufficient supply for the expected life of the variety held in temperature-controlled storage. Seed production is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Production of breeder and foundation seed classes is limited to the Pacific Northwest. A maximum of two harvest years is permitted on stands producing foundation or certified classes.

6. Certified seed will be available in 2004.

7. Plant Variety Protection will not be applied for.

8. Variety Name: FK 345 Date submitted November 2003

Experimental designations: ZR 9906R

1. TOP HAND is a synthetic variety with 225 parent plants that 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 nurseries. Nursery source plants were selected from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of TOP HAND traces to the following germplasm sources: Abound and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcata (10%), Ladak (5%), M.varia (27%), Turkistan (4%), Flemish (45%), and Chilean (9%).

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

3. TOP HAND is a dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. TOP HAND has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, and Aphanomyces root rot (race 1), with resistance to Phytophthora root rot, pea aphid, spotted alfalfa aphid, and northern root knot nematode (*Meloidogyne hapla*) and moderate resistance to stem nematode. Reaction to the blue alfalfa aphid has not been tested.

5. Seed increase of TOP HAND 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 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 TOP HAND will be available in 2003.

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

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

9. Variety Name: TOP HAND Date submitted: November 30, 2003.

Experimental Designation: CW 73038

1. AlfaStar II is a synthetic variety with 220 parent plants that 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 Minnesota and Wisconsin yield trials. Yield trial source varieties were derived from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of AlfaStar II traces to the following germplasm sources: BigHorn, DK 142, Gold Plus, Hunter, and miscellaneous Cal/West Seeds breeding populations. Breeder seed was produced under cage isolation near Woodland, California in 1997. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (8%), Ladak (5%), M.varia (27%), Turkistan (4%), Flemish (48%), and Chilean (8%).

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

3. AlfaStar II is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is greater than 98% purple with 1% variegated, and a trace of white, cream, and yellow.

4. AlfaStar II has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1), with resistance to Verticillium wilt, spotted alfalfa aphid, stem nematode, and northern root knot nematode (*Meloidogyne hapla*) and moderate resistance to pea aphid and blue alfalfa aphid.

5. Seed increase of AlfaStar II 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 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 AlfaStar II will be available in 2003.

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

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

9. Variety Name: AlfaStar II Date submitted: November 30, 2003.

Experimental Designation: CW 74013

1. CW 83010 is a synthetic variety with 203 parent plants that were selected sequentially for high winter hardiness, high forage yield, high relative feed value, and multifoliolate leaf expression. Parent plants were selected from three-year old Minnesota and Wisconsin yield trials and from three-year old Wisconsin nurseries. Yield trial source varieties and nursery source plants were selected from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 83010 traces to the following germplasm sources: Abound (4%), Sprint (3%), Supreme (3%), DK 142 (2%), Extreme (2%), Pointer (2%), TOP HAND (2%), 512 (1%), Alliant (1%) Legend Gold (1%), Nemesis (1%), UltraLac (1%), and miscellaneous Cal/West Seeds breeding populations (77%). Approximate germplasm source contributions are as follows: M. falcata (10%), Ladak (5%), M.varia (26%), Turkistan (4%), Flemish (46%), and Chilean (9%).

2. CW 83010 is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, and Great Plains areas of the U.S. CW 83010 has been tested in Wisconsin, Illinois, and Minnesota.

3. CW 83010 is a dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.2 generation is greater than 98% purple and 1% white with a trace of variegated, cream, and yellow.

4. CW 83010 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1) with moderate resistance to spotted alfalfa aphid. Reaction to the Verticillium wilt, pea aphid, blue alfalfa aphid, stem nematode, and root knot nematode has not been tested.

5. Seed increase of CW 83010 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 1998. 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 83010 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 83010

1. CW 83019 is a synthetic variety with 225 parent plants that 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 Minnesota and Wisconsin yield trials and selections from three-year old Wisconsin nurseries. Yield trial source varieties and nursery source plants were selected from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 83019 traces to the following germplasm sources: Abound, Sprint, Legend Gold, Pointer, 512, Gold Plus, DK 142, FQ 315, Nemesis, UltraLac and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcata (9%), Ladak (4%), M.varia (27%), Turkistan (4%), Flemish (47%), and Chilean (9%).

2. CW 83019 is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, and Great Plains areas of the U.S. CW 83019 has been tested in Wisconsin, Illinois, Minnesota, Nebraska, Pennsylvania, and New York.

3. CW 83019 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 83019 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1), with resistance to bacterial wilt, pea aphid, and spotted alfalfa aphid. Reaction to Verticillium wilt, blue alfalfa aphid, stem nematode, and northern root knot nematode (*Meloidogyne hapla*) has not been tested.

5. Seed increase of CW 83019 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 1998. 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 83019 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 83019

1. CW 94008 is a synthetic variety with 200 parent plants that were selected sequentially for high winter hardiness, large deep-set crowns and multifoliolate leaf expression. Parent plants were selected from five-year old Pennsylvania and three-year old Wisconsin yield trials. Yield trial source varieties were derived from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 94008 traces to the following germplasm sources: BigHorn, Hunter, DK 133, WinterGold, 9429, Alliant, HayMaker II, Trialfalon, Stallion, Cyclone, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcata (6%), Ladak (5%), M.varia (27%), Turkistan (5%), Flemish (50%), and Chilean (7%).

2. CW 94008 is adapted to and intended for use in the North Central, East Central, and Great Plains areas of the U.S.. CW 94008 has been tested in Wisconsin, Iowa, Minnesota, South Dakota, Nebraska, Pennsylvania, and New York.

3. CW 94008 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 94008 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, and stem nematode, with resistance to pea aphid, Aphanomyces root rot (race 1), and northern root knot nematode (*Meloidogyne hapla*). Reaction to Verticillium wilt, spotted alfalfa aphid, and blue alfalfa aphid has not been tested

5. Seed increase of CW 94008 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 1999. 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 94008 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 94008

1. CW 94022 is a synthetic variety with 200 parent plants that 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 Minnesota and Wisconsin yield trials. Yield trial source varieties were derived from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 94022 traces to the following germplasm sources: 9429, Alliant, FQ 315, and miscellaneous Cal/West Seeds breeding populations. Breeder seed was produced under cage isolation near Woodland, California in 1999. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (6%), Ladak (5%), M.varia (26%), Turkistan (5%), Flemish (50%), and Chilean (8%).

2. CW 94022 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.. CW 94022 has been tested in Wisconsin, Iowa, and Minnesota.

3. CW 94022 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 94022 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), and stem nematode, with resistance to pea aphid and northern root knot nematode (*Meloidogyne hapla*). Reaction to Verticillium wilt, spotted alfalfa aphid, and blue alfalfa aphid has not been tested

5. Seed increase of CW 94022 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 1999. 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 94022 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 94022

1. SummerGold is a synthetic variety with 200 parent plants that 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 Minnesota and Wisconsin yield trials and selections from three-year old Wisconsin nurseries. Yield trial source varieties and nursery source plants were selected from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of SummerGold traces to the following germplasm sources: WinterGold, 9429, Alliant, DK 142, FQ 315, Trialfalon, BigHorn, 9326, Stallion, DK 133, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcata (8%), Ladak (5%), M.varia (24%), Turkistan (6%), Flemish (50%), and Chilean (7%).

2. SummerGold 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.. SummerGold has been tested in Wisconsin, Iowa, and Minnesota.

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

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

5. Seed increase of SummerGold 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 1999. 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 SummerGold will be available in 2003.

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

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

9. Variety Name: SummerGold Date submitted: November 30, 2003.

Experimental Designation: CW 94023

1. CW 58073 is a synthetic variety with 209 parent that were selected for phytophthora root rot and anthracnose from crosses between selections from 4 year old California yield trials and selections from 3-year old California selection nurseries. Nursery 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 58073 traces to DK 189, WestStar, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.varia (5%), Turkistan (18%), Flemish (7%), Chilean (8%), Peruvian (4%), Indian (21%), African (33%), and Unknown (4%).

2. CW 58073 is adapted to and intended for use in the Southwest area of the U.S. and Argentina. CW 58073 has been tested in California and Argentina.

3. CW 58073 is a nondormant variety with fall dormancy similar to FD class 8 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 58073 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, northern root knot nematode (*Meloidogyne hapla*), and southern root knot nematode (*Meloidogyne incognita*), with resistance to Verticillium wilt, and moderate resistance to bacterial wilt. Reaction to Aphanomyces root rot (race 1) has not been adequately tested.

5. Seed increase of CW 58073 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 CW 58073 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 58073.

1. CW 78122 is a synthetic variety with 202 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 CW 78122 traces to Activa, DK 189, Topacio, ACA 900, F969, 13 R Supreme, Yolo, Super Supreme, Grasis, DK 191, 5715, WL 516, WL 457, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.varia (4%), Turkistan (17%), Flemish (7%), Chilean (8%), Peruvian (4%), Indian (23%), and African (37%).

2. CW 78122 is adapted to and intended for use in the Southwest area of the U.S. and Argentina. CW 78122 has been tested in California, New Mexico, and Argentina.

3. CW 78122 is a nondormant variety with fall dormancy similar to FD class 8 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 78122 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and southern root knot nematode (*Meloidogyne incognita*), with resistance to Verticillium wilt and stem nematode, and moderate resistance to northern root knot nematode (*Meloidogyne hapla*). Reaction to bacterial wilt and Aphanomyces root rot (race 1) has not been adequately tested.

5. Seed increase of CW 78122 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 CW 78122 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 78122.

1. CW 89132 is a synthetic variety with 320 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 CW 89132 traces to DK 191, Super Supreme, F969, 5929, ACA 900, Grasis II, Beacon, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.varia (5%), Turkistan (15%), Flemish (5%), Chilean (9%), Peruvian (4%), Indian (25%), and African (37%).

2. CW 89132 is adapted to and intended for use in the Southwest area of the U.S. and Argentina. CW 89132 has been tested in California and Argentina.

3. CW 89132 is a very nondormant variety with fall dormancy similar to FD class 9 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 89132 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and southern root knot nematode (*Meloidogyne incognita*), with resistance to Verticillium wilt and northern root knot nematode (*Meloidogyne hapla*). Reaction to bacterial wilt and Aphanomyces root rot (race 1) has not been adequately tested.

5. Seed increase of CW 89132 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 1998. 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 89132 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 89132.

1. CW 99112 is a synthetic variety with 61 parent plants which were selected for lygus tolerance and seed yield from space planted nurseries in California. Parent plants were selected from various populations which were developed by selecting for aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parentage of CW 99112 traces to miscellaneous Cal/West Seeds breeding populations (100%). Approximate germplasm source contributions are as follows: M.varia (4%), Turkistan (10%), Flemish (4%), Chilean (10%), Peruvian (4%), Indian (25%), and African (43%).

2. CW 99112 is adapted to and intended for use in the Southwest area of the U.S., Mexico, and Argentina. CW 99112 has been tested in California, Mexico, and Argentina.

3. CW 99112 is a very nondormant variety with fall dormancy similar to FD class 9 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 99112 has high resistance to Fusarium wilt, blue alfalfa aphid, and stem nematode, with resistance to anthracnose (race 1), Phytophthora root rot, and spotted alfalfa aphid. Reaction to bacterial wilt, Verticillium wilt, Aphanomyces root rot (race 1), pea aphid, and root knot nematode has not been adequately tested.

5. Seed increase of CW 99112 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 Tranquility, California in 1999. 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 99112 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 99112.

1. CW 99113 is a synthetic variety with 77 parent plants which were selected for lygus tolerance and seed yield from space planted nurseries in California. Parent plants were selected from various populations which were developed by selecting for aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parentage of CW 99113 traces to miscellaneous Cal/West Seeds breeding populations (100%). Approximate germplasm source contributions are as follows: M.varia (4%), Turkistan (10%), Flemish (4%), Chilean (9%), Peruvian (4%), Indian (23%), and African (46%).

2. CW 99113 is adapted to and intended for use in the Southwest area of the U.S., Mexico, and Argentina. CW 99113 has been tested in California, Mexico, and Argentina.

3. CW 99113 is a very nondormant variety with fall dormancy similar to FD class 9 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 99113 has high resistance to anthracnose (race 1), Fusarium wilt, blue alfalfa aphid, and stem nematode, with resistance to Phytophthora root rot and spotted alfalfa aphid. Reaction to bacterial wilt, Verticillium wilt, Aphanomyces root rot (race 1), pea aphid, and root knot nematode has not been adequately tested.

5. Seed increase of CW 99113 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 Tranquility, California in 1999. 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 99113 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 99113.

1. CW 09051 is a synthetic variety with 70 parent plants which were selected for lygus tolerance and seed yield from space planted nurseries in California. Parent plants were selected from various populations which were developed by selecting for aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parentage of CW 09051 traces to miscellaneous Cal/West Seeds breeding populations (100%). Approximate germplasm source contributions are as follows: M.varia (4%), Turkistan (9%), Flemish (4%), Chilean (9%), Peruvian (4%), Indian (22%), and African (48%).

2. CW 09051 is adapted to and intended for use in the Southwest area of the U.S., Mexico, and Argentina. CW 09051 has been tested in California, Mexico, and Argentina.

3. CW 09051 is a very nondormant variety with fall dormancy similar to FD class 9 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 09051 has high resistance to anthracnose (race 1), Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid, blue alfalfa aphid, spotted alfalfa aphid and stem nematode, with resistance to northern root knot nematode (Meloidogyne hapla) and moderate resistance to bacterial wilt. Reaction to Aphanomyces root rot (race 1), and has not been adequately tested.

5. Seed increase of CW 09051 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 Merced, California in 2000. 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 09051 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 09051.

1. CW 09052 is a synthetic variety with 82 parent plants which were selected for lygus tolerance and seed yield from space planted nurseries in California. Parent plants were selected from various populations which were developed by selecting for aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parentage of CW 09052 traces to miscellaneous Cal/West Seeds breeding populations (100%). Approximate germplasm source contributions are as follows: M.varia (4%), Turkistan (9%), Flemish (4%), Chilean (10%), Peruvian (4%), Indian (23%), and African (46%).

2. CW 09052 is adapted to and intended for use in the Southwest area of the U.S., Mexico, and Argentina. CW 09052 has been tested in California, Mexico, and Argentina.

3. CW 09052 is a very nondormant variety with fall dormancy similar to FD class 9 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 09052 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid, stem nematode, and southern root knot nematode (Meloidogyne incognita) with resistance to Verticillium wilt, pea aphid, blue alfalfa aphid, and northern root knot nematode (Meloidogyne hapla) and moderate resistance to bacterial wilt. Reaction to Aphanomyces root rot (race 1) and has not been adequately tested.

5. Seed increase of CW 09052 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 Merced, California in 2000. 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 09052 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 09052.

1. CW 09084 is a synthetic variety with 150 parent plants which were selected for spotted alfalfa aphid resistance from source populations selected for drought tolerance, crown rot resistance and persistence in Mexico. 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: Fusarium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, and blue alfalfa aphid. Parentage of CW 09084 traces to miscellaneous Cal/West Seeds breeding populations (100%). Approximate germplasm source contributions are as follows: African (100%).

2. CW 09084 is adapted to the Southwest area of the U.S. and Mexico and is intended for use in Mexico. CW 09084 has been tested in California and Mexico.

3. CW 09084 is a very nondormant variety with fall dormancy similar to FD class 9 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.

4. CW 09084 has high resistance to Fusarium wilt, pea aphid, and stem nematode, with resistance to Phytophthora root rot and spotted alfalfa aphid, moderate resistance to blue alfalfa aphid, and low resistance to anthracnose (race 1),. Reaction to bacterial wilt, Verticillium wilt, Aphanomyces root rot (race 1), and root knot nematode has not been adequately tested.

5. Seed increase of CW 09084 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 2000. 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 09084 will be available in 2003.

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 30, 2003.

Experimental Designation: CW 09084.

1. CW 9701 is an advanced generation synthetic variety of Ladino type white clover with 162 parent plants. Parent plants were selected for persistence from a replicated grazing test following two years of close continuous grazing with high stocking rates of beef cattle at Eatonton, Georgia. Parentage of CW 9701 traces to the following varieties: CW 190 (54%), SRVR (27%), Regal (6%), Osceola (4%), and miscellaneous Cal/West Seeds breeding populations (9%). Breeder seed (Syn.1) was produced under field isolation near Woodland, California in 1997. Three vegetative cuttings from each of the 162 parent plants were established to produce the breeder seed. Seed was bulk harvested from all parent plants.

2. CW 9701 is adapted to the Southeast, East Central, and Moderately Winterhardy Intermountain areas of the U.S.. It is intended for use in the Southeast, East Central, and North Central, areas of the U.S..CW 9701 has been tested in California, Georgia, and Kentucky. The intended use of CW 9701 is for hay, haylage, greenchop, or pasture, primarily in mixtures with forage grasses.

3. CW 9701 is earlier in maturity and has a higher frequency of plants without leaf markings compared to CW 190.

4. Seed increase of CW 9701 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 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 2 and 4 years, respectively.

5. Certified seed of CW 9701 will be available in 2004.

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

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

8. Variety Name: _____ Date Submitted: November 30, 2003

Experimental Designation: CW 9701, CW 7000

1. eXtreme is a synthetic variety with 224 parent plants that 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 Minnesota and Wisconsin yield trials. Yield trial source varieties were derived from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of eXtreme traces to the following germplasm sources: WinterKing, 9326 and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.falcata (8%), Ladak (6%), M.varia (27%), Turkistan (3%), Flemish (49%), and Chilean (7%).

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

3. eXtreme is a dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple with a trace of variegated, white, cream, and yellow.

4. eXtreme 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 pea aphid, spotted alfalfa aphid, and stem nematode, and moderate resistance to northern root knot nematode (Meloidogyne hapla). Reaction to blue alfalfa aphid has not been adequately tested.

5. Seed increase of eXtreme 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 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 eXtreme will be available in 2003.

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

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

9. Variety Name: eXtreme.

Experimental Designation: CW 73010.

Date NA&MLVRB first accepted this variety: January 2003.

Date previous amendments were accepted: _____

Date this amendment submitted: November 30, 2003.

1. Power 4.2 is a synthetic variety with 200 parent plants that 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 Minnesota and Wisconsin yield trials. Yield trial source varieties were derived from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Power 4.2 traces to the following germplasm sources: Cyclone, Gold Plus, 512, DK 142, Nemesis, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.falcata (8%), Ladak (6%), M.varia (26%), Turkistan (3%), Flemish (49%), and Chilean (8%).

2. Power 4.2 is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, and Great Plains areas of the U.S. Power 4.2 has been tested in Wisconsin, Minnesota, Illinois, Michigan, and Pennsylvania.

3. Power 4.2 is a dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple with a trace of variegated, white, cream, and yellow.

4. Power 4.2 has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), and stem nematode with resistance to anthracnose (race 1), Verticillium wilt, pea aphid, spotted alfalfa aphid, and northern root knot nematode (Meloidogyne hapla). Reaction to blue alfalfa aphid has not been adequately tested.

5. Seed increase of Power 4.2 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 1998. 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 Power 4.2 will be available in 2003.

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

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

9. Variety Name: Power 4.2.

Experimental Designation: CW 84017, CW 83017

Date NA&MLVRB first accepted this variety: January 2003.

Date previous amendments were accepted: _____

Date this amendment submitted: November 30, 2003.

1. CW 95026 is a synthetic variety with 225 parent plants that were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and anthracnose (race 1). Parent plants were selected from crosses between selections from three-year old Minnesota and Wisconsin yield trials and three-year old nursery selections, and from crosses between the selections from three-year old Wisconsin nurseries. Both yield trial and nursery source varieties were derived from various populations that 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, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 95026 traces to the following germplasm sources: 512, Gold Plus, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.falcata (8%), Ladak (5%), M.varia (24%), Turkistan (3%), Flemish (51%), and Chilean (9%).

2. CW 95026 is adapted to and intended for use in the North Central, East Central, and Great Plains areas of the U.S. CW 95026 has been tested in Wisconsin, Minnesota, Iowa, Pennsylvania, and Nebraska.

3. CW 95026 is a dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple, with a trace of variegated, cream, white, and yellow.

4. CW 95026 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), and stem nematode with resistance to Verticillium wilt, pea aphid, spotted alfalfa aphid, and northern root knot nematode (Meloidogyne hapla). Reaction to blue alfalfa aphid has not been adequately tested.

5. Seed increase of CW 95026 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 1999. 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 95026 will be available in 2003.

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

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

9. Variety Name:_____

Experimental Designation: CW 95026.

Date NA&MLVRB first accepted this variety: January 2003.

Date previous amendments were accepted: _____

Date this amendment submitted: November 30, 2003.

DryLand

1. DryLand is a 150 clone synthetic variety. Parent plants were selected out of a 27-year-old stand of Ladak in eastern Washington. These plants were selected for visual herbage yield, seed yield, drought tolerance and root and crown health. Fifty plants were selected out of AC Minto for Phytophthora root rot resistance. Selected plants were hand pollinated in greenhouse near Sloughhouse, CA. Seed from hand crosses were bulked to produce Syn.1 as Breeder Seed in1998.

2. DryLand is adapted in the North Central region of the United States. It is intended for use in the North Central and Winterhardy Intermountain regions of the United States. The state in which it has been tested is Wisconsin.

3. DryLand is a dormant, fall dormancy 3 variety, similar to the fall dormancy 3 checks. Flower color in the Syn.2 generation is 90% purple, 7% variegated, 1% cream, 1% white, and 1% yellow.

4. DryLand has high resistance to bacterial wilt, Fusarium wilt; resistance to Phytophthora root rot; moderate resistance to stem nematode, anthracnose (Race1), northern root knot nematode; low resistance to Verticillium wilt and susceptible to Aphanomyces root rot (Race1). Its reaction to spotted alfalfa aphid, blue alfalfa aphid and pea aphid has not been tested.

5. Breeder seed (Syn. 1) was produced from hand-pollinated crosses made in greenhouse near Sloughhouse, CA in 1998. 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 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: DryLand Date submitted November 25, 2003
   Experimental designations: DS061

FSG 408DP

1. FSG 408DP 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. FSG 408DP 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. FSG 408DP is a moderately dormant variety similar to the fall dormancy 4 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

4. FSG 408DP has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), stem nematode, Verticillium wilt and pea aphid. FSG 408DP 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 FSG 408DP
Experiment designation BPR379
Date NA&MLVRB first accepted this variety January, 2000
Dates previous amendments were accepted
Date amendment submitted November 25, 2003

Jade III

1 Jade III 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 stem nematode.

2. Jade III is adapted and intended for use in the North Central, East Central and Great Plain regions of the United States. The states in which it has been tested are: Minnesota, Nebraska, Pennsylvania and Minnesota Washington, Wisconsin,

3. Jade III is moderately dormant, fall dormancy 4 variety similar to the fall dormancy checks. Flower color in the Syn.2 generation is 90% purple, 7% variegated, 1% cream, 1% white, and 1% yellow.

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

5. Breeder seed (Syn. 1) was produced from cuttings of the parent plants that were grown in isolation at Sloughhouse, CA in 1996-97. 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 will maintain sufficient Breeder seed for the projected life of the variety

6. Certified seed was available spring of 2003.

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 III
Experiment designation DS013
Date NA&MLVRB first accepted this variety January, 2003
Dates previous amendments were accepted _____
Date amendment submitted November 25, 2003

FSG 351

1. FSG 351 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. FSG 351 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. FSG 351 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. FSG 351 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 FSG 351
Experiment designation BPR380
Date NA&MLVRB first accepted this variety January, 2000
Dates previous amendments were accepted _____
Date amendment submitted November 25, 2003

RC9301 Red Clover

1. RC9301 is adapted to and intended for use in the east central and north central United States. It has been tested in Indiana, Illinois, Kentucky, Michigan, Pennsylvania, and Tennessee.

2. RC9301 is a diploid medium red clover. Its flower color is 7% red, 27% dark pink, 45% medium pink, 19% light pink, and 2% white. Approximately 68% of the plants exhibit leaf markings, and 98% have hairs on the stems. RC9301 is resistant to northern and southern anthracnose and powdery mildew. Approximately 75% of the plants flower in the seeding year. RC9301 reaches 50% bloom approximately the same time as Arlington, 1 day earlier than Marathon, and 3 days later than Kenland in the spring growth of the first year after the seeding year.

3. Seed increase of RC9301 is limited to one generation of breeder (syn-1), two generations of foundation (syn 2 or 3), and three generations of certified (syn 2, 3, or 4) classes. Breeder seed was produced in 1998 and is maintained in cold storage by FFR Cooperative. Length of stand allowed is 2 years each for foundation and certified classes. Production of foundation seed is limited to the northwest United States.

4. Certified seed will first be offered for sale in 2004.

5. Application will not be made for Plant Variety Protection.

6. Information in this application may be forwarded to the PVP office.

7. Variety name: Date submitted: November 26, 2003

   Experimental designation: RC9301

FSG 9601 Red Clover (Amended)

1. FSG 9601 is adapted to and intended for use in the east central and north central United States. It has been tested in Indiana, Iowa, Kentucky, Michigan, Ohio, Pennsylvania, Tennessee, and Wisconsin.

2. FSG 9601 is a diploid medium red clover. Its flower color is 22% light pink, 45% medium pink, 30% dark pink, and 3% red. Approximately 77% of the plants exhibit leaf markings, and 98% have hairs on the stems. FSG 9601 is highly resistant to northern and southern anthracnose and powdery mildew. It reaches 50% bloom approximately 2 days later than Arlington in the spring growth of the first year after the seeding year.

3. Seed increase is limited to one generation of breeder (syn 1), two generations of foundation (syn 2 or 3), and three generations of certified (syn 2, 3, or 4) classes. Breeder seed was produced in 1997 and is maintained in cold storage by FFR Cooperative. Length of stand allowed is 2 years for each of the breeder, foundation, and certified classes. Production of breeder and foundation seed classes is limited to the northwest United States.

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

5. Application will not be made for Plant Variety Protection.

6. Information in this application may be forwarded to the PVP office.

7. Variety name: FSG 9601 Date submitted: December 1, 2001

   Experimental designation: RC9601

   Acceptance date: January 2002

   Date amendment submitted: November 26, 2003

DKA33-16

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

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

3. Test variety is Dormant, similar to FD3 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower color (Syn2) is 90% purple, 10% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (Race 1); resistance to pea aphid, spotted alfalfa aphid and root-knot nematode (*M. hapla*). Reaction to stem nematode and 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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: DKA33-16 Date Submitted: November 1, 2003

   Experimental designations: FG 30M145

LegenDairy 5.0

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

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

3. Test variety is Dormant, similar to FD3 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower color (Syn2) is 89% purple, 11% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (Race 1); resistance to pea aphid, spotted alfalfa aphid and root-knot nematode (*M. hapla*); with moderate resistance to stem nematode. 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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: LegenDairy 5.0 Date Submitted: November 1, 2003

   Experimental designations: FG 30Q133

GH707

1. The selection criteria used in the development of this variety include for forage yield, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

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

3. Test variety is Moderately Fall Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 95% purple, 5% variegated with a trace of yellow, white and cream. This variety has high multifoliate leaf expression.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), and Aphanomyces root rot (Race 2); with resistance to stem nematode, pea aphid and spotted alfalfa aphid. Reaction to blue alfalfa aphid and root-knot nematode (*M. hapla*) 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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: GH707 Date Submitted: November 1, 2003

   Experimental designations: FG 40M1531

6415

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

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

3. Test variety is Moderately Fall Dormant, similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower color (Syn2) is 94% purple, 6% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (Race 1); resistance to pea aphid and spotted alfalfa aphid. Reactions to root-knot nematode (*M. hapla*), stem nematode and blue alfalfa aphid have 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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: 6415 Date Submitted: November 1, 2003

   Experimental designations: FG 40M156

WL 355HQ

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

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

3. Test variety is Moderately Fall Dormant, similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower color (Syn2) is 92% purple, 8% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid, and Aphanomyces root rot (Race 1); moderate resistance to stem nematode and root-knot nematode (*M. hapla*); with resistance to spotted alfalfa aphid. 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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 355HQ Date Submitted: November 1, 2003

   Experimental designations: FG 40M158

FG 40M162

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

2. This variety is adapted to North Central and East Central regions. This variety has been tested in Minnesota, Wisconsin, New York and Pennsylvania, and is intended for use in the North Central and East Central regions.

3. Test variety is Moderately Fall Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 97% purple, 3% variegated with a trace of yellow, white and cream.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid, and Aphanomyces root rot (Race 1); resistance to root-knot nematode (*M. hapla*); with moderate resistance to stem nematode. Reactions to spotted alfalfa aphid and blue alfalfa aphid have 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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, 2003

   Experimental designations: FG 40M162

FG 40M180

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: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race1 and Race2).

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

3. Test variety is Moderately Fall Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 92% purple, 8% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), and Aphanomyces root rot (Race 2); resistance to pea aphid and spotted alfalfa aphid; with moderate resistance to stem nematode. Reaction to blue alfalfa aphid and root-knot nématode (*M. hapla*) 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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, 2003

   Experimental designations: FG 40M180

Phabulous II

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: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

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

3. Test variety is Moderately Fall Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 92% purple, 8% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), and Aphanomyces root rot (Race 2); resistance to pea aphid and spotted alfalfa aphid; with moderate resistance to stem nematode. Reaction to blue alfalfa aphid and root-knot nematode (*M. hapla*) 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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: Phabulous II Date Submitted: November 1, 2003

   Experimental designations: FG 40M503

FG 4S41

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Wisconsin, Michigan and Kentucky, and is intended for use in the North Central and East Central 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 91% purple, 9% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.

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); with moderate resistance to stem nematode and root-knot nematode (*M. hapla*). 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 in the greenhouse in 1998 and in the field near Nampa, ID in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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, 2003

   Experimental designations: FG 4S41

Lightning Extra

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

2. This variety is adapted to North Central and East Central regions. This variety has been tested in Iowa, Kentucky, Michigan and Wisconsin, and is intended for use in the North Central and East Central 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 anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, and Aphanomyces root rot (Race 1); with moderate resistance to root-knot nematode (*M. hapla*). Reactions to stem nematode and blue alfalfa aphid have 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 in the greenhouse in 1998 and in the field near Nampa, ID in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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: Lightning Extra Date Submitted: November 1, 2003

   Experimental designations: FG 4S442

FG 50T176

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: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, Aphanomyces root rot (Race 1 and Race 2), and Sclerotinia crown and stem rot.

2. This variety is adapted to East Central and Winterhardy Intermountain regions. This variety has been tested in Idaho, Indiana, and Tennessee, and is intended for use in the East Central and Winterhardy Intermountain regions.

3. Test variety is Moderately Fall Dormant, similar to FD5 check. Test variety is Low Winterhardy, similar to WS4 check. Flower color (Syn2) is 97% purple, 3% variegated with a trace of yellow, white and cream.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and pea aphid; with resistance to Aphanomyces root rot (Race 1). Reactions to stem nematode, spotted alfalfa aphid, blue alfalfa aphid, and root-knot nematode (*M. hapla*) have 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 in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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, 2003

   Experimental designations: FG 50T176

DKA50-18

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).

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

3. Test variety is Moderately Fall Dormant, similar to FD5 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 98% purple, 2% variegated with a trace of yellow, white and cream. This variety has Moderate multifoliolate leaf expression.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot and Aphanomyces root rot (Race 1); resistance to stem nematode, pea aphid and spotted alfalfa aphid. Reactions to root-knot nematode (*M. hapla*) and blue alfalfa aphid have 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 in the greenhouse in 1998 and in the field near Nampa, ID in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2004.

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: DKA50-18 Date Submitted: November 1, 2003

   Experimental designations: FG 5S56

FG 8S920

1. The selection criteria used in the development of this variety include selection for multifoliolate expression, winter active growth and high forage yield and persistence from older trials and/or nurseries.

2. This variety is adapted to California and the low desert areas of the west. This variety has been tested in California. It will be used in the Southwest.

3. Test variety is Non-Dormant, similar to FD8 check. Flower color (Syn2) is 100% purple with a trace of cream, yellow, variegated and white. Test variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (race 1), Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid and root knot nematode (*M. hapla*) and resistance to bacterial wilt, Fusarium wilt, Verticillium 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 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 yeasr, respectively.

6. Certified seed will be marketed in 2004.

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, 2003

   Experimental designations: FG 8S920

Focus

1. Focus is a synthetic variety with 100 parent plants. Plants were selected for multifoliolate expression and resistance to one or more of the following pests: stem nematode, Verticillium wilt and Phytophthora root rot. Germplasm sources used in developing Pinnacle were LegenDairy (25%), MultiKing 1 (25%), Excalibur II (12.5%), Prism II (12.5%), Dividend (12.5%), and Acheiva (12.5%). 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* (3%), Ladak (6%), *M.varia* (27%), Turkistan (3%), Flemish (57%) and Chilean (4%).

2. This variety is adapted to the Winterhardy Intermountain United States. This variety has been tested in Idaho and Oregon. It will be used in the Winterhardy Intermountain United States.

3. This variety has fall dormancy similar to FD4 checks and winter survival similar to WS3 checks. Flower color (Syn2) is 90% purple, 9% variegated, 1% white and a trace of yellow and cream. Focus has high multifoliolate leaf expression.

4. This variety has high resistance to Aphanomyces root rot (Race 1), bacterial wilt, Fusarium wilt, anthracnose (Race 1), Phytophthora root rot, stem nematode and spotted alfalfa aphid; resistance to Verticillium wilt, pea aphid and northern root knot nematode. 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 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 5 years, 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 Focus

   Experimental designations FG 3L171

   Date NA&MLVRB first accepted this variety January 1999

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

Mountaineer 2.0

1. The selection criteria used in the development of this variety include forage yield, fall dormancy reaction, persistence, and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, stem nematode and Phytophthora root rot.

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

3. Test variety is moderately fall dormant, similar to FD5 checks. Flower color (Syn2) is 92% purple, 6% variegated, 2% white with a trace of yellow and cream. Test variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, stem nematode and pea aphid; resistance to Verticillium wilt, spotted alfalfa aphid, root-knot nematode (*M. hapla*) and Aphanomyces root rot (Race 1). 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 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 2003.

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 Mountaineer 2.0

   Experimental designations FG 4M124

   Date NA&MLVRB first accepted this variety January 2003

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

Boulder

1. The selection criteria used in the development of this variety include forage yield, fall dormancy reaction, persistence, and pest resistance and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, alfalfa stem nematode and Phytophthora root rot.

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

3. Test variety is Moderately Fall Dormant, similar to FD4 checks. Flower color (Syn2) is 98% purple, 2% variegated with a trace of white, yellow and cream. Test variety has high multifoliolate leaf expression.

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

4. 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.

5. Certified seed will be marketed in 2003.

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

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

8. Variety name Boulder

   Experimental designations FG 4M125

   Date NA&MLVRB first accepted this variety January 2003

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

WL 357HQ

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, Fusarium wilt, Verticillium wilt, anthracnose, 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, Michigan and Kentucky and is intended for use in the North Central and East Central regions.

3. Test variety is Moderately Fall Dormant, similar to FD5 checks. Test variety is Very Winterhardy, similar to WS2 checks. Flower color (Syn2) is 95% purple, 5% variegated with a trace of yellow, white and cream.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid and Aphanomyces root rot (Race 1); with resistance to stem nematode. Reactions to spotted alfalfa aphid, blue alfalfa aphid and root-knot nematode have 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 in the greenhouse in 1998 and in the field near Nampa, ID in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2003.

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 357HQ

   Experimental designations FG 5S43

   Date NA&MLVRB first accepted this variety January 2003

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

WL 346LH

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: potato leafhopper, bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1).

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

3. Test variety is Moderately Fall Dormant, similar to FD4 checks. Test variety is Moderately Winterhardy, similar to WS3 checks. Flower color (Syn2) is 84% purple, 14% variegated, 1% cream and 1% yellow with a trace of white.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Potato Leafhopper, Verticillium wilt, Aphanomyces root rot (Race 1) and Phytophthora root rot; with moderate resistance to stem nematode and pea aphid. Reaction to root-knot nematode, spotted alfalfa aphid, 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 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2003.

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 346LH

   Experimental designations FG 40H118

   Date NA&MLVRB first accepted this variety January 2003

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

Fertilac 10

1. The selection criteria used in the development of this variety include forage yield potential, persistence, winter-active growth 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 U.S. regions. This variety has been tested in Idaho and California and is intended for use in the Southwest U.S. regions.

3. Test variety is very non-dormant, similar to FD10 checks. Flower color (Syn2) is 100% purple, with a trace of cream, yellow, variegated and white.

4. This variety has high resistance to Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid and blue alfalfa aphid; moderate resistance to anthracnose (Race 1), Verticillium wilt and alfalfa stem nematode, and low resistance to bacterial wilt. 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 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 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 Fertilac 10

   Experimental designations FG 10A215

   Date NA&MLVRB first accepted this variety January 2000

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

WL 348AP

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: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race1).

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

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, Aphanomyces root rot (Race 1), and Aphanomyces root rot (Race 2); resistance to pea aphid, with moderate resistance to stem nematode. Reaction to root-knot nematode (*M. hapla*), spotted alfalfa aphid, 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 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2003.

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 348AP

   Experimental designations FG 40M153

   Date NA&MLVRB first accepted this variety January 2003

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

PLUSS

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, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot.

2. This variety is adapted to the North Central region. This variety has been tested in Wisconsin and Iowa, 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 WS1 checks. Flower color (Syn2) is 80% purple, 10% variegated, 6% yellow, 2% white and 2% cream. This variety has high multifoliolate leaf expression.

4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (Race 1); resistance to stem nematode and pea aphid; with moderate resistance to root-knot nematode. Reaction to spotted alfalfa aphid and 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 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 2002.

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 PLUSS

   Experimental designations FG 4M68

   Date NA&MLVRB first accepted this variety January 2002

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

EverGreen 2

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: potato leafhopper, bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, 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 Wisconsin and Iowa, and is intended for use in the North Central and East Central regions.

3. Test variety is Moderately Fall Dormant, similar to FD4 checks. Test variety is Moderately Winterhardy, similar to WS3 checks. Flower color (Syn2) is 80% purple, 15% variegated, 2% white, 2% cream and 1% yellow.

4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid, Potato Leafhopper and Aphanomyces root rot (Race 1). Reactions to spotted alfalfa aphid, blue alfalfa aphid, root-knot nematode and stem nematode have 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 in the greenhouse in 1998 and in the field near Nampa, ID in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2003.

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 EverGreen 2

   Experimental designations FG 4S86

   Date NA&MLVRB first accepted this variety January 2003

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

Expedition

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: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1).

2. This variety is adapted to North Central, East Central and Great Plains regions. This variety has been tested in Wisconsin, Nebraska and Indiana and is intended for use in the North Central, East Central 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, 3% variegated, 1% yellow with a trace of white and cream.

4. Test variety has high resistance to anthracnose (Race 1), Fusarium wilt, Verticillium wilt, Phytophthora root rot and Aphanomyces root rot (Race 1); with resistance to bacterial wilt, stem nematode, spotted alfalfa aphid and root-knot nematode (*M. hapla*). Reaction to,blue alfalfa aphid and pea 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 1998. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

6. Certified seed will be marketed in 2003.

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 Expedition

   Experimental designations FG 5M87

   Date NA&MLVRB first accepted this variety January 2003

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

Altura

1. The selection criteria used in the development of this variety include high multifoliolate leaf expression and high forage yield and persistence from older trials and/or nurseries.

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

3. Test variety is moderately fall dormant, similar to FD6 checks. Flower color (Syn2) is 100% purple with a trace of variegated, white, yellow and cream. Test variety has high multifoliolate leaf expression.

4. This variety has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid and spotted alfalfa aphid; resistance to Verticillium wilt, stem nematode, blue alfalfa aphid and root knot nematode (Northern), and 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 2002.

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 Altura

   Experimental designations FG 6R628

   Date NA&MLVRB first accepted this variety January 2002

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

Paramount II

1. Paramount II is a 101-plant synthetic variety resulting from phenotypic recurrent selection for high forage yield in a space-plant nursery. Parental germplasm traces to ABT 350, GH755, Paramount and WL 252 HQ. Approximate germplasm. Source contributions are M. falcata (7%), Ladak (17%), M. varia (200/o), Turkistan (18%), Flemish (360/o), and Chilean (2%).

2. Paramount II is adapted for use in the north central region of the United States tested in Illinois and Wisconsin.

3. Flower color of Paramount II at syn2 approximates 100% purple with a trace of variegated and white. The fall dormancy of Paramount II is similar to Pioneer 5246 (Class 3).

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

5. Breeder seed (syn1) was produced in 1996 on 101 plants under cage isolation at Warden, Washington. Sufficient foundation (syn2) seed will be produced for the expected life of the variety and will be maintained by W-L Research. One generation of breeder (syn1I), two generations of foundation (syn2 or 3) and three generations of certified (syn2, 3 or 4) seed are recognized. The maximum permitted length of stand for foundation and certified seed fields are three and five years, respectively. Foundation seed must be produced above 40 degrees North latitude. Production of syn.3 foundation seed requires consent of the breeder.

6. Certified seed will be marketed in 2000.

7. It is undecided whether application will be made for Plant Variety Protection.

8. The information in this application can be turned over to the PVP office.

9. Variety name Paramount II

   Experimental designations W330

   Date NA&MLVRB first accepted this variety January 2000

   Dates previous amendments were accepted none

   Date this amendment submitted November 1, 2003

Multi775

1. The selection criteria used in the development of Multi775 was multifoliate expression, vigor, seed yield and resistance to Phytophthora root rot, Verticillium wilt, and crown and root rot.

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

3. This variety is moderately dormant, similar to FD 3 check. Flower color in the Syn 2 is about 91% purple and 9% variegated with traces of cream, white and yellow. Multi775 has multifoliate leaf expression higher than the high MF check. RFV (relative feed value) is higher than the high forage quality check with ADF (acid detergent fiber) and NDF (neutral detergent fiber) lower than the high quality check..

4. This variety has high resistance to bacterial wilt and Fusarium wilt, resistance to Phytophthora root rot, Verticillium wilt, anthracnose (Race 1), Moderate resistance to pea aphid and low resistance to Aphanomyces (Race 1). 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 1999 and 2000 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 2004.

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: Multi775 Date submitted: November 18, 2003

Experimental designations: M775

Nova

1. The selection criteria used in the development of this variety include persistence in cold climates, less fall dormancy and winterhardiness.

2. This variety is adapted to the North Central and East Central regions.

3. Test variety is moderately fall dormant, similar to FD4 checks. Flower color (Syn 2) is 13% variegated and 87% purple.

4. This variety has high resistance to Bacterial Wilt, Fusarium Wilt, Phytophthora Root Rot and Pea Aphid; with resistance to Anthracnose (race 1), Verticillium Wilt, Stem Nematode and spotted Alfalfa Aphid; and moderate resistance to Aphanomyces Root Rot (race 1). Blue alfalfa aphid and root-knot nematode resistance not tested.

5. Seed increase is on a limited generation basis: Breeder (Syn 1), Foundation (Syn 2), and certified (Syn 3). Breeder seed was produced in 2000. Breeder and Foundation seed will be maintained by Great Plains Research Company, Inc. Sufficient breeder and foundation seed are available for foreseeable needs.

6. Certified seed will be marketed in 2004.

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

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

9. Variety Name: Nova Date Submitted November 20, 2003

Experimental Designation: CK2000

420

1. The selection criteria used in the development of this variety were overall plant vigor, fall re-growth, and freedom from root and crown diseases. The 102 selected plants were intercrossed to form the base population of 420.

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

3. 420 is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 3 generation is approximately 95% purple and 5% variegated with traces of cream, yellow and white.

4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). It is moderately resistant to pea aphid. Resistance to Fusarium wilt, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and root-knot nematode has not been determined.

5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2001. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.

6. Seed will be marketed in 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name: 420 Date submitted: 24 November 2003

   Experimental designations: LS 102

Everlast

1. The selection criteria used in the development of Everlast were plant vigor, fall re-growth, and freedom from root and crown diseases. The 103 selected plants were intercrossed to form the base population of Everlast.

2. Everlast is adapted to the North Central and East Central regions of the United States. It has been tested in Iowa and Wisconsin. Everlast is intended for use in the North Central and East Central regions of the U.S.

3. Everlast is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 3 generation is approximately 96% purple and 4% variegated with traces of yellow, cream and white.

4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, Verticillium wilt, and Phytophthora root rot. It is resistant to Aphanomyces root rot (race 1) and stem nematode. It is moderately resistant to Pea aphid. Resistance to Fusarium wilt, spotted alfalfa aphid, blue alfalfa aphid and root-knot nematode has not been determined.

5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 2, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2001 and 2002. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.

6. Seed will be marketed in 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name: Everlast Date submitted: 24 November 2003

   Experimental designation: LS 101

L-311

1. The selection criteria used in the development of L-311 were overall plant vigor, fall re-growth, and freedom from root and crown diseases. The 108 selected plants were intercrossed to form the base population of L-311.

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

3. L-311 is a dormant cultivar with a fall dormancy similar to the FD 3 check. Flower color in the Syn 3 generation is approximately 98% purple and 2% variegated with traces of cream, yellow and white.

4. L-311 is highly resistant to anthracnose (race 1), bacterial wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). It has low resistance to pea aphid. Resistance to Fusarium wilt, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and root-knot nematode has not been determined.

5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Moses Lake, WA in 2001. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.

6. Seed will be marketed in 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name: L-311 Date submitted 24 November 2003

   Experimental designation: LS 104

L-411HD

1. The selection criteria used in the development of L-411HD were overall plant vigor, fall re-growth, and freedom from root and crown diseases. The 98 selected plants were intercrossed to form the base population of L-411HD.

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

3. L-411HD is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 3 generation is approximately 96% purple and 4% variegated with traces of cream, yellow and white.

4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). It has moderate resistance to pea aphid and stem nematode. Resistance to Fusarium wilt, spotted alfalfa aphid, blue alfalfa aphid and root-knot nematode has not been determined.

5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2001. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.

6. Seed will be marketed in 2004.

7. Plant Variety Protection will not be applied for.

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

9. Variety Name: L-411HD Date submitted: 24 November 2003

   Experimental designations: LS 103

C 316 (Amended)

1. C316 is a 198-plant synthetic variety resulting from phenotypic recurrent selection for resistance to Phytophthora root rot. Parental germplasm traces to ABT 350 and Paramount. Approximate germplasm source contributions are *M. falcata* (14%), Ladak (23%), *M. varia* (27%), Turkistan (5%) and Flemish (31%).

2. C316 is adapted for use in North Central and East Central regions of the United States. C316 has been yield tested in Illinois, Pennsylvania and Wisconsin.

3. Flower color of C316 at syn2 approximates 100% purple with a trace of yellow, variegated and white. The fall dormancy of C316 is similar to Legend (Class 4).

4. C316 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt and Aphanomyces root rot (race 1); and resistance to Phytophthora root rot, stem nematode and pea aphid; and moderate resistance to spotted alfalfa aphid, blue alfalfa aphid and southern root-knot nematode (*M. incognita*).

5. Breeder seed (syn1) was produced in 1996 on 198 plants under cage isolation at Bakersfield, California. Sufficient foundation (syn2) seed will be produced for the expected life of the variety and will be maintained by W-L Research. One generation of Breeder (syn1), two generations of Boundation (syn2 or 3), and three generations of Certified (syn2, 3 or 4) seed are recognized. The maximum permitted length of stand for Foundation and Certified seed fields are three and five years, respectively. Foundation seed must be produced above 40 degrees North latitude. Production of syn 3 Foundation seed requires consent of the breeder.

6. Certified seed will be marketed in 2000.

7. It is undecided whether application will be made for Plant Variety Protection.

8. Information in this application can be turned over to the PVP office.

9. Variety Name: C316

   Experimental designation: C316

   Date submitted original: November 1999

   Date accepted original: January 2000

   Date submitted amendment: December 1, 2003

   Date accepted amendment:

C 241 (amended)

1. C 241 is a 200-plant synthetic variety resulting from phenotypic recurrent selection for resistance to Verticillium wilt. Source material traces to Valley +, WL 457, WL 414 and Archer. Approximate germplasm source contributions are Arabian (46%), Chilean (32%), Peruvian (12%), Indian (5%) and African (5%).

2. C 241 is adapted to and intended for use in the Southwestern United States. C 241 has been yield tested in California.

3. Flower color of C 241 at syn 2 approximates 100% purple with a trace of variegated and white. The fall dormancy of C 241 is similar to ABI 700 (Class 6).

4. C 241 has high resistance to Fusarium wilt, Verticillium wilt and Phytophthora root rot; resistance to anthracnose, bacterial wilt, stem nematode, pea aphid, spotted alfalfa aphid, blue alfalfa aphid and northern root knot nematode; and moderate resistance to southern root-knot nematode (*M. incognita*). Reaction to Aphonomyces root rot (Race 1) has not been adequately tested.

5. Breeder seed (syn 1) was produced in 1995 on 200 plants under cage isolation at Bakersfield, California. Sufficient foundation (syn 2) seed will be produced for the expected life of the variety and will be maintained by WL Research. One generation of breeder (syn 1), two generations of foundation (syn 2 or 3), and three generations of certified (syn 2, 3 or 4) seed are recognized. The maximum permitted length of stand for foundation and certified seed fields are three and five years, respectively. Foundation seed must be produced above 40 degrees North latitude. Production of syn 3 foundation seed requires consent of the breeder.

6. Certified seed will be marketed in 2002.

7. It is undecided whether application will be made for Plant Variety Protection.

8. Information in this application can be turned over to the PVP office.

9. Variety Name: C 241

   Experimental designation: C 241

   Date submitted original: November 2001

   Date accepted original: January 2002

   Date submitted amendment: December 1, 2003

   Date accepted amendment:

53V52

1. 53V52 is a synthetic cultivar with 134 parent plants intercrossed in cage isolation. Parental plants were selected phenotypically from a greenhouse screening for resistance to *Aphanomyces* (races 1 and 2) and *Phytophthora* root rot from a Pioneer experimental that had been selected phenotypically for winterhardiness, general appearance, and to one or more of the following pests: bacterial wilt, *Verticillium* wilt, *Phytophthora* root rot, *Aphanomyces* (races 1 and 2) root rot, *Fusarium* wilt, and spotted alfalfa aphid.

2. 53V52 is adapted to the North Central, East Central and moderately winterhardy intermountain regions of the United States and Ontario, Canada. 53V52 is intended for use in the North Central, East Central, winterhardy intermountain, moderately winterhardy intermountain, and Great Plains regions of the United States, as well as Canada.

3. 53V52 is a moderately dormant cultivar with fall dormancy similar to FD-4 check. Flower color of the Syn 2 generation is approximately 73% purple, 27% variegated, with a trace of cream, yellow and white.

4. 53V52 is highly resistant to *Phytophthora* root rot, *Aphanomyces* root rot (race 1), *Aphanomyces* root rot (race 2), *Verticillium* wilt, bacterial wilt, and spotted alfalfa aphid; resistant to anthracnose (race 1), *Fusarium* wilt, and pea aphid; low resistance to stem nematode. Reactions to blue alfalfa aphid and root-knot nematode have not been tested.

5. Breeder seed (Syn 1) was produced on 134 plants under cage isolation during the summer of 1997 in Connell, WA, and bulked. 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 one, three and five years, respectively, for breeder, foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.

6. Seed will be marketed in the spring of 2005.

7. Application for Plant Variety Protection may 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: 53V52 Date submitted: November 26, 2003
   Experimental designation: X53V52, Y53H52, W97PM73

54H11

1. 54H11 is a synthetic cultivar with 109 parent plants intercrossed in the greenhouse. Parent plants trace to Pioneer experimentals with winterhardiness, forage yield, persistence, and resistance to lodging. Parent plants of 54H11 were selected phenotypically for winterhardiness, general appearance, resistance to lodging and to one or more of the following pests: bacterial wilt, *Verticillium* wilt, *Phytophthora* root rot, A*phanomyces* root rot, and *Phoma* crown and leaf spot.

2. 54H11 is adapted to the North Central and moderately winterhardy intermountain regions of the United States. 54H11 is intended for use in the North Central, East Central, moderately winterhardy intermountain, Great Plains, and winterhardy intermountain region of the United States. It also is intended for use in Canada.

3. 54H11 is a moderately dormant cultivar with fall dormancy similar to FD-4 check. Flower color of the Syn 2 generation is approximately 99% purple, 1% variegated, with a trace of cream, yellow and white.

4. 54H11 is highly resistant to anthracnose (race 1), *Aphanomyces* root rot (race 1), *Verticillium* wilt, and *Fusarium* wilt; resistant to *Phytophthora* root rot, spotted alfalfa aphid, Northern root-knot nematode, stem nematode, and bacterial wilt; moderately resistant to pea aphid; and low resistance to *Aphanomyces* root rot (race 2). Reactions to blue alfalfa aphid have not been tested.

5. Breeder seed (Syn 1) was produced on 140 plants in 2001 in Connell, WA, and bulked. Seed classes will be breeder, foundation (Syn 2 or 3), and certified (Syn 3, 4, or 5). 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 one, three and five years, respectively, for breeder, foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.

6. Seed will be marketed in the spring of 2004.

7. Application for Plant Variety Protection may 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: 54H11 Date submitted: November 26, 2003
   Experimental designation: X54H11, Y54H11, 01W09PM2, W00PM72

56S82

1. 56S82 is a synthetic cultivar with 220 parent plants intercrossed in cage isolation. Parent plants trace to Pioneer experimentals with winterhardiness, forage yield, and persistence. Parent plants of 56S82 were selected phenotypically for one or more of the following pests: bacterial wilt, *Verticillium* wilt, *Phytophthora* root rot, stem nematode, northern root knot nematode, and A*phanomyces* root rot (race 1). Parent plants were also phenotypically selected for improved crown type.

2. 56S82 is adapted to the North Central and moderately winterhardy intermountain regions of the United States and is also adapted to Argentina and Australia. 56S82 is intended for use in the North Central, East Central, moderately winterhardy intermountain, Great Plains, and southwest region of the United States. It also is intended for use in Argentina, Australia, Mexico, North Africa and southern Europe.

3. 56S82 is a semidormant cultivar with a fall dormancy similar to FD-6 check. Flower color of the Syn 2 generation is 93% purple, 3% variegated, 2% yellow, 1 % cream, and 1% white.

4. 56S82 is highly resistant to anthracnose (race 1), stem nematode, northern root-knot nematode, southern root-knot nematode, bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, spotted alfalfa aphid, blue alfalfa aphid, and pea aphid; and resistant to *Aphanomyces* root rot (race 1). Reactions to *Verticillium* wilt have not been tested.

5. Breeder seed (Syn 1) was produced on 220 plants in 1998 in Connell, WA, and bulked. 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 one, three and five years, respectively, for breeder, foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.

6. Seed will be marketed in the spring of 2005.

7. Application for Plant Variety Protection may 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: 56S82 Date submitted: December 1, 2003
   Experimental designation: X56S82, Y56S82, 98N12PS1

Variety Description Summary
For
SW 10 ALFALFA

1. Parent plants were selected for abundant mid winter growth at Poston, Arizona and Mendota, California, large crowns, healthy roots and resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

2. SW 10 is adapted to the Southwest area of adaptation in the southern San Joaquin Valley and Imperial Valley of California and to the hot climate areas of Arizona where very non-dormant alfalfa varieties are grown. These are the areas of intended use and locations of yield tests.

3. Fall dormancy of SW 10 is similar to the FD10 check. Flower color is 100% purple in the Syn.3 generation.

4. SW 10 is highly resistant to spotted alfalfa aphid, pea aphid, blue alfalfa aphid; resistant to Fusarium Wilt, southern root knot nematode (m.incognita) and Phytophthera Root Rot; moderately resistant to Bacterial Wilt. Reaction to Anthracnose (Race 1), Verticillium Wilt, stem nematode and aphanomyces root rot (Race 1) has not been tested.

5. Breeder seed was produced in 1999. 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 2004.

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

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

9. Variety name: SW 10 Date submitted: November 21, 2003
Experimental designations: SW 100, SW 101, SW 10 .

SW 6403 (Amended) Alfalfa Variety Description/Summary

1. Selection criteria used in developing SW 6403 included short internodes, medium fine stems, healthy roots, large seed pods, large leaves, dark green forage, resistance to Blue Alfalfa Aphid and resistance to Fusarium Wilt.

2. SW 6403 is adapted for use in parts of California where Fall forage is desired and alfalfa varieties of Fall dormancy 7 are grown. Use is intended in the Sacramento and San Joaquin Valleys of California, where yield tests have been conducted on SW 6403.

3. Fall dormancy of SW 6403 is 7, similar to the FD 7 check variety Dona Anna. Flower color is 96% purple, 3% variegated and 1% white in the syn. 3 generation.

4. SW 6403 is highly resistant to Blue Alfalfa Aphid and Fusarium Wilt. It is resistant to Spotted Alfalfa Aphid and Southern Root Knot Nematode (M. incognita), and moderately resistant to Phytophthora Root Rot, Anthracnose (Race 1) and Pea Aphid. SW 6403 has low resistance to Bacterial Wilt, Verticillium Wilt and Northern Root Knot Nematode (M. Hapla), and was not tested for Aphanomyces Root Rot (Race 1) or Stem Nematode.

5. Breeders seed was produced during 1994. 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. S&W Seed Company will maintain seed stocks of the variety. 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. Application will not be made for P.V.P.

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

9. Variety Name: SW 6403 Date Submitted: November 1, 2003

Experimental designations: 9403, 9212B, 7403

Seminole

1. Seminole is an advanced generation variety of Ladino type white clover bred over repetitive cycles of mass selection from 40 original parental plants. Seminole has undergone four cycles of vigorous selection at Brownsville, Oregon, for vegetative vigor, rapid establishment and freedom from foliar diseases. Breeder seed (Cycle 4 seed) was produced in 1992 at Brownsville, Oregon. Seed was harvested in bulk from parental plants.

2. Seminole has been grown in Oregon and Oklahoma and is adapted for use in the moderately winter hardy intermountain areas of the Pacific Northwest, Northern California and the Great Plains. It is intended for use as a forage legume in pastures and hay crops planted either alone or in grass-clover combinations.

3. Seminole is later in maturity than Regal.

4. Seed increase of Seminole is on a limited generation base with one generation of breeder, two generations of registered and foundation, and three generations of certified. Breeder seed (Cycle 4), foundation (Cycle 5), registered (Cycle 6), and certified (Cycle 7) will be recognized. Breeder seed was produced in isolation at Brownsville, Oregon in 1992. Sufficient breeder seed will be maintained by Willamette Valley Plant Breeders, Inc. Foundation and registered seed will be grown under the Oregon State University seed certification project. Life of stand is limited to two years for foundation and registered seed, and four years for certified seed.

5. Certified seed will be available in 2004.

6. Plant variety Protection will not be applied for.

7. Yes, this can be forwarded to the PVP office.

8. Variety Name: Seminole Date Submitted: December 1, 2003

9. Experimental designation(s): WVPB-WC-Tan-Ag-1; Tan-Ag-1

Robust II Red Clover

1. Robust II is adapted to and intended for use in the east central and north central United States. It has been tested in Tennessee and Wisconsin.

2. Robust II is a diploid medium red clover. Its flower color is 2% red, 10% dark pink, 46% medium pink, 38% light pink, and 4% white. Approximately 80% of the plants exhibit leaf markings, and 94% have hairs on the stems. Robust II has low resistance to northern anthracnose, and resistance to southern anthracnose and powdery mildew. Robust II reaches 50% bloom approximately the same time as Arlington, and 1 day earlier than Marathon in the spring growth of the first year after the seeding year.

3. Seed increase of Robust II is limited to one generation of breeder (syn 1), two generations of foundation (syn 2 or 3), and three generations of certified (syn 2, 3, or 4) classes. Breeder seed was produced in 1995. Length of stand allowed is 2 years each for foundation and certified classes. Production of foundation seed is limited to the northwest United States.

4. Certified seed will first be offered for sale in 2004.

5. Application will not be made for Plant Variety Protection.

6. Information in this application may be forwarded to the PVP office.

7. Variety name: Robust II Date submitted: November 26, 2003

   Experimental designation: R54