A REPORT OF THE

NATIONAL ALFALFA AND MISCELLANEOUS LEGUMES

VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

NATIONAL ALFALFA AND MISCELLANEOUS LEGUMES
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NATIONAL ALFALFA AND MISCELLANEOUS LEGUMES
VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES
(JANUARY 2010)

The Association of Official Seed Certifying Agencies (AOSCA) National Alfalfa and Miscellaneous Legumes Variety Review Board reviewed the following varieties on January 12, 2010, in Las Vegas, NV. The Board recommended the inclusion of these varieties for certification. Seed of these varieties may be certified, providing production meets all standards of the Seed Certifying Agency of the jurisdiction in which the seed is grown.

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

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

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Respectfully submitted,

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

2010 AOSCA ALFALFA & MISC LEGUMES NVRB

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PLACING THE CURSOR OVER THE DESIRED VARIETY/EXPERIMENTAL DESIGNATION & CLICKING WILL TAKE YOU DIRECTLY TO THE SUMMARY DESCRIPTION.

eXclaim

Breeding History:
eXclaim is a synthetic variety with 18 parent plants. Parent plants were selected from crosses between selections of various populations from three-year old Minnesota yield trials, three year old Wisconsin yield trials, and from three-year old Wisconsin nurseries. Yield trial and nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, high NDFD and low ADL (using Near Infrared Reflectance Spectroscopy), high milk per acre using Milk2000, high forage dry matter yield, 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 and/or race 2), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of eXclaim traces to the following germplasm sources: Harmony (6%), 30-30Q (17%), 9429 (6%), CW 83010 (17%), CW 03014 (11%), and miscellaneous Cal West Seeds germplasm (43%). Breeder seed was produced under cage isolation near Woodland, California during 2004. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Area of Probable Adaptation:
eXclaim 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, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. eXclaim has been tested in Iowa, Minnesota, Ohio, Pennsylvania, and Wisconsin.

Agronomic & Botanical Characteristics:
eXclaim is a moderately dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple. eXclaim has moderate multifoliolate leaf expression rating similar to Moderate MF check variety.

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

Procedures for Maintaining Seed Stock:
Seed increase of eXclaim is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.2 or Syn.3), foundation (Syn.3 or Syn.4), and certified (Syn.4 or Syn.5) classes will be recognized. Production of Syn.3 breeder or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2004. 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.

Date Certified Seed First Offered for Sale:
Certified seed of eXclaim will be available in 2010.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name: eXclaim Date submitted November 30, 2009

Experimental designations: CW 043003

ForageGold

Breeding History:
ForageGold is a synthetic variety with 91 parent plants. Parent plants were selected from crosses between selections of various populations from three-year old Iowa yield trials. three-year old Pennsylvania yield trials, three year old Wisconsin yield trials, and from three-year old Wisconsin nurseries. Yield trial and nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, high NDFD and low ADL (using Near Infrared Reflectance Spectroscopy), high milk per acre using Milk2000, high forage dry matter yield, 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 and/or race 2), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of ForageGold traces to the following germplasm sources: Alliant (1%), Cornerstone (6%), Foremost II (6%), GH 700 (3%), Olympian (5%), Power 4.2 (5%), Radiant AM (5%), Trialfalon (1%), Tribute (6%), WinterGold (9%), and CW 04-060 (53%). Breeder seed was produced under cage isolation near Woodland, California in 2004. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Area of Probable Adaptation:
ForageGold 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, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. ForageGold has been tested in Iowa, Minnesota, Ohio, Pennsylvania, and Wisconsin.

Agronomic & Botanical Characteristics:
ForageGold is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple with a trace of varigated. ForageGold has moderate multifoliolate leaf expression rating similar to Moderate MF check variety.

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

Procedures for Maintaining Seed Stock:
Seed increase of ForageGold is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.2 or Syn.3), foundation (Syn.3 or Syn.4), and certified (Syn.4 or Syn.5) classes will be recognized. Production of Syn.3 breeder or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2004. 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.

Date Certified Seed First Offered for Sale:
Certified seed of ForageGold will be available in 2010.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name: ForageGold Date submitted November 30, 2009

Experimental designations: CW 044026

Sundance II

Breeding History:
Sundance II is a synthetic variety with 156 parent plants. Parent plants were selected from crosses between selections of various populations from three-year old Iowa yield trials, three-year old Pennsylvania yield trials, three year old Wisconsin yield trials, and from three-year old Wisconsin nurseries. Yield trial and nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, fast recovery, standability, high NDFD and low ADL (using Near Infrared Reflectance Spectroscopy), high milk per acre using Milk2000, high forage dry matter yield, 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 Sundance II traces to the following germplasm sources: Alicia (3%), Aubigny (2%), Daisy (2%), Europe (1%), Marshal (1%), Mercedes (2%), RADAR (5%), CW 500 (5%), Olympian (2%), Shepherd (6%), 512 (3%), Ascend (6%), Tribute (3%), CW 04-118 (14%), CW 04-119 (6%), CW 04-120 (16%), CW 04-121 (6%), and CW 04-122 (17%). Breeder seed was produced under cage isolation near Woodland, California in 2004. S. Seed was bulk harvested from all parent plants as Synthetic generation

Area of Probable Adaptation:
Sundance II 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, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. Sundance II has been tested in Iowa, Minnesota, Ohio, Pennsylvania, and Wisconsin.

Agronomic & Botanical Characteristics:
Sundance 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 approximately 100% purple. Sundance II has moderate multifoliolate leaf expression rating similar to Moderate MF check variety.

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

Procedures for Maintaining Seed Stock:
Seed increase of Sundance II is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.2 or Syn.3), foundation (Syn.3 or Syn.4), and certified (Syn.4 or Syn.5) classes will be recognized. Production of Syn.3 breeder or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2004. 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.

Date Certified Seed First Offered for Sale:
Certified seed of Sundance II will be available in 2010.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name: Sundance II Date submitted November 30, 2009

Experimental designations: CW 045035

PGI 557

Breeding History:
PGI 557 is a synthetic variety with 10 parent plants selected for high forage dry matter yield, high forage milk per acre using Milk 2000, and/or high forage NDFD. Parent plants were selected from a three year old selection nursery composed of various populations that were developed by phenotypic recurrent selection for winter hardiness, high forage dry matter yield, high NDFD (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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of PGI 557 traces to the following germplasm sources: CW 05-072 (30%), CW 05-073 (40%), and CW 05-074 (30%). Breeder seed was produced under cage isolation near Woodland, California in 2005. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Area of Probable Adaptation:
PGI 557 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, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. PGI 557 has been tested in Iowa, Minnesota, Pennsylvania, and Wisconsin.

Agronomic & Botanical Characteristics:
PGI 557 is a moderately 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 cream, and a trace of variegated. PGI 557 has low multifoliolate leaf expression rating similar to Low MF check variety.

PGI 557 has high resistance to anthracnose (race 1), Aphanomyces root rot (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt, stem nematode; with resistance to blue alfalfa aphid, pea aphid; and with moderate resistance to cow pea aphid. Reaction to the spotted alfalfa aphid, and root knot nematode has not been tested.

Procedures for Maintaining Seed Stock:
Seed increase PGI 557 is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.2 or Syn.3), foundation (Syn.3 or Syn.4), and certified (Syn.4 or Syn.5) classes will be recognized. Production of Syn.3 breeder or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2005. 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.

Date Certified Seed First Offered for Sale:
Certified seed of PGI 557 will be available in 2010.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name: PGI 557 Date submitted November 30, 2009

Experimental designations: CW 055023

Summit

Breeding History:
Summit is a synthetic variety with 108 parent plants. Parent plants were selected from crosses between selections of various populations from three-year old Iowa yield trials, three-year old Minnesota yield trials, three year old Wisconsin yield trials, and from three-year old Wisconsin nurseries. Yield trial and nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, high NDFD and low ADL (using Near Infrared Reflectance Spectroscopy), high milk per acre using Milk2000, high forage dry matter yield, 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 Summit traces to the following germplasm sources: Radiant AM (2%), Foremost II (1%), Cornerstone (1%), Shepherd (9%), 512 (5%), A 4230 (1%), GH 700 (4%), Ascend (6%), Tribute (1%), Labrador (3%), SummerGold (3%), CW 05-081 (14%), CW 05-082 (12%), CW 05-083 (19%), and CW 05-084 (19%). Breeder seed was produced under cage isolation near Woodland, California in 2004. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Area of Probable Adaptation:
Summit 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, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. Summit has been tested in Iowa, Minnesota, Pennsylvania, and Wisconsin.

Agronomic & Botanical Characteristics:
Summit is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, 1% white, with a trace of cream, and a trace of variegated. Summit has moderate multifoliolate leaf expression rating similar to Moderate MF check variety.

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

Procedures for Maintaining Seed Stock:
Seed increase of Summit is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.2 or Syn.3), foundation (Syn.3 or Syn.4), and certified (Syn.4 or Syn.5) classes will be recognized. Production of Syn.3 breeder or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2005. 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.

Date Certified Seed First Offered for Sale:
Certified seed of Summit will be available in 2010.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name: Summit Date submitted November 30, 2009

Experimental designations: CW 055026

CW 055031

Breeding History:
CW 055031 is a synthetic variety with 24 parent plants. Parent plants were selected from crosses between selections of various populations from three-year old Wisconsin nurseries. Nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, fast recovery, standability, high NDFD and low ADL (using Near Infrared Reflectance Spectroscopy), high milk per acre using Milk2000, high forage dry matter yield, 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 055031 traces to the following germplasm sources: CW 05-203 (20%), CW 05-204 (20%), CW 05-205 (20%), CW 05-206 (20%), and CW 05-207 (20%). Breeder seed was produced under cage isolation near Woodland, California in 2005. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Area of Probable Adaptation:
CW 055031 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, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. CW 055031 has been tested in Iowa, Minnesota, Ohio, Pennsylvania, and Wisconsin.

Agronomic & Botanical Characteristics:
CW 055031 is a moderately dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is approximately 97% purple, 2% white, and 1% variegated. CW 055031 has low multifoliolate leaf expression rating similar to Low MF check variety. CW 055031 has resistance to lodging with standability rating similar to the class 7 check variety.

CW 055031 has high resistance to anthracnose (race 1), Aphanomyces root rot (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt; with resistance to pea aphid, stem nematode; with moderate resistance to blue alfalfa aphid; and low resistance to cow pea aphid. Reaction to the spotted alfalfa aphid, and root knot nematode has not been tested.

Procedures for Maintaining Seed Stock:
Seed increase of CW 055031 is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.2 or Syn.3), foundation (Syn.3 or Syn.4), and certified (Syn.4 or Syn.5) classes will be recognized. Production of Syn.3 breeder or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2005. 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.

Date Certified Seed First Offered for Sale:
Certified seed of CW 055031 will be available in 2010.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: CW 055031

Cornerstone

Breeding History:
Cornerstone is a synthetic variety with 225 parent plants that were selected sequentially for resistance to Phytophthora root rot, Aphanomyces root rot, and anthracnose and for multifoliolate leaf expression. Parent plants were selected from crosses between selections of various populations from three-year old Iowa yield trials and four-year old Wisconsin yield trials. Yield trial source varieties were derived from various populations that were developed by phenotypic recurrent selection for winter hardiness, high forage yield, 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Cornerstone traces to the following germplasm sources: 8930MF (2%), 9429 (5%), A4230 (5%), Abound (1%), Alliant (1%), DK 142 (1%), Foremost (5%), GH 700 (10%), Perfect (1%), Pointer (1%), Radiant (3%), Sprint (1%), Ultralac (1%), WinterGold (3%), and miscellaneous Cal/West Seeds breeding populations (60%). Breeder seed was produced under cage isolation near Woodland, California in 2000. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
Cornerstone is adapted to the North Central, East Central, and Great Plains areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. Cornerstone has been tested in Wisconsin, Iowa, Minnesota, Pennsylvania, Kansas, and Ohio.

Agronomic and Botanical Characteristics:
Cornerstone is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 98% purple and 2% variegated. Cornerstone has high multifoliolate leaf expression.

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

Procedures for maintaining seed stock:
Seed increase of Cornerstone is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or 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.

Date certified seed will first be offered for sale:
Certified seed of Cornerstone will be available in 2007.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name Cornerstone

Experimental Designation(s) CW 04028

Date NA&MLVRB first accepted this variety 2008

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

Legend Extra

Breeding History:
Legend Extra is a synthetic variety with 205 parent plants that were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot, Aphanomyces root rot, and anthracnose. Parent plants were selected from crosses between selections of various populations from five-year old Wisconsin, five-year old Pennsylvania, three-year old Iowa, three-year old Wisconsin yield trials, and from three-year old Wisconsin nurseries. Yield trial source varieties and nursery source plants 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Legend Extra traces to the following germplasm sources: Setter (1%), Abound (2%), 9326 (2%), 30-30Q (2%), FQ 315 (6%), TopHand (9%), Supreme (13%), Extreme (14%), and miscellaneous Cal/West Seeds breeding populations (51%). Breeder seed was produced under cage isolation near Woodland, California in 2001. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
Legend Extra is adapted to the North Central, East Central, and Great Plains areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain, and Winterhardy Intermountain areas of the U.S.. Legend Extra has been tested in Wisconsin, Pennsylvania, Kansas, and South Dakota.

Agronomic and Botanical Characteristics:
Legend Extra is a moderately dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, and 1% yellow, with a trace of cream.

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

Procedures for maintaining seed stock:
Seed increase of Legend Extra is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2001. 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.

Date certified seed will first be offered for sale:
Certified seed of Legend Extra will be available in 2007.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name Legend Extra

Experimental Designation(s) CW 13019

Date NA&MLVRB first accepted this variety January, 2007

Date(s) previous amendments were accepted January, 2009

Date amendment submitted November 30, 2009

PGI 437

Breeding History:
PGI 437 is a synthetic variety with 165 parent plants that were selected for resistance to Phytophthora root rot or Aphanomyces root rot (race 1). Parent plants were selected from two-year old nursery selection from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, standability, high relative feed value (using Near Infrared Reflectance Spectroscopy), high forage yield potential, 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 14032 traces to the following germplasm sources: 512, Gold Plus, CW 75046, and miscellaneous Cal/West Seeds breeding populations. Breeder seed was produced under cage isolation near Woodland, California in 2001. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (4%), Ladak (4%), M.varia (28%), Turkistan (4%), Flemish (52%), and Chilean (8%).

Area of probable adaptation:
PGI 437 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, Great Plains areas of the U.S.. PGI 437 has been tested in Wisconsin, Minnesota, South Dakota, Iowa, Indiana, Ohio, and Pennsylvania.

Agronomic and Botanical Characteristics:
PGI 437 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. PGI 437 has resistance to lodging with standabilty rating similar to class 7 check variety.

PGI 437 has high resistance to anthracnose (race 1), Fusarium wilt, root knot nematode *(Meloidogyne hapla)*, resistance to bacterial wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1, and stem nematode**,** and moderate resistance to pea aphid and spotted alfalfa aphid. Reaction to the blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
Seed increase of PGI 437 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 2001. 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.

Date certified seed will first be offered for sale:
Certified seed of PGI 437 will be available in 2005.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name PGI 437

Experimental Designation(s) CW 14032

Date NA&MLVRB first accepted this variety January 2005

Date(s) previous amendments were accepted January 2006, January 2007

Date amendment submitted November 30, 2009

Chesapeake

Breeding History:
Chesapeake is a synthetic variety with 205 parent plants that were selected sequentially for resistance to Phytophthora root rot, Aphanomyces root rot, and anthracnose and for multifoliolate leaf expression. Parent plants were selected from crosses between selections of various populations from three-year old Illinois yield trials, three-year old Minnesota yield trials, five-year old Pennsylvania yield trials, and three and five-year old Wisconsin yield trials. Yield trial source varieties were derived from various populations that were developed by phenotypic recurrent selection for winter hardiness, high forage yield, 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Chesapeake traces to the following germplasm sources: Abound (6%), Concept (3%), GH 700 (2%), Harmony (4%), Perfect (1%), Power 4.2 (2%), Radiant (1%), WinterGold (4%), and miscellaneous Cal/West Seeds breeding populations (77%). Breeder seed was produced under cage isolation near Woodland, California in 2002. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
Chesapeake is adapted to the North Central, East Central, and Great Plains, areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. Chesapeake has been tested in Iowa, Kansas, Minnesota, South Dakota, Pennsylvania, and Wisconsin.

Agronomic and Botanical Characteristics:
Chesapeake is a dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, 1% cream, a trace of yellow, and a trace of variegated. Chesapeake has moderate multifoliolate leaf expression.

Chesapeake has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), Aphanomyces root rot (race 2), pea aphid, and spotted alfalfa aphid, with resistance to root knot nematode (*Meloidogyne hapla*) and stem nematode. Reaction to the blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
Seed increase of Chesapeake is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2002. 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.

Date certified seed first be offered for sale:
Certified seed of Chesapeake will be available in 2007.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name Chesapeake

Experimental Designation(s) CW 23017

Date NA&MLVRB first accepted this variety 2008

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

Adrenalin

Breeding History:
Adrenalin is a synthetic variety with 230 parent plants that were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot, Aphanomyces root rot, and anthracnose. Parent plants were selected from five-year old Pennsylvania yield trials, three-year old Illinois yield trials, three-year old Minnesota yield trials, 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 24027 traces to the following germplasm sources: Alliant, GH 700, WinterGold, and miscellaneous Cal/West Seeds breeding populations. Breeder seed (Syn.1) was produced under cage isolation near Woodland, California in 2002.

Area of probable adaptation:
Adrenalin 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, Great Plains, Moderately Winterhardy Intermountain, and Winterhardy Intermountain areas of the U.S. Adrenalin has been tested in Wisconsin, Iowa, Minnesota, and South Dakota.

Agronomic and Botanical Characteristics:
Adrenalin is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple with a trace of variegated, white, cream, and yellow. Adrenalin has high multifoliolate leaf expression rating similar to High MF check variety.

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

Procedures for maintaining seed stock:
Seed increase of Adrenalin is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2002. 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.

Date certified seed will first be offered for sale:
Certified seed of Adrenalin will be available in 2006.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name Adrenaline

Experimental Designation(s) CW 24027

Date NA&MLVRB first accepted this variety January, 2006

Date(s) previous amendments were accepted January, 2008

Date amendment submitted November 30, 2009

eXalt

Breeding History:
eXalt is a synthetic variety with 240 parent plants derived from three-year old Wisconsin nursery selections from various populations for one or more of the following traits: high forage dry matter yield, high milk per acre using Milk2000, high relative feed value using Near Infrared Reflectance Spectroscopy, and high rumen undegradable protein using Near Infrared Reflectance Spectroscopy. The nursery source plants were derived from various populations that were developed by phenotypic recurrent selection for high winter hardiness, 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of eXalt traces to the following germplasm sources: 9429, Alliant, FQ 315, WinterGold, and miscellaneous Cal/West Seeds breeding populations. Breeder seed (Syn.1) was produced under cage isolation near Woodland, California in 2002.

Area of probable adaptation:
eXalt 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, Great Plains, Moderately Winterhardy Intermountain, and Winterhardy Intermountain areas of the U.S.. eXalt has been tested in Wisconsin, Iowa, and South Dakota.

Agronomic and Botanical Characteristics:
eXalt is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 96% purple, 1% variegated, 1% white, 1% cream and 1% yellow.

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

Procedures for maintaining seed stock:
Seed increase of eXalt is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2002. 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.

Date certified seed will first be offered for sale:
Certified seed of eXalt will be available in 2006.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name eXalt

Experimental Designation(s) CW 24033

Date NA&MLVRB first accepted this variety January, 2006

Date(s) previous amendments were accepted January, 2007

Date amendment submitted November 30, 2009

PGI 459

Breeding History:
PGI 459 is a synthetic variety with 180 parent plants selected from two-year old grazing selection plots from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, standability, high relative feed value (using Near Infrared Reflectance Spectroscopy), high forage yield potential, and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of PGI 459 traces to the following germplasm sources: Ascend, GH 717, Tribute, and CW 84028. Breeder seed (Syn.1) was produced under cage isolation near Woodland, California in 2002.

Area of probable adaptation:
PGI 459 is adapted to the North Central, East Central, and Great Plains areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain, and Winterhardy Intermountain areas of the U.S. PGI 459 has been tested in Wisconsin, Iowa, Minnesota, Pennsylvania, Ohio, Nebraska, Indiana, and South Dakota.

Agronomic and Botanical Characteristics:
PGI 459 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple, with a trace of variegated, white, cream and yellow.

PGI 459 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and root knot nematode (*Meloidogyne hapla*), with resistance to Aphanomyces root rot (race 1), Aphanomyces root rot (race 2), pea aphid, and stem nematode. Reaction to the blue alfalfa aphid has not been tested

Procedures for maintaining seed stock:
Seed increase of PGI 459 is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2002. 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.

Date certified seed will first be offered for sale:
Certified seed of PGI 459 will be available in 2006.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name PGI 459

Experimental Designation(s) CW 24044

Date NA&MLVRB first accepted this variety January, 2006

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

A 5225

Breeding History:
A 5225 is a synthetic variety with 39 parent plants selected sequentially for high winter hardiness, high forage yield, high relative feed value, and multifoliolate leaf expression; 9 parent plants were from three-year old Wisconsin nursery selections from various populations; 30 parent plants were selected from five-year old Pennsylvania yield trials, three-year old Illinois yield trials, three-year old Minnesota yield trials, and three-year old Wisconsin yield trials. 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW A 5225 traces to the following germplasm sources: Tribute, Escalade, Royal Harvest, WinterGold, and miscellaneous Cal/West Seeds breeding populations. Breeder seed (Syn.1) was produced under cage isolation near Woodland, California in 2002.

Area of probable adaptation:
A 5225 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, Great Plains, Moderately Winterhardy Intermountain, and Winterhardy Intermountain areas of the U.S. A 5225 has been tested in Wisconsin, Iowa, and South Dakota.

Agronomic and Botanical Characteristics:
A 5225 is a moderately dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple and 1%variegated, with a trace of white, cream and yellow. A 5225 has high multifoliolate leaf expression rating similar to High MF check variety.

A 5225 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, and Phytophthora root rot, spotted alfalfa aphid, and root knot nematode (*Meloidogyne hapla)*, with resistance to Aphanomyces root rot (race 1), Aphanomyces root rot (race 2), and pea aphid, with moderate resistance to stem nematode. Reaction to the blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
Seed increase of A 5225 is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2002. 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.

Date certified seed will first be offered for sale:
Certified seed of A 5225 will be available in 2006.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name A 5225

Experimental Designation(s) CW 25006

Date NA&MLVRB first accepted this variety January, 2006

Date(s) previous amendments were accepted January, 2008

Date amendment submitted November 30, 2009

PGI 427

Breeding History:
PGI 427 is a synthetic variety with 192 parent plants selected sequentially for germination, seedling growth, and mature plant regrowth after repeated irrigation with 100 mM NaCl solution in the greenhouse. Parent plants were selected from crosses between selections from NaCl tolerant plants from source varieties of various populations that were developed by phenotypic recurrent selection for winter hardiness, high forage dry matter yield, 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of PGI 427 traces to the following germplasm sources: WinterGold (8%), DK 142 (31%), and miscellaneous Cal/West Seeds breeding populations (61%). Breeder seed was produced under cage isolation near Woodland, California in 2003. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
PGI 427 is adapted to the North Central, East Central and Great Plains areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain, and Winterhardy Intermountain areas of the U.S. PGI 427 has been tested in Wisconsin, Iowa, Minnesota, and Kansas.

Agronomic and Botanical Characteristics:
PGI 427 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple, with a trace of variegated. PGI 427 has regrowth salt tolerance similar to the tolerant check variety.

PGI 427 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Aphanomyces root rot (race 1), Phytophthora root rot, pea aphid, and root knot nematode (*Meloidogyne hapla*), with resistance to spotted alfalfa aphid and stem nematode. Reaction to the blue alfalfa aphid and has not been tested.

Procedures for maintaining seed stock:
Seed increase of PGI 427 is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2003. 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.

Date certified seed will first be offered for sale:
Certified seed of PGI 427 will be available in 2007.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name PGI 427

Experimental Designation(s) CW 34024

Date NA&MLVRB first accepted this variety January, 2007

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

Pillar

Breeding History:
Pillar is a synthetic variety with 225 parent plants that were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot, Aphanomyces root rot, and anthracnose. Parent plants were selected from crosses between selections of various populations from a four-year old Wisconsin yield trial. Yield trial source varieties were derived from various populations that were developed by phenotypic recurrent selection for fast growth rate, winter hardiness, high forage yield, 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Pillar traces to the following germplasm sources: CW 83021 (32%), CW 84028 (37%), and GH 717 (31%). Breeder seed was produced under cage isolation near Woodland, California in 2003. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
Pillar is adapted to the North Central, East Central and Great Plains areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain, and Winterhardy Intermountain areas of the U.S.. Pillar has been tested in Wisconsin, Minnesota, Iowa, Pennsylvania, and Kansas

Agronomic and Botanical Characteristics:
Pillar is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple.

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

Procedures for maintaining seed stock:
Seed increase of Pillar is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2003. 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.

Date certified seed will first be offered for sale:
Certified seed of Pillar will be available in 2007.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name Pillar

Experimental Designation(s) CW 34029

Date NA&MLVRB first accepted this variety 2007

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

PGI 908-S

Breeding History:
PGI 908-S is a synthetic variety with 177 parent plants which were selected for survival under salt stress at the seedling stage and for yield under salt stress at the mature plant stage. 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, stem nematode, and cowpea aphid. Parentage of PGI 908-S traces to DK 194, SPS 9000, CW 907, Milenia, and various Cal/West Seeds miscellaneous breeding populations. Approximate germplasm source contributions are as follows: M.varia (2%), Turkistan (6%), Flemish (3%), Chilean (11%), Peruvian (7%), Indian (25%), African (41%), and Unknown (5%).

Area of probable adaptation:
PGI 908-S is adapted to the Southwestern area of the U.S. It is intended for use in the Southwestern U.S. PGI 908-S has been tested in California and Arizona.

Agronomic and Botanical Characteristics
PGI 908-S is a very nondormant variety with fall dormancy similar to the FD9 check variety. Flower color observed in the Syn.2 generation is 99% purple and 1% cream, with a trace of variegated, white, and yellow.

PGI 908-S has high resistance to Anthracnose, Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, northern root knot nematode, and southern root knot nematode, with resistance to bacterial wilt, Verticillium wilt, cowpea aphid, and stem nematode. The reaction to Aphanomyces root rot (race 1) has not been adequately tested.

PGI 908-S has salt tolerance of germinating alfalfa seeds and forage production under salt stress similar to the tolerant check varieties for these two characteristics.

Procedures for maintaining seed stock:
Seed increase of PGI 908-S is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.1or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2003. 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.

Date certified seed first be offered for sale?
Certified seed of PGI 908-S will be available in 2008.

PVP Information
No decision has been made regarding Plant Variety Protection.

This information can be forwarded to the PVP office.

Variety Name: PGI 908-S Date submitted December 1, 2009

Experimental designations: CW 39060

243

Breeding History:
243 is a synthetic variety with 213 parent plants selected sequentially for resistance to Phytophthora root rot, Aphanomyces root rot, and anthracnose. Parent plants were selected from crosses between selections of various populations from three-year old Pennsylvania yield trials, three year old Wisconsin yield trials, and from three-year old Wisconsin nurseries. Yield trial and nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, fast recovery, standability, high NDFD and low ADL (using Near Infrared Reflectance Spectroscopy), high milk per acre using Milk2000, high forage dry matter yield, 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 243 traces to the following germplasm sources: GH 717 (38%), Stealth SF (38%), CW 04-105a (13%) and CW 04-105b (11%). Breeder seed was produced under cage isolation near Woodland, California in 2004. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
243 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, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. 243 has been tested in Iowa, Minnesota, Ohio, Pennsylvania, and Wisconsin.

Agronomic and Botanical Characteristics:
243 is a moderately dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple. 243 has low multifoliolate leaf expression rating similar to Low MF check variety.

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

Procedures for maintaining seed stock:
Seed increase of 243 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2004. 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.

Date certified seed first be offered for sale:
Certified seed of 243 will be available in 2008.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name 243

Experimental Designation(s) CW 044031

Date NA&MLVRB first accepted this variety 2009

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

FSG 528SF

Breeding History:
FSG 528SF is a synthetic variety with 194 parent plants that were selected sequentially for resistance to Phytophthora root rot and anthracnose. Parent plants were selected from crosses between selections of various populations from three-year old Wisconsin nurseries for high forage yield and improved standability or lodging resistance and three-year old Wisconsin-yield trials. Yield trial and nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, fast recovery, standability, high NDFD and low ADL (using Near Infrared Reflectance Spectroscopy), high milk per acre using Milk2000, high forage dry matter yield, 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 FSG 528SF traces to the following germplasm sources: Alicia (1%), Aubigny (1%), Daisy (1%), Diane (1%), Europe (1%), Mercedes (1%), and miscellaneous Cal/West Seeds breeding populations with North American and/or European origin (94%). Breeder seed was produced under cage isolation near Woodland, California in 2004. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
FSG 528SF is adapted to the North Central, East Central and Great Plains areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. FSG 528SF has been tested in Iowa, Kansas, Minnesota, Ohio, Pennsylvania, and Wisconsin.

Agronomic and Botanical Characteristics:
FSG 528SF is a moderately dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is approximately 98% purple, and 2% variegated, with a trace of white. FSG 528SF has low multifoliolate leaf expression rating similar to Low MF check variety. FSG 528SF has resistance to lodging with standability rating similar to class 7 check variety.

FSG 528SF has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, and Verticillium wilt, with resistance to Phytophthora root rot, Aphanomyces root rot (race 1), pea aphid, blue alfalfa aphid, root knot nematode (*Meloidogyne hapla*), and stem nematode. Reaction to the spotted alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
Seed increase of FSG 528SF is on a limited generation basis with two generations each of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2004. 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.

Date certified seed first be offered for sale:
Certified seed of FSG 528SF will be available in 2007.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name FSG 528SF

Experimental Designation(s) CW 045038

Date NA&MLVRB first accepted this variety 2008

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

PGI 709

Breeding History:
PGI 709 is a synthetic variety with 124 parent plants which were selected for cowpea aphid resistance. Parent plants were selected from a population selected for leaf disease resistance, aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parentage of PGI 709 traces to Stamina GT6, Victoria, Sutter, WL 457, DK 170, Diamond, 5715, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. varia (4%), Turkistan (15%), Flemish (6%), Chilean (12%), Peruvian (6%), Indian (23%), and African (34%).

Area of probable adaptation:
PGI 709 is adapted to the Southwestern area of the U.S. It is intended for use in the Southwestern U.S. and Argentina. PGI 709 has been tested in California.

Agronomic and Botanical Characteristics
PGI 709 is a nondormant variety with fall dormancy similar to the FD 7 check variety. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, cream, white, and yellow.

PGI 709 has high resistance to Anthracnose, Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and northern root knot nematode, with resistance to Bacterial wilt and cowpea aphid, and moderate resistance to stem nematode. The reaction to Aphanomyces root rot (race 1) has not been adequately tested.

Procedures for maintaining seed stock:
Seed increase of PGI 709 is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), 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 (Syn.1) was produced under cage isolation near Woodland, California in 2004. 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.

Date certified seed first be offered for sale?
Certified seed of PGI 709 will be available in 2009.

PVP Information
No decision has been made regarding Plant Variety Protection.

This information can be forwarded to the PVP office.

Variety Name: PGI 709 Date submitted December 1, 2009

Experimental designations: CW 047075

CW 054038

Breeding History:
CW 054038 is a synthetic variety with 104 parent plants selected sequentially for germination, seedling growth, and mature plant regrowth after repeated irrigation with 100 mM NaCl solution in the greenhouse. Parent plants were selected from crosses between selections from NaCl tolerant plants from source varieties of various populations that were developed by phenotypic recurrent selection for winter hardiness, high forage dry matter yield, 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, anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 054038 traces to the following germplasm sources: PGI 427 (54%), Stealth SF (3%), CW 04-047 (5%), CW 04-061 (4%), CW 04-070 (6%), and CW 05-061 (28%). Breeder seed was produced under cage isolation near Woodland, California in 2005. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
CW 054038 is adapted to the North Central, East Central and Great Plains areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. areas of the U.S. CW 054038 has been tested in Iowa, Kansas, Minnesota, Ohio, Pennsylvania, and Wisconsin.

Agronomic and Botanical Characteristics:
CW 054038 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 98% purple, 2% variegated, with a trace of white. CW 054038 has low multifoliolate leaf expression rating similar to Low MF check variety. CW 054038 has regrowth salt tolerance similar to the tolerant check variety.

CW 054038 has high resistance to anthracnose (race 1), Aphanomyces root rot (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt, and pea aphid; with resistance to blue alfalfa aphid, stem nematode, and root knot nematode (*Meloidogyne hapla*); and low resistance to Cow Pea Aphid. Reaction to the spotted alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
Seed increase of CW 054038 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2005. 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.

Date certified seed first be offered for sale:
Certified seed of CW 054038 will be available in 2008.

PVP Information:
No decision has been made regarding Plant Variety Protection. This information can be forwarded to the PVP office.

Variety Name _____

Experimental Designation(s) CW 054038

Date NA&MLVRB first accepted this variety 2009

Date(s) previous amendments were accepted _____

Date amendment submitted November 30, 2009

A-1086

Breeding History:
A-1086 is a synthetic variety with 180 parent plants that were selected for resistance to stem nematode, anthracnose (race 1), and Phytophthora root rot. Parent plants were selected from crosses between selections from four-year old California yield trials and selections from seed yield nurseries. Source populations from yield trials and nurseries 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, and blue alfalfa aphid. Parentage of A-1086 traces to Robusta, CW 907, ACA 900, DK 191, Grasis, Grasis II, 5929, DK 192, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.varia (2%), Turkistan (8%), Flemish (1%), Chilean (6%), Peruvian (3%), Indian (26%), African (54%).

Area of probable adaptation:
A-1086 is adapted to and intended for use in the Southwest area of the U.S., Mexico, and Argentina. CW 99052 has been tested in California, Mexico, and Argentina.

Agronomic and Botanical Characteristics
A-1086 is a very nondormant variety with fall dormancy similar to FD class 10 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple with a trace of variegated, white, cream, and yellow.

A-1086 has high resistance to Fusarium wilt, Phytophthora root rot, stem nematode, southern root knot nematode (*Meloidogyne incognita*), northern root knot nematode (*Meloidogyne hapla*), and spotted alfalfa aphid, with resistance to anthracnose (race 1), Verticillium wilt, pea aphid, and blue alfalfa aphid, and moderate resistance to bacterial wilt. Reaction to Aphanomyces root rot (race 1) has not been adequately tested.

Procedures for maintaining seed stock:
Seed increase of A-1086 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.

Date certified seed first be offered for sale?
Certified seed of A-1086 will be available in 2003.

PVP Information
No decision has been made regarding Plant Variety Protection.

This information can be forwarded to the PVP office.

Variety Name: A-1086 Date submitted December 1, 2009

Experimental designations: CW 99052

Chema 1

Breeding History:
Chema 1 is a synthetic variety consisting of 50 parent plants selected from a stand of alfalfa near Brawley, California. Seed for the stand was from a 50 pound bag of nondormant alfalfa seed provided by Bill Lehman. Selection criteria included forage yield potential, seed yield, quicker recovery after cutting and disease and pest resistance. There was a severe white fly infestation the year the plants were selected.

The selected plants were dug and transplanted to an isolation field near Brawley, California for breeder seed production. Breeder seed, Syn 1, was produced in 2006. Seed from all plants was bulked to form Chema 1 breeder seed.

Area of probable adaptation:
Chema 1 is adapted to the southwest region of the United States. It will be used primarily for hay, haylage, greenchop and dehydration. It has been tested in California and New Mexico.

Agronomic and Botanical Characteristics
This variety is a nondormant cultivar with a fall dormancy similar to the FD 10 check. Flower color in the Syn 1 generation is approximately 99.98% purple.

This variety has high resistance to spotted alfalfa aphid; resistant to Verticillium wilt, Phytophthora root rot and pea aphid; and is susceptible to Anthracnose (Race 1) and stem nematode. Resistance to Fusarium wilt, bacterial wilt, blue alfalfa aphid and southern root knot nematode has not been determined at this time.

Procedures for maintaining seed stock:
Seed classes for this variety will be breeder (Syn 1), foundation (Syn 2) and certified (Syn 2 or 3). 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 Brawley, CA in 2006. Claborn Hay Company will maintain sufficient seed stocks for the life of this variety.

Date certified seed to be first offered for sale:
Seed will be marketed in 2010.

PVP Information:
No decision has been made concerning the Plant Variety Protection Act. The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: Chema 1

Ezra

Breeding History:
'Ezra' is the result of a population cross between two populations. The first population is Seedway 9558 after one cycle of selection for resistance to Phytophthora root rot. The second population traces back to a cross between Magnum III selected for resistance to anthracnose (Race 1) and Verticillium wilt and plants from multiple Cornell breeding populations related to Oneida VR, which was further selected for resistance to Verticillium wilt, anthracnose (Race 1), and Phytophthora root rot. Full-sib crosses between the populations were made by hand (~125 clones per population). Equal amounts of seed from each fullsib cross were bulked to form Syn. 1 seed.

Area of Probable Adaptation:
'Ezra' is adapted to the North Central and East Central regions. This variety has been tested in New York and Pennsylvania and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics:
'Ezra' is Dormant similar to the FD3 check. Flower color (Syn. 3) is 78% purple, and 22% variegated with a trace of yellow, cream and white. Pod shape (Syn. 3) is 76% tightly coiled, 21% loosely coiled, and 3% crescent.

'Ezra' has high resistance to anthracnose (Race 1), and Fusarium wilt; with resistance to Verticillium wilt, bacterial wilt, and Phytophthora root rot. NY 0240 is susceptible to Aphanomyces root rot (Race 1).

Procedures for Maintaining Seed Stock:
Seed increase is on a limited generation basis with one generation each of breeder and foundation and two generations of certified seed classes. Breeder (Syn. 2), foundation (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 field near Caldwell, ID in 2002. Enough seed was produced to last the life of the variety. Seed is maintained under environmentally controlled conditions at Cornell University in Ithaca, NY. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Date Certified Seed first to be offered for sale:
Certified seed will first be marketed in 2009.

PVP Information
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name Ezra

Experimental Designation(s) NY 0240

Date NA&MLVRB first accepted this variety 01/19/09

Date(s) previous amendments were accepted

Date amendment submitted 01/04/10

4A415

Breeding History:
4A415 is a 10 clone synthetic. The 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, multileaf expression, resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1 and 2). All of parent plants trace back to Dairyland experimental germplasm. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
4A415 is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The states where it has been tested are Wisconsin, Minnesota and New York.

Agronomic and Botanical Characteristics:
4A415 is a moderately dormant variety similar to the fall dormancy 4 check. 4A415 is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

4A415 has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode; resistance to *Aphanomyces* root rot (Race2) and southern root-knot nematode. 4A415 has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: 4A415 Date submitted 11/30/09
Experimental designations: DS811-M

4N900

Breeding History
4N900 is a synthetic variety composed of half sib seed from 10 elite clones. These clones were evaluated for the following: seed yield, spring vigor, fall dormancy, *Phytophthora* root rot, anthracnose, *Verticillium* wilt, forage yield, leaf disease resistance and persistence.

Area of probable adaptation
4N900 is adapted Southwest region of the United States and the country of Argentina and intended for use across the Southwest Region of the United States and the countries of Argentina and Saudi Arabia. The states where it has been tested are California and Arizona and Chacabuco, Argentina.

Agronomic and Botanical Characteristics
4N900 is a non dormant variety similar to the fall dormancy 9 check. Flower color in the Syn. 2 generation is 100% purple, with trace amounts of variegated, cream and white.
4N900 has high resistance to *Phytophthora* root rot, *Fusarium* wilt, pea aphid, spotted aphid and stem nematode; resistance to anthracnose and northern root knot nematode: moderate resistance to *Aphanomyces* root rot (Race 1), bacterial wilt and low resistance to *Verticillium* wilt. 4N900 has not been tested for resistance to blue alfalfa aphid.

Procedures for maintaining seed stock
Breeder seed (Syn. 1) was produced by growing a bulk of equal proportions of half-sib seed from the 10 parent plants. Foundation seed (Syn.2) was produced from Breeder seed, and Certified seed (Syn. 2 or 3) from Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of two harvest years is permitted on stands producing Breeder and Foundation seed, and a maximum of four years for Certified seed. Dairyland Research International will maintain the original clones and sufficient Breeder seed for the projected life of the variety.

Date certified seed to be first offered for sale
Certified Seed will be available fall of 2009.

PVP Information
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: 4N900 Date submitted November 20, 2009

Experimental designations: DS 598

4S417

Breeding History:
4S417 is a three clone 75-95% hybrid alfalfa variety consisting of a female, maintainer and restorer line. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also 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 female, maintainer, and restorer lines trace to Dairyland experimental germpalsms. Female seed (D-1007A**)** was generated by crossing a cytoplasmic male sterile female line by a maintainer line in field isolation and inter-pollinated by honey, leaf cutting and bumble bees. The female plants were harvested to produce the female Breeder Seed near Sloughhouse, California in 2005-09. Female seed was kept separate each year to produce Breeder seed. Male Breeder seed (Syn. 1) (DS764M) was produced in 2003 near Sloughhouse, CA**.**

Area of probable adaptation:
4S417 is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central, East Central, Great Plains and Winterhardy Intermountain Regions of the United States. The states where it has been tested are Wisconsin, Minnesota and Michigan.

Agronomic and Botanical Characteristics:
4S417 is a moderately dormant variety similar to the fall dormancy 4 check. 4S417 is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation and female (F1) is 90% purple, 9% variegated, less than 1% white with trace amounts of yellow and cream. The male of 4S417 is 1% white seeded.

4S417 has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode and moderate resistance to southern root-knot nematode. 4S417 has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 2005-09. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 2003. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed 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 seed for the projected life of the variety.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: 4S417 Date submitted 11/30/09
Experimental designations: msSunstra-801, DS752

375HY/BR

Breeding History:
375HY/BR is a three clone 75-95% hybrid alfalfa variety consisting of a female, maintainer and restorer line . Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also 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 and 2). The female line, maintainer line and restorer line trace to Dairyland experimental germplasms. Female seed (D-1007A) was generated by crossing a cytoplasmic male sterile female line by a maintainer line in field isolation and inter-pollinated by honey, leaf cutting and bumble bees. The female plants were harvested to produce the female Breeder Seed near Sloughhouse, California in 2005-09. Female seed was kept separate each year to produce Breeder seed. Male Breeder seed (Syn. 1) (DS748M) was produced in 2005 near Sloughhouse, CA**.**

Area of probable adaptation:
375HY/BR is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central, East Central, Great Plains and Winterhardy Intermountain Regions of the United States. The states where it has been tested are Wisconsin, Minnesota and Michigan.

Agronomic and Botanical Characteristics:
357HY/BR is a moderately dormant variety similar to the fall dormancy 4 check. 375HY/BR is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation and female (F1) is 90% purple, 9% variegated, less than 1% white with trace amounts of yellow and cream. The male of 375HY/BR is 1% white seeded.

375HY/BR has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode; resistance to *Aphanomyces* root rot (Race2) and southern root-knot nematode. 375HY/BR has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 2005-09. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 2005. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed 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 seed for the projected life of the variety.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: 375HY/BR Date submitted 11/30/09
Experimental designations: msSunstra-715

Arapaho II

Breeding History:
Arapaho II is a 30 clone synthetic. The parent clones were selected out of saline soils in North Dakota. This population was progeny tested for one or more of the following traits: forage yield, forage production under salt stress, stand persistence, and forage quality, resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1). All of parent plants trace back to Dairyland experimental germplasm which were parent source for Arapaho. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2004 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked to produce Breeder seed.

Area of probable adaptation:
Arapaho II is adapted to the North Central Region of the United States and intended for use across the North Central, East Central and Winterhardy Intermountain Regions of the United States. The state where it has been tested is Wisconsin.

Agronomic and Botanical Characteristics:
Arapaho II is a moderately dormant variety similar to the fall dormancy 4 check. Arapaho II is a very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

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

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: Arapaho II Date submitted 11/30/09
Experimental designations: DS876

Arrowhead II

Breeding History:
Arrowhead II is a 24 clone synthetic. The 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, crown depth, stand persistence, forage quality, resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1). All of parent plants trace back to Dairyland experimental germplasm in which 54% trace to Arrowhead. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
Arrowhead II is adapted to the North Central Region of the United States and intended for use across the North Central, East Central and Winterhardy Intermountain Regions of the United States. The state where it has been tested is Wisconsin.

Agronomic and Botanical Characteristics:
Arrowhead II is a dormant variety similar to the fall dormancy 2 check. Arrowhead II is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

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

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: Arrowhead II Date submitted 11/30/09
Experimental designations: DS761

BY723

Breeding History:
BY723 is a 16 clone synthetic. The 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, multifoliate expression; resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1 and 2). All of parent plants trace back to Dairyland experimental germplasm. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
BY723 is adapted to the North Central Region of the United States and intended for use across the North Central and East Central Regions of the United States. The state where it has been tested is Wisconsin.

Agronomic and Botanical Characteristics:
BY723 is a moderately dormant variety similar to the fall dormancy 4 check. BY723 is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

BY723 has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode; resistance to *Aphanomyces* root rot (Race2) and moderate resistance to southern root-knot nematode. BY723 has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2011.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: _____ Date submitted 11/30/09
Experimental designations: BY723

DS711-BR

Breeding History:
DS711-BR is a 24 clone synthetic. The 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, branch root traits, resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1 and 2). All of parent plants trace back to Dairyland experimental germplasm. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
BY711-BR is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The state where it has been tested is Wisconsin, Michigan and New York.

Agronomic and Botanical Characteristics:
BY711-BR is a moderately dormant variety similar to the fall dormancy 4 check. BY711-BR is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

BY711-BR has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode; resistance to *Aphanomyces* root rot (Race2) and southern root-knot nematode. BY711-BR has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2011.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: _____ Date submitted 11/30/09
Experimental designations: DS711-BR

DS812-T

Breeding History:
DS812-T is a 12 clone synthetic. The 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 and 2). All of parent plants trace back to Dairyland experimental germplasm. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
BY812-T is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The states where it have been tested are Wisconsin, Minnesota, Iowa and New York.

Agronomic and Botanical Characteristics:
BY812-T is a moderately dormant variety similar to the fall dormancy 4 check. BY812-T is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

BY812-T has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode; resistance to stem nematode, *Aphanomyces* root rot (Race2) and moderate resistance to southern root-knot nematode. BY812-T has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: _____ Date submitted 11/30/09
Experimental designations: DS812-T

AV4211

Breeding History:
AV4211 is a 12 clone synthetic. The 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 and 2). All of parent plants trace back to Dairyland experimental germplasm. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
AV4211 is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The states where it have been tested are Wisconsin, Pennsylvania, Iowa and Minnesota.

Agronomic and Botanical Characteristics:
AV4211 is a moderately dormant variety similar to the fall dormancy 4 check. AV4211 is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

AV4211 has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), stem nematode, northern root-knot nematode; resistance to *Aphanomyces* root rot (Race2) and moderate resistance to southern root-knot nematode. AV4211 has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2011.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: AV4211 Date submitted 11/30/09
Experimental designations: BY813-T

Milestone II

Breeding History:
Milestone II is a 12 clone synthetic. The 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, branch root trait, forage quality, resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1 and 2). All of parent plants trace back to Dairyland experimental germplasm in which 58% trace back to Milestone. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
Milestone II is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The states where it has been tested are Wisconsin, New York and Minnesota.

Agronomic and Botanical Characteristics:
Milestone II is a moderately dormant variety similar to the fall dormancy 4 check. Milestone II is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

Milestone II has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), stem nematode, northern root-knot nematode; resistance to *Aphanomyces* root rot (Race2) and southern root-knot nematode. DS815-BR has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: Milestone II Date submitted 11/30/09
Experimental designations: DS815-BR, DS656

HybriForce-2420/Wet

Breeding History:
HybriForce-2420/Wet is a three clone 75-95% hybrid alfalfa variety consisting of a female, maintainer and restorer line. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also 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 and 2). The female line, maintainer line and restorer line trace to Dairyland experimental germplasms. Female seed (D-1009) was generated by crossing a cytoplasmic male sterile female line by a maintainer line in field isolation and inter-pollinated by honey, leaf cutting and bumble bees. The female plants were harvested to produce the female Breeder Seed near Sloughhouse, California in 2005-09. Female seed was kept separate each year to produce Breeder seed. Male Breeder seed (Syn. 1) (DS748M) was produced in 2004 near Sloughhouse, CA**.**

Area of probable adaptation:
HybriForce-2420/Wet is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central, East Central, Great Plains and Winterhardy Intermountain Regions of the United States. The states where it has been tested are Wisconsin, Minnesota and Michigan.

Agronomic and Botanical Characteristics:
HybriForce-2420/Wet is a moderately dormant variety similar to the fall dormancy 4 check. Hybriforce-2420/Wet is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation and female (F1) is 90% purple, 9% variegated, less than 1% white with trace amounts of yellow and cream. The male of HybriForce-807 is 1% white seeded.

Hybriforce-2420/Wet has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode; resistance to *Aphanomyces* root rot (Race2) and to southern root-knot nematode. HybriForce-807 has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 2005-09. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 2003. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed 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 seed for the projected life of the variety.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2011.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: HybriForce-2420/Wet Date submitted 11/30/09
Experimental designations: HybriForce-807, msSunstra-807, DS748

HybriForce-2400

Breeding History:
HybriForce-2400 is a three clone 75-95% hybrid alfalfa variety consisting of a female, maintainer and restorer line. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also 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 female line, maintainer line and restorer line trace to Dairyland experimental germplasms. Female seed (D-1009) was generated by crossing a cytoplasmic male sterile female line by a maintainer line in field isolation and inter-pollinated by honey, leaf cutting and bumble bees. The female plants were harvested to produce the female Breeder Seed near Sloughhouse, California in 2005-9. Female seed was kept separate each year to produce Breeder seed. Male Breeder seed (Syn. 1) (DS764M) was produced in 2003 near Sloughhouse, CA**.**

Area of probable adaptation:
HybriForce-2400 is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central, East Central, Great Plains and Winterhardy Intermountain Regions of the United States. The states where it has been tested are Wisconsin, Minnesota and Michigan.

Agronomic and Botanical Characteristics:
HybriForce-2400 is a moderately dormant variety similar to the fall dormancy 4 check. Hybriforce-2400 is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation and female (F1) is 90% purple, 9% variegated, less than 1% white with trace amounts of yellow and cream. The male of HybriForce-2400 is 1% white seeded.

Hybriforce-2400 has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode; resistance to southern root-knot nematode. HybriForce-2400 has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 2005-09. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 2003. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed 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 seed for the projected life of the variety.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: HybriForce-2400 Date submitted 11/30/09
Experimental designations: HybriForce-802, msSunstra-802, DS754

msSunstra-610, DS751

Breeding History:
msSunstra-610 is a three clone 75-95% hybrid alfalfa variety consisting of a female, maintainer and restorer line. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also 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 female line, maintainer line and restorer line trace to Dairyland experimental germplasms. Female seed (D-1006A) was generated by crossing a cytoplasmic male sterile female line by a maintainer line in field isolation and inter-pollinated by honey, leaf cutting and bumble bees. The female plants were harvested to produce the female Breeder Seed near Sloughhouse, California in 2004-9. Female seed was kept separate each year to produce Breeder seed. Male Breeder seed (Syn. 1) (DS764M) was produced in 2003 near Sloughhouse, CA**.**

Area of probable adaptation:
msSunstra-610 is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central, East Central, Great Plains and Winterhardy Intermountain Regions of the United States. The states where it has been tested are Wisconsin and Minnesota.

Agronomic and Botanical Characteristics:
msSunstra-610 is a moderately dormant variety similar to the fall dormancy 4 check. Hybriforce-2410 is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation and female (F1) is 90% purple, 9% variegated, less than 1% white with trace amounts of yellow and cream. The male of msSunstra-610 is 1% white seeded.

msSunstra-610 has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode; moderate resistance to southern root-knot nematode. msSunstra-610 has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 2005-09. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 2003. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed 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 seed for the projected life of the variety.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: _____ Date submitted 11/30/09
Experimental designations: msSunstra-610, DS751

msSunstra-808

Breeding History:
msSunstra-808 is a three clone 75-95% hybrid alfalfa variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also 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 female line, maintainer and restorer line trace to Diaryland experimental germplasms. Female seed (D-1007A) was generated by crossing a cytoplasmic male sterile female line by a maintainer line in field isolation and inter-pollinated by honey, leaf cutting and bumble bees. The female plants were harvested to produce the female Breeder Seed near Sloughhouse, California in 2005-9. Female seed was kept separate each year to produce Breeder seed. Male Breeder seed (Syn. 1) (DS670) was produced in 2003 near Sloughhouse, CA**.**

Area of probable adaptation:
msSusntra-808 is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central, East Central, Great Plains and Winterhardy Intermountain Regions of the United States. The state where it has been tested is Wisconsin.

Agronomic and Botanical Characteristics:
msSunstra-808 is a moderately dormant variety similar to the fall dormancy 6 check. msSunstra-808 is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation and female (F1) is 90% purple, 9% variegated, less than 1% white with trace amounts of yellow and cream. The male of msSusntra-808 is 1% white seeded.

msSusntra-808 has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, northern root-knot nematode; resistance to anthracnose (Race 1), *Verticillium* wilt, stem nematode; moderate resistance to southern root-knot nematode. msSusntra-808 has not been tested for resistance to spotted alfalfa aphid, pea aphid, blue alfalfa aphid and *Aphanomyces* root rot (Race1).

Procedures for maintaining seed stock:
Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 2005-09. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 2003. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed 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 seed for the projected life of the variety.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: _____ Date submitted 11/30/09
Experimental designations: msSunstra-808

Phirst Extra

Breeding History:
Phirst Extra is a three clone 75-95% hybrid alfalfa variety consisting of a female, maintainer and restorer line. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also 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 female line and restorer lines trace back to Dairyland germplasms and maintainer line trace back to the parents of Phirst. Female seed (DS-1008) was generated by crossing a cytoplasmic male sterile female line by a maintainer line in field isolation and inter-pollinated by honey, leaf cutting and bumble bees. The female plants were harvested to produce the female Breeder Seed near Sloughhouse, California in 2005-09. Female seed was kept separate each year to produce Breeder seed. Male Breeder seed (Syn. 1) (DS764M) was produced in 2003 near Sloughhouse, CA**.**

Area of probable adaptation:
Phirst Extra is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central, East Central, Great Plains and Winterhardy Intermountain Regions of the United States. The states where it has been tested are Wisconsin and Minnesota.

Agronomic and Botanical Characteristics:
Phirst Extra is a moderately dormant variety similar to the fall dormancy 4 check. Phirst Extra is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation and female (F1) is 90% purple, 9% variegated, less than 1% white with trace amounts of yellow and cream. The male of Phirst Extra is 1% white seeded.

Phirst Extra has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), northern root-knot nematode, stem nematode; moderate resistance to southern root-knot nematode. Phist Extra has not been tested for resistance to spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 2005-09. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 2003. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed 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 seed for the projected life of the variety.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: Phirst Extra Date submitted 11/30/09
Experimental designations: msSunstra-806, DS753

Prolific II

Breeding History:
Prolific II is a 12 clone synthetic. The 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, branch root trait, forage quality, resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1 and 2). All of parent plants trace back to Dairyland experimental germplasm in which 58% trace back to Prolific. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
Prolific II is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The states where it has been tested are Wisconsin, New York and Minnesota.

Agronomic and Botanical Characteristics:
Prolific II is a moderately dormant variety similar to the fall dormancy 4 check. Prolific II is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

Prolific II has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), stem nematode, northern root-knot nematode; resistance to *Aphanomyces* root rot (Race 2) and southern root-knot nematode. Prolific II has not been tested for resistance to, spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2009.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: Prolific II Date submitted 11/30/09
Experimental designations: DS814-BR

Red Falcon BR

Breeding History:
Red Falcon BR is a 24 clone synthetic. The 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, branch root trait, forage quality, resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1 and 2). All of parent plants trace back to Dairyland experimental germplasm. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
Red Falcon BR is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The states where it has been tested are Wisconsin, Michigan, New York and Minnesota.

Agronomic and Botanical Characteristics:
Red Falcon BR is a moderately dormant variety similar to the fall dormancy 4 check. Red Falcon BR is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

Red Falcon BR has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt, *Aphanomyces* root rot (Race1), stem nematode, northern root-knot nematode; resistance to *Aphanomyces* root rot (Race 2). Red Falcon BR has not been tested for resistance to southern root-knot nematode, spotted alfalfa aphid, pea aphid and blue alfalfa aphid.

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: Red Falcon BR Date submitted 11/30/09
Experimental designations: DS703-BR, DS853

Winchester

Breeding History:
Winchester is a 16 clone synthetic. The 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). All of parent plants trace back to Dairyland experimental germplasm. They were planted in field isolation and inter-pollinated by honey, leaf cutting and bumble bees near Sloughhouse, California in 2006 to produce Syn. 1 as Breeder Seed. Seed from parent plants were equally bulked each year to produce Breeder seed.

Area of probable adaptation:
Winchester is adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The states where it has been tested are Wisconsin, Iowa and Pennsylvania.

Agronomic and Botanical Characteristics:
Winchester is a moderately dormant variety similar to the fall dormancy 5 check. Winchester is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.

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

Procedures for maintaining seed stock:
Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 2006. Seed from parental clones were bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder, 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.

Date certified seed first offered for sale:
Certified Seed will be available spring of 2010.

PVP Information:
Application for the Plant Variety Protection is undecided.
Information in the NAVRB application can be forwarded to the PVP office.

Variety Name: Winchester Date submitted 11/30/09
Experimental designations: DS706-5, DS854

DG 3210

Breeding History:
DG 3210 is a synthetic variety with 15 parent clones. Parent clones were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (race 1 and race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
DG 3210 is adapted to the North Central and East Central regions. DG 3210 has been tested in Iowa, Wisconsin, Pennsylvania and New York and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
DG 3210 is Fall Dormant similar to FD3 check. DG 3210 is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 82% purple, 9% variegated, 5% yellow, 2% cream and 2 % white. DG 3210 has high multifoliolate leaf expression.

DG 3210 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 stem nematode, pea aphid and root knot nematode (Northern *M. hapla)*. Reaction to spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2003. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.

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

Variety Name: DG 3210 Date submitted November 30, 2009

Experimental designations: FG 33Q116

6305Q

Breeding History:
6305Q is a synthetic variety with 12 parent clones. Parent clones were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (Race 1 and Race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
6305Q is adapted to the North Central and East Central regions. 6305Q has been tested in Iowa, Wisconsin and New York and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
6305Q is Fall Dormant similar to FD3 check. 6305Q is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 96% purple, 2% variegated, 1% white, 1% cream with a trace of yellow. 6305Q has high multifoliolate leaf expression.

6305Q has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and spotted alfalfa aphid; with resistance to stem nematode. Reaction to pea aphid, root knot nematode (Northern *M. hapla)* and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2005. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.

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

Variety Name: 6305Q Date submitted November 30, 2009

Experimental designations: FG 35Q105

Triple Trust 500

Breeding History:
Triple Trust 500 is a synthetic variety with 22 parent clones. Parent clones were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (Race 1 and Race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
Triple Trust 500 is adapted to the North Central and East Central regions. Triple Trust 500 has been tested in Iowa, Wisconsin, Pennsylvania and Indiana and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
Triple Trust 500 is Moderately Fall Dormant similar to FD5 check. Triple Trust 500 is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 84% purple, 13% variegated, 3% yellow with a trace of white and cream.

Triple Trust 500 has high resistance to Anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and pea aphid; with resistance to root knot nematode (Northern *M. hapla)* and moderate resistance to stem nematode. Reaction to spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2003. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: Triple Trust 500 Date submitted November 30, 2009

Experimental designations: FG 43F150

FG 44H371

Breeding History:
FG 44H371 is a synthetic variety with 13 parent clones. Parent clones were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: potato leafhopper, bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode, and Aphanomyces root rot (Race 1 and Race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
FG 44H371 is adapted to the North Central and East Central regions. FG 44H371 has been tested in Indiana, Pennsylvania and Iowa and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
FG 44H371 is Moderately Fall Dormant similar to FD4 check. FG 44H371 is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 49% purple, 34% variegated, 6% yellow, 6% cream and 5% white.

FG 44H371 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), pea aphid and potato leafhopper; with resistance to stem nematode. Reaction to spotted alfalfa aphid, root knot nematode (Northern *M. hapla)* and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2004. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: FG 44H371

6475H

Breeding History:
6475H is a synthetic variety with 21 parent clones. Parent clones were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: potato leafhopper, bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode, and Aphanomyces root rot (Race 1 and Race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
6475H is adapted to the North Central and East Central regions. 6475H has been tested in Indiana, Pennsylvania and Iowa and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
6475H is Moderately Fall Dormant similar to FD4 check. 6475H is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 48% purple, 32% variegated, 8% white, 7% yellow and 5% cream.

6475H has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), and potato leafhopper; with resistance to stem nematode and moderate resistance to spotted alfalfa aphid. Reaction to root knot nematode (Northern *M. hapla)*, pea aphid and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2004. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.

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

Variety Name: 6475H Date submitted November 30, 2009

Experimental designations: FG 44H375

FG 45A119

Breeding History:
FG 45A119 is a synthetic variety with 37 parent clones. Parent clones were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (Race 1 and Race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
FG 45A119 is adapted to the North Central and East Central regions. FG 45A119 has been tested in Iowa, Wisconsin and New York and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
FG 45A119 is Modeately Fall Dormant similar to FD4 check. FG 45A119 is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 89% purple, 11% variegated with a trace of yellow, white and cream. FG 45A119 has high multifoliolate leaf expression.

FG 45A119 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). Reaction to pea aphid, spotted alfalfa aphid, stem nematode, root knot nematode (Northern *M. hapla)* and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2005. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: FG 45A119

Rebound 6.0

Breeding History:
Rebound 6.0 is a synthetic variety with 110 parent plants. Parent plants were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode, and Aphanomyces root rot (Race 1 and Race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
Rebound 6.0 is adapted to the North Central and East Central regions. Rebound 6.0 has been tested in Iowa, Wisconsin and New York and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
Rebound 6.0 is Modeately Fall Dormant similar to FD4 check. Rebound 6.0 is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 90% purple, 10% variegated with a trace of yellow, white and cream. Rebound 6.0 has high multifoliolate leaf expression.

Rebound 6.0 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), Aphanomyces root rot (Race 2) and spotted alfalfa aphid; with resistance to pea aphid and stem nematode. Reaction to root knot nematode (Northern *M. hapla)* and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2005. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: Rebound 6.0 Date submitted November 30, 2009

Experimental designations: FG 45A120

DG 4210

Breeding History:
DG 4210 is a synthetic variety with 17 parent clones. Parent clones were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root rot nematode and Aphanomyces root rot (Race 1 and Race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
DG 4210 is adapted to the North Central and East Central regions. DG 4210 has been tested in Nebraska, Wisconsin and New York and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
DG 4210 is Modeately Fall Dormant similar to FD4 check. DG 4210 is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 93% purple, 5% variegated, 2% white with a trace of yellow and cream. DG 4210 has high multifoliolate leaf expression.

DG 4210 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and spotted alfalfa aphid; with resistance to pea aphid and stem nematode. Reaction to root knot nematode (Northern *M. hapla)* and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2005. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.

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

Variety Name: DG 4210 Date submitted November 30, 2009

Experimental designations: FG 45M324

FG 45W271

Breeding History:
FG 45W271 is a synthetic variety consisting of 14 parent plants. Plants were selected based on forage yield, fall dormancy reaction, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, stem nematode and Phytophthora root rot. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Moderately Winterhardy Intermountain and Winterhardy Intermountain regions. This variety has been tested in Idaho, Washington and Colorado and is intended for use in the Moderately Winterhardy Intermountain and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
This variety is Moderately Dormant similar to FD4 check. Flower Color (Syn2) is 95% purple, 3% variegated, 2% yellow and a trace of white and cream. It has moderate multifoliolate leaf expression.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2005. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: FG 45W271

FG 46W202

Breeding History:
FG 46W202 is a synthetic variety consisting of 110 parent plants. Plants were selected based on forage yield, fall dormancy reaction, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, stem nematode and Phytophthora root rot. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Moderately Winterhardy Intermountain and Winterhardy Intermountain regions. This variety has been tested in Idaho, Washington and Colorado and is intended for use in the Moderately Winterhardy Intermountain and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
This variety is Moderately Dormant similar to FD5 check. Flower Color (Syn2) is 94% purple, 4% variegated, 1% cream, 1% white and a trace of yellow. Test variety has high multifoliolate leaf expression.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2006. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: FG 46W202

FG 106T701

Breeding History:
FG 106T701 is a synthetic variety consisting of 26 parent plants. Plants were selected based on fall dormancy reaction, persistence and for Phytophthora root rot resistance. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Southwest region. This variety has been tested in California and is intended for use in the Southwest.

Agronomic and Botanical Characteristics
This variety is Very Non-Dormant similar to FD11 check. Flower Color (Syn2) is 100% purple, with a trace of variegated, white, cream and yellow.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2006. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: FG 106T701

FG 95T073

Breeding History:
FG 95T073 is a synthetic variety consisting of 310 parent plants. Plants were selected based on forage yield, fall dormancy reaction and persistence. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Southwest. This variety has been tested in California and is intended for use in the Southwest.

Agronomic and Botanical Characteristics
This variety is Non-Dormant similar to FD8 check. Flower Color (Syn2) is 100% purple with a trace of variegated, white, cream and yellow.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2005. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: FG 95T073

WL 656HQ

Breeding History:
WL 656HQ is a synthetic variety consisting of 120 parent plants. Plants were selected based on forage yield, fall dormancy reaction, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, stem nematode and Phytophthora root rot. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Southwest. This variety has been tested in California and is intended for use in the Southwest.

Agronomic and Botanical Characteristics
Test variety is Very Non-Dormant similar to FD9 check. Flower Color (Syn2) is 100% purple, with a trace of variegated, white, cream and yellow.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2005. 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**.**

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: WL 656HQ Date submitted November 30, 2009

Experimental designations: FG 95T284

FG 96T706

Breeding History:
FG 96T706 is a synthetic variety consisting of 136 parent plants. Plants were selected based on fall dormancy reaction, persistence and for Phytophthora root rot resistance. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Southwest region. This variety has been tested in California and is intended for use in the Southwest.

Agronomic and Botanical Characteristics
This variety is Very Non-Dormant similar to FD 9 check. Flower Color (Syn2) is 100% purple with a trace of variegated, white, cream and yellow.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2006. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: FG 96T706

FG 96T707

Breeding History:
FG 96T707 is a synthetic variety consisting of 85 parent plants. Plants were selected based on fall dormancy reaction, persistence and for Phytophthora root rot resistance. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Southwest region. This variety has been tested in California and is intended for use in the Southwest.

Agronomic and Botanical Characteristics
Test variety is Very Non-Dormant similar to FD 9 check. Flower Color (Syn2) is 100% purple with a trace of variegated, white, cream and yellow.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2006. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name: _____ Date submitted November 30, 2009

Experimental designations: FG 96T707

6422Q

Breeding History:
6422Q is a synthetic variety with 15 parent clones. Parent clones were selected for forage yield, forage quality, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (Race 1 and Race 2). A combination of genotypic and phenotypic selection was used to identify the parent plants.

Area of probable adaptation:
6422Q is adapted to the North Central and East Central regions. 6422Q has been tested in Nebraska, Wisconsin and New York and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
6422Q is Moderately Fall Dormant similar to FD4 check. 6422Q is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 96% purple and 4% variegated with a trace of white, yellow and cream. 6422Q has high multifoliolate leaf expression.

6422Q 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 stem nematode and pea aphid. Reaction to spotted alfalfa aphid, root knot nematode (Northern *M. hapla)* and blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
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 (Syn1) was produced near Nampa, ID in 2005. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2009.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.

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

Variety Name 6422Q

Experimental Designation(s) FG 45M322

Date NA&MLVRB first accepted this variety January 2009

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

AmeriStand 803T

Breeding History:
AmeriStand 803 T is a synthetic variety consisting of 300 parent plants. Plants were selected based on forage yield, fall dormancy reaction and persistence. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Southwest region. This variety has been tested in California and is intended for use in the Southwest regions.

Agronomic and Botanical Characteristics
Test variety is Non-Dormant similar to FD8 check. Flower Color (Syn2) is 100% purple with a trace of variegated, cream, white and yellow.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2003. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2009.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.
The information in this application may not be forwarded to the PVP office.

Variety Name AmeriStand 803T

Experimental Designation(s) FG 93T054

Date NA&MLVRB first accepted this variety January 2009

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

AmeriStand 901TS

Breeding History:
AmeriStand 901TS is a synthetic variety consisting of 67 parent plants. Plants were selected based on forage yield, fall dormancy reaction and persistence. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Southwest region. This variety has been tested in California and is intended for use in the Southwest regions.

Agronomic and Botanical Characteristics
Test variety is Very Non-Dormant similar to FD9 check. Flower Color (Syn2) is 100% purple with a trace of variegated, cream, white and yellow.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2002. 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.

Date certified seed to be first offered for sale:

Certified seed will be marketed in 2009.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.

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

Variety Name AmeriStand 901TS

Experimental Designation(s) FG 92T206

Date NA&MLVRB first accepted this variety January 2009

Date(s) previous amendments were accepted

Date amendment submitted November 30, 2009

FG 85M282

Breeding History:
FG 85M282 is a synthetic variety consisting of 125 parent plants. Plants were selected based on forage yield, fall dormancy reaction, persistence and pest resistance. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

Area of probable adaptation:
This variety is adapted to the Southwest region. This variety has been tested in California and is intended for use in the Southwest region.

Agronomic and Botanical Characteristics
Test variety is Very Non-Dormant similar to FD9 check. Flower Color (Syn2) is 100% purple with a trace of variegated, white, cream and yellow. Test variety has high multifoliolate leaf expression.

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

Procedures for maintaining seed stock:
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 field near Nampa, ID in 2005. 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.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2009.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.

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

Variety Name _____

Experimental Designation(s) FG 85M282

Date NA&MLVRB first accepted this variety January 2009

Date(s) previous amendments were accepted _____

Date amendment submitted November 30, 2009

Triple Play

Breeding History:
The selection criteria used in the development of this variety include winter active growth, high forage yield and persistence. Recurrent phenotypic selection was used to develop source populations and identify parent plants.

Area of probable adaptation:
This variety is adapted to the Southwest region. This variety has been tested in California and is intended for use in the Southwest region.

Agronomic and Botanical Characteristics
Test variety is Very Non-Dormant, similar to FD 9 checks. Flower color (Syn2) is 100% purple with a trace of variegated, cream, yellow and white.

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

Procedures for maintaining seed stock:
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 years, respectively.

Date certified seed to be first offered for sale:
Certified seed will be marketed in 2003.

PVP Information:
No decision has been made concerning Plant Variety Protection Act.

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

Variety Name Triple Play

Experimental Designation(s) FG 9S903

Date NA&MLVRB first accepted this variety January 2003

Date(s) previous amendments were accepted January 2006

Date amendment submitted November 30, 2009

SECURE

Breeding History:
The breeding procedure used was recurrent selection in the HayGrazer variety for persistence in cold climates, winter-hardiness, and less fall dormancy.

Area of probable adaptation:
This variety is adapted to the North Central, East Central, and Great Plains regions of the United States of America. It has been tested for yield in Kansas, North Dakota, Ohio, and Wisconsin. The proposed areas of use are the North Central, East Central, Great Plains, Moderately winter-hardy intermountain, and Winter hardy intermountain regions.

Agronomic and Botanical Characteristics
This variety is moderately fall dormant, similar to FD4 checks. Flower color (Syn 1) is 19% variegated and 81% purple.

This variety is highly resistant to Anthracnose (race 1), Bacterial Wilt, and Phytophthora Root Rot, and resistant to Spring Blackstem and Fusarium Wilt diseases.

This variety is resistant to the Pea and Spotted Alfalfa Aphids and to the Stem Nematode.

Resistance to the Blue Alfalfa Aphid, the Root Knot nematode, and the Verticillium Wilt and Aphanomyces root rot diseases were not tested.

Procedures for maintaining seed stock:
Seed increase is on a limited generation basis: Breeder seed (Syn1), Foundation (Syn2), and Certified (Syn3). Breeder seed was produced in 2002 and 2003. Breeder and Foundation seed will be maintained by Great Plains Research Company, Inc. Sufficient breeder and foundation seed are available for the foreseeable future. Seed certification is limited to the Syn 1, Syn 2, and Syn 3 generations. Age of stand for the production of certified seed is limited to six years.

Date certified seed to be first offered for sale:
Certified seed will be available in 2010.

PVP Information:
No decision has been made concerning the Plant Variety Protection Act.

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

Variety name: SECURE Date submitted: November 30, 2009

Experimental designations: Ichg04, Chg04

Radiance HD

Breeding History:
Radiance HD is a 100 plant synthetic variety. Plants were selected from performance nurseries near Evansville, WI in the spring of 2006. Phenotypic selection was based on high forage yield, high forage quality, good winter survival, and the absence of root and crown diseases. Seed of the selected plants was produced in an isolation field near Nampa, ID.

Area of probable adaptation:
This variety is adapted to the North Central and East central regions of the U.S. It will be used primarily for hay, haylage, greenchop and dehydration. It has been tested in Wisconsin and is intended for use in the North central and East Central regions of the United States.

Agronomic and Botanical Characteristics
This variety is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 2 generation is approximately 94% purple and 6% variegated with traces of yellow, cream and white.

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

Procedures for maintaining seed stock:
Seed classes for this cultivar will be breeder (Syn 1), foundation (syn 2), and certified (Syn 2 or Syn 3). Stand life will be limited to 1, 3, and 6 years for breeder, foundation, and certified seed, respectively. Legacy Seeds will maintain sufficient seed stocks for the life of this variety. Breeder seed was produced near Nampa, Idaho in 2006.

Date certified seed to be first offered for sale:
Seed may be marketed in 2009.

PVP Information:
Plant Variety Protection will not be applied for.

This information can be forwarded to the PVP office.

Variety Name: Radiance HD Date submitted 30 Nov. 2009

Experimental designations: LS 605

LS 604

Breeding History:
LS 604 is a 94 plant synthetic variety. Plants were selected from performance nurseries near Evansville, WI in the spring of 2006. Phenotypic selection was based on high forage yield, high forage quality, good winter survival, and the absence of root and crown diseases. Seed of the selected plants was produced in an isolation field near Nampa, ID.

Area of probable adaptation:
This variety is adapted to the North Central and East central regions of the U.S. It will be used primarily for hay, haylage, greenchop and dehydration. It has been tested in Wisconsin and is intended for use in the North central and East Central regions of the United States.

Agronomic and Botanical Characteristics
This variety is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 2 generation is approximately 92% purple and 8% variegated with traces of yellow, cream and white.

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

Procedures for maintaining seed stock:
Seed classes for this cultivar will be breeder (Syn 1), foundation (syn 2), and certified (Syn 2 or Syn 3). Stand life will be limited to 1, 3, and 6 years for breeder, foundation, and certified seed, respectively. Legacy Seeds will maintain sufficient seed stocks for the life of this variety. Breeder seed was produced near Nampa, Idaho in 2006.

Date certified seed to be first offered for sale:
Seed may be marketed in 2009.

PVP Information:
Plant Variety Protection will not be applied for.

This information can be forwarded to the PVP office.

Variety Name: _____ Date submitted 30 Nov 2009

Experimental designations: LS 604

NUMEX BILL MELTON

Breeding History:
'NuMex Bill Melton' was developed by initially intermating the germplasms, NM9D11A-PRR4 and NM911A-AN4. These two germplasms were previously derived by subjecting the cultivar 'Wilson' to four cycles of phenotypic recurrent selection for resistance to Phytophthora root rot (NM9D11A-PRR4) or anthracnose (Race 1) (NM9D11A-AN4). Fifty resistant genotypes from each Cycle 4 population were then intermated by hand (i.e., NM9D11A-PRR4 × NM9D11A-AN4). This population was then subjected to water deficit field conditions (i.e. 50% of the normal flood irrigation rate) for two years near Las Cruces, NM. Phenoytpic selection for early spring forage production was then imposed on surviving plants. Fifty genotypes were selected and intermated under cage isolation in 2003 using leaf cutter bees to produce Syn. 1 breeder seed of NuMex Bill Melton. Syn. 1 seed was harvested in total on all parents, bulked, and distributed for yield evaluations. Based on yield trial results, Syn. 2 breeder seed of NuMex Bill Melton was produced from 400 Syn. 1 progeny grown under cage isolation with pollination by honey bees in 2007 and 2008.

Area of probable adaptation:
'NuMex Bill Melton' is adapted to the Moderately Winterhardy Intermountain and southern Great Plains regions. This variety has been tested throughout New Mexico, and is intended for use in New Mexico and adjacent areas of the Moderately Winterhardy Intermountain, southern Great Plains, and Southwest regions.

Agronomic and Botanical Characteristics
'NuMex Bill Melton' is nondormant, similar to the FD7 check. Under optimum and suboptimum irrigation levels, its forage yield has equaled or exceeded that of the drought tolerant check 'Wilson'. Flower color is almost 100% purple with a trace of white.

'NuMex Bill Melton' has resistance to anthracnose, Phytophthora root rot, Fusarium wilt, spotted alfalfa aphid; and moderate resistance to bacterial wilt, pea aphid, and blue alfalfa aphid. Reaction to Verticillium wilt, Aphanomyces root rot, stem nematode, and root knot nematode has not been tested.

Procedures for maintaining seed stock:
In 2003, 2007 and 2008, breeder seed (Syn 1 and Syn 2) of 'NuMex Bill Melton' was produced under cage isolation near Las Cruces, NM, in sufficient quantity to last the lifetime of the variety. This seed will be maintained by the New Mexico Agricultural Experiment Station. Seed increase will be on a limited generation basis with two generations of the foundation (Syn 3 or 4) and certified seed classes (Syn 4 or 5) being recognized. Production of Syn 4 foundation seed and Syn 5 certified seed requires consent of the breeder. Stand duration will be 3 and 6 years for foundation and certified seed fields, respectively. Certified seed may be produced from foundation seed fields that are no more than 6 years old. Seed increase will be under the supervision of the New Mexico State University Seed Certification Program or other seed certifying agencies.

Date certified seed to be first offered for sale:
'NuMex Bill Melton' will be offered for exclusive release. It is anticipated that certified seed will be available in 2012.

PVP Information:
No decision has been made concerning the Plant Variety Protection Act.

The information in this application may be forwarded to the PVP office.

Variety Name: NuMex Bill Melton Date submitted November 24, 2009

Experimental designations: NM0307

55H94

Breeding History:
55H94 is a synthetic variety with 19 parent clones. Parent clones were selected from Pioneer experimentals for forage yield, persistence and or resistance to one or more of the following pests: potato leafhopper, bacterial wilt, *Fusarium* wilt, *Verticillium wilt*, anthracnose (Race 1), *Phytophthora* root rot, and *Aphanomyces* root rot (Race 1 & 2). Parent clones were identified using a combination of genotypic and phenotypic selection in nursery and agronomic tests.

Area of probable adaptation:
55H94 is adapted to the North Central and East Central regions of the US. This variety has been tested in Illinois and Wisconsin, and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and the Great Plains regions of the US and Canada.

Agronomic and Botanical Characteristics
55H94 is Moderately Dormant, similar to FD5 check. Flower color (Syn2) is 90% purple, 1% cream, 8% variegated and 1% white with a trace of yellow.

55H94 is highly resistant to anthracnose (Race 1), Aphanomyces root rot (Race 1), Verticillium wilt, Fusarium wilt, spotted alfalfa aphid, Phytophthora root rot, and potato leafhopper; with resistance to stem nematode, pea aphid, Aphanomyces root rot (Race 2), and root-knot nematode (M. hapla). Reaction to blue alfalfa aphid and bacterial wilt has not been tested.

Procedures for maintaining seed stock:
Seed increase is on a limited generation basis with one generation of breeder, one generation of foundation and two generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2) and certified (Syn 3 or Syn 4) classes will be recognized. Breeder seed was produced in the greenhouse in 2006 in Arlington, WI and under cage in 2007 in Connell, WA. Pioneer Hi-Bred International will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 5 years, respectively.

Date certified seed to be first offered for sale:
Certified seed may be marketed in 2011.

PVP Information:
Application for Plant Variety Protection may be made and the certification option will not be requested.

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.

Variety Name: 55H94 Date submitted November 30, 2009

Experimental designations: 07W03CZ, W07CZ78

55V50

Breeding History:
55V50 is a synthetic straincross variety in which 192 plants used as a pollen source were crossed to 13 parent clonal plants as pollen recipients. The pollen donor plants trace to a Pioneer experimental with winterhardiness, forage yield, persistence, and resistance to *Aphanomyces* root rot (Race 1 & 2), and were selected phenotypically for one or more of the following pests: bacterial wilt, *Fusarium* wilt, *Verticillium* wilt, and *Aphanomyces* root rot (Race 1 & 2), *Phytophthora* root rot and field performance. Each of the thirteen parent clonal plants were selected for forage yield, persistence and or resistance to one or more of the following pests: bacterial wilt, *Fusarium* wilt, *Verticillium* wilt, anthracnose (Race 1), *Phytophthora* root rot, stem nematode, northern root knot nematode (*M. hapla*) and *Aphanomyces* root rot (Race 1 & 2). Parent clonal plants were identified using a combination of genotypic and phenotypic selection in nursery and agronomic tests.

Area of probable adaptation:
55V50 is adapted to North Central, East Central, and the Moderately Winterhardy Intermountain regions of the US and to Canada. This variety has been tested in Minnesota, Wisconsin, Ohio, Washington and Canada, and is intended to use in the North Central, East Central, the Moderately Winterhardy Intermountain, Winterhardy Intermountain and the Great Plains regions of the US and Canada.

Agronomic and Botanical Characteristics
55V50 is Moderately Dormant, similar to FD5 check. Flower color (Syn2) is 98% purple, 1% cream and 1% white with a trace of variegated and yellow.

55V50 is highly resistant to anthracnose (Race 1), Aphanomyces root rot (Race 1), Aphanomyces root rot (Race 2), Verticillium wilt, root-knot nematode (M. hapla) and Phytophthora root rot; with resistance to Fusarium wilt, stem nematode, pea aphid, and spotted alfalfa aphid. Reaction to blue alfalfa aphid and bacterial wilt has not been tested.

Procedures for maintaining seed stock:
Seed increase is on a limited generation basis with one generation of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3) and certified (Syn 3, Syn 4 or Syn 5) classes will be recognized. Breeder seed was first produced in Arlington WI in 2005. Pioneer Hi-Bred International 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.

Date certified seed to be first offered for sale:
Certified seed may be marketed in 2011.

PVP Information:
Application for Plant Variety Protection may be made and the certification option will not be requested.

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.

Variety Name: 55V50 Date submitted November 30, 2009

Experimental designations: 07W06PX, W07PX61

55V12

Breeding History:
55V12 is an eighteen clone synthetic cultivar crossed in a modified polycross design with seed bulked equally by clone to make up the Syn 1 population. Parent clones were selected phenotypically for resistance to one or more of the following: anthracnose race 1, bacterial wilt, Fusarium wilt, Verticillium wilt, Aphanomyces root rot, stem nematode, Phytophthora root, and spotted alfalfa aphid. Parent clones were also selected based on half-sib progeny performance for early spring vigor, forage growth, fall dormancy, and resistance to lodging. Germplasm sources for 55V12 are (39%) 54H11 and (61%) five Pioneer experimental lines. Breeder seed (Syn 2) was harvested on 239 plants grown in cage isolation in Connell, WA in 2005 in total on all plants and bulked to form breeder seed.

Area of probable adaptation:
55V12 is adapted to North Central, East Central, and the Moderately Winterhardy Intermountain regions of the US and to Canada. This variety has been tested in Illinois, Wisconsin, Iowa, Washington and Canada, and is intended to use in the North Central, East Central, the Moderately Winterhardy Intermountain, Winterhardy Intermountain and the Great Plains regions of the US and Canada.

Agronomic and Botanical Characteristics
55V12 is Moderately Dormant, similar to FD5 check. Flower color (Syn2) is 93% purple, 6% variegated and 1% white with a trace of cream and yellow.

55V12 is highly resistant to Anthracnose (Race 1), Aphanomyces root rot (Race 1), Verticillium wilt, Fusarium wilt, and Phytophthora root rot; with resistance to bacterial wilt, stem nematode, pea aphid, spotted alfalfa aphid, Aphanomyces root rot (Race 2) and root-knot nematode (M. hapla), and lodging. Reaction to blue alfalfa aphid has not been tested.

Procedures for maintaining seed stock:
Seed increase is on a limited generation basis with one generation of breeder, two generations of foundations and three generations of certified seed classes. Breeder (Syn 2), foundation (Syn 3 or Syn 4) and certified (Syn 3, Syn 4 or Syn 5) classes will be recognized. Breeder seed was first produced in Connell, WA in 2005. Pioneer Hi-Bred International will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 5 years, respectively.

Date certified seed to be first offered for sale:
Certified seed may be marketed in 2009.

PVP Information:
Application for Plant Variety Protection may be made and the certification option will not be requested.

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.

Variety Name 55V12

Experimental Designation(s) 05W07CY, W05CY88

Date NA&MLVRB first accepted this variety January 2009

Date(s) previous amendments were accepted None

Date amendment submitted November 30, 2009

53H92

Breeding History:
53H92 is an 18 clone synthetic cultivar. Parent clones were selected phenotypically for resistance to potato leafhopper and one or more of the following: anthracnose race 1, *Phytophthora* root rot, *Aphanomycyes* root rot (races 1 and 2), bacterial wilt, *Fusarium* wilt, *Verticillium* wilt, and spotted alfalfa aphid. Parent clones were also selected phenotypically for spring vigor, field appearance, and fall dormancy.

Area of probable adaptation:
53H92 area of probable adaptation is the North Central, East Central and Moderately Winterhardy Intermountain regions of the United States. 53H92 is intended for use in the North Central, East Central, Great Plains, and Canada. 53H92 has been tested for yield in Iowa, Illinois, and Wisconsin.

Agronomic and Botanical Characteristics
53H92 is a dormant cultivar with fall dormancy similar to FD-3 check. Flower color in the Syn 2 generation is 83% purple, 15% variegated, 1% yellow, and 1% cream with traces of white found.
53H92 is highly resistant to potato leafhopper, anthracnose (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), pea aphid, and Verticillium wilt; resistant to spotted alfalfa aphid and Aphanomyces root rot (Race 2); low resistance to Northern root-knot nematode. 53H92 has not been tested for blue alfalfa aphid resistance or stem nematode resistance.

Procedures for maintaining seed stock:
Breeder seed (Syn 1) was produced in the greenhouse at Arlington, WI during the winter of 2002-03. Seed classes will be breeder (Syn 1), foundation (Syn 2), and certified (Syn 2 or 3). Limitations of age of stand will be one, three and five years, respectively, for breeder, foundation and certified seed. Pioneer Hi-Bred International will maintain the breeder seed for the life of the cultivar.

Date certified seed to be first offered for sale:
Seed will be marketed in the spring of 2007.

PVP Information:
Application for Plant Variety Protection may be made and the certification option will not be requested.
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.

Variety Name: 53H92

Experimental Designation(s): 03W16CZ2, W03CZ92

Date NA&MLVRB first accepted this variety: January, 2006

Date(s) previous amendments were accepted: None

Date amendment submitted: November 30, 2009

SW 8421S

Breeding History:
The selection criteria used in the development of this variety include forage yield potential, salt tolerance, persistence, and resistance to the following pests: Bacterial Wilt, Fusarium Wilt, Phytophthora Root Rot, Spotted Alfalfa Aphid, Pea Aphid, Blue Alfalfa Aphid and Root Knot Nematode (M.incognita). Plants of this variety were cross pollinated in a cage using both honey bees and leafcutting bees.

Area of probable adaptation:
This variety is adapted to the Southwest region. SW 8421S has been tested for yield in the San Joaquin Valley of California and in Tucson, Arizona, and is intended for use in the Southwest region.

Agronomic and Botanical Characteristics
SW 8421S is non-dormant in the fall, similar to FD8 checks. Flower color (Syn.2) is 98% purple, 1 ½% variegated and ½% white. This variety has tolerance to salt stress when measured by forage yield.
SW 8421S has high resistance to Bacterial Wilt, Fusarium Wilt, and Spotted Alfalfa Aphid; with resistance to Phytophthora Root Rot, Pea Aphid, Blue Alfalfa Aphid and to Southern Root Knot Nematode (M.incognita). Reaction to Anthracnose (race 1), Verticillium Wilt, Aphanomyces Root Rot (race1) and Stem Nematode have not been tested.

Procedures for maintaining seed stock:
Breeder seed was produced in 2004. S & W Seed Company will maintain seed stocks of this variety. Under certification, the classes of seed will be Breeders, Foundation, and Certified. Foundation seed will be produced from Breeder seed and/or Foundation seed. Foundation or Breeder seed will be used to produce Certified seed. Length of stand of life allowed for Foundation and Certified seed is four and six years respectively.

Date certified seed to be first offered for sale:
Certified seed will be available for sale in the fall of 2010.

PVP Information:
No decision has been made concerning Plant Variety Protection Act. This information may not be sent to the P.V.P. Office.

Variety Name: SW 8421S Date Submitted: NOV. 27, 2009

Experimental Designation: SW 8421, SW 9421

CW 0401

Breeding History:
CW 0401 is an advanced generation synthetic variety of Ladino type white clover with 87 parent plants. Parent plants were selected for persistence from replicated grazing tests following two and three years of close continuous grazing with high stocking rates of beef cattle at Eatonton and Calhoun, Georgia. Parentage of CW 0401 traces to the following varieties: RegalGraze (100%). Breeder seed (Syn.1) was produced under field isolation near Woodland, California in 2004 and 2005. Five vegetative cuttings from each of the 87 parent plants were established to produce the breeder seed. Seed was bulk harvested from all parent plants.

Area of probable adaptation:
CW 0401 is adapted to the North Central, East Central, Moderately Winterhardy Intermountain, and Southeast regions of the US. It is intended for use in the East Central and Southeast areas of the U.S. CW 0401 has been tested in California, Wisconsin, Kentucky, and Georgia. The intended use of CW 0401 is for hay, haylage, greenchop, or pasture, primarily in mixtures with forage grasses.

Agronomic and Botanical Characteristics:
CW 0401 is a ladino large-leaf type white clover. Flower color of CW 0401 is approximately 99% white with a trace of plants having pinkish flowers. Approximately 56% of the plants exhibit leaf markings. Approximately 98% of the plants flower in the seeding year. CW 0401 reaches 50% bloom approximately 2 days earlier than the variety RegalGraze in California.

Procedures for maintaining seed stock:
Seed increase of CW 0401 is on a limited generation basis with two generations of breeder, foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.2 breeder or Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under field isolation near Woodland, California in 2004 and 2005. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of breeder, foundation, and certified seed fields are limited to 2, 2, and 4 years, respectively.

Date certified seed to be first offered for sale:
Certified seed of CW 0401 will be available in 2010.

PVP Information:
No decision has been made regarding Plant Variety Protection.

This information can be forwarded to the PVP office.

Variety Name: _____ Date submitted December 1, 2009

Experimental designations: CW 0401

Rampart White Clover

Breeding History:
Rampart ladino white clover is the result of a polycross of 43 original plants collected from roadsides, ditches, pastures, and common ladino production fields around the east side of Linn County in Oregon. Selection criteria included large leaves, high stolon count, drought resistance, high number of flowers, and over-all plant vigor in late summer. Two cycles of recurrent phenotypic selection were performed to provide uniformity of plant type and maturity.

Area of probable adaptation:
Rampart has been trialed at the University of Kentucky and in Lebanon, OR. Results indicate that Rampart is adapted for use in the Pacific NW and the transition zone of the US, and its intended use is for pasture and hay production in those regions.

Agronomic and Botanical Characteristics:
Rampart has a maturity four days earlier than Will ladino clover and six days later than white Dutch clover. It has 100% water marks on the leaves with 94% white flowers and 6% slight pinkish flowers as determined on the Syn-1 generation.

Procedures for maintaining seed stock:
Breeder seed of Rampart ladino white clover was designated in 2003 and is maintained in long term controlled storage by Oregro Seeds, Inc. of Albany, OR. Breeder seed may be used to produce Foundation, Registered, and Certified generations. Limitations for generations include two years for Foundation, two years for Registered, and four years for Certified. Additional years may be approved by the breeder or his designee.

Date certified seed to be first offered for sale:
Experimental/Certified seed was first offered for sale in 2006, with certified seed offered in 2010.

PVP Information:
PVP will not be applied for and information on this variety is available to the PVP office.

Variety Name: Rampart Date submitted: 11/19/2009

Experimental designation: WC-1

Companion White Clover

Breeding History:
Companion ladino white clover is the result of mass selection of 211 original plants collected from roadsides, ditches, pastures, and common ladino production fields around the east side of Linn County in Oregon. Selection criteria included large leaves, high stolon count, drought resistance in late summer. Three cycles of recurrent phenotypic selection were performed to provide uniformity of plant type and maturity.

Area of probable adaptation:
Companion has been trialed at the University of Kentucky and in Lebanon, OR. Results indicate that Companion is adapted for use in the Pacific NW and the transition zone of the US, and its intended use is for pasture and hay production in those regions.

Agronomic and Botanical Characteristics:
Companion has a maturity three days earlier than Will ladino clover and seven days later than white Dutch clover. It has 100% water marks on the leaves with 95% white flowers and 5% slight pinkish flowers as determined on the Syn-4 generation.

Procedures for maintaining seed stock:
Breeder seed of Companion ladino white clover was designated in 2005 and is maintained in long term controlled storage by Oregro Seeds, Inc. of Albany, OR. Breeder seed may be used to produce Foundation, Registered, and Certified generations. Limitations for generations include two years for Foundation, two years for Registered, and four years for Certified. Additional years may be approved by the breeder or his designee.

Date certified seed to be first offered for sale:
Experimental/Certified seed was first offered for sale in 2006, with certified seed offered in 2010.

PVP Information:
PVP will not be applied for and information on this variety is available to the PVP office.

Variety Name: Companion Date submitted 11/19/2009

Experimental designation: WC-2