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
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ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES
(JANUARY 2014)

The Association of Official Seed Certifying Agencies (AOSCA) National Alfalfa and Miscellaneous Legumes Variety Review Board reviewed the following varieties on January 14, 2014, 2013, in Denver, CO. 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 Moore, Chair
National Alfalfa and Miscellaneous Legumes Variety Review Board

2014 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.

CW 38101 (Exp)

Origin and Breeding History
CW 38101 is a synthetic variety with 202 parent plants which were selected for aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from selection trials in Buenos Aires, Cordoba, La Pampa, and Santa Fe Provinces Argentina that had been grazed for three years. Parent plants were selected from a population which was developed by selection for aphid resistance, drought tolerance, frost tolerance, leaf disease resistance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parentage of CW 38101 traces to CW 78122 (100%). Breeder seed was produced under cage isolation near Tunuyan, Argentina in 2003. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation
CW 38101 is adapted to the Moderately Winterhardy Intermountain and Southwest areas of the US and to Argentina and is intended for use in the Southwest areas of the US and to Argentina. CW 38101 has been tested in California and Argentina

Agronomic and Botanical Characteristics
CW 38101 is a nondormant variety with fall dormancy similar to FD class 8 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, and a trace of variegated, white, cream, and yellow.

CW 38101 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, and southern root knot nematode; resistance to Verticillium wilt, blue alfalfa aphid, northern root knot nematode and stem nematode; moderate resistance to bacterial wilt and cow pea aphid. Reaction to Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of CW 38101 is on a limited generation basis with two generations of breeder, and three generations of the foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2, Syn.3, or Syn.4), and certified (Syn.3, Syn.4, or Syn.5) classes will be recognized. Production of Syn.2 breeder, Syn.3 foundation, or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Tunuyan, Argentina in 2003. Sufficient foundation seed for the projected life of the variety will be maintained by Alforex Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed of CW 38101 will be available in 2014. Certified acreage may not be published by AOSCA or member agencies.

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

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Jan 14, 2014

CW 39102 (Exp)

Origin and Breeding History
CW 39102 is a synthetic variety with 615 parent plants which were selected for leaf disease resistance, aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parent plants were selected from various populations which were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, blue alfalfa aphid, and stem nematode. Parentage of CW 39102 traces to DK 194 (12%), DK 191 (10%), CW 907 (5%), Millenia (3%), Super 10 (3%), DK 192 (2%), and miscellaneous Alforex Seeds breeding populations (65%). Breeder seed was produced under cage isolation near Tunuyan, Argentina in 2003. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation
CW 39102 is adapted to the Moderately Winterhardy Intermountain and Southwest areas of the US and to Argentina and is intended for use in the Southwest areas of the US and to Argentina. CW 39102 has been tested in California and Argentina

Agronomic and Botanical Characteristics
CW 39102 is a very nondormant variety with fall dormancy similar to FD class 9 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, and a trace of variegated, white, cream, and yellow.

CW 39102 has high resistance to Fusarium wilt, spotted alfalfa aphid, northern root knot nematode and stem nematode; resistance to anthracnose (race 1), Verticillium wilt, Phytophthora root rot, pea aphid, blue alfalfa aphid and southern root knot nematode; moderate resistance to bacterial wilt and cow pea aphid. Reaction to Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of CW 39102 is on a limited generation basis with two generations of breeder, and three generations of the foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2, Syn.3, or Syn.4), and certified (Syn.3, Syn.4, or Syn.5) classes will be recognized. Production of Syn.2 breeder, Syn.3 foundation, or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Tunuyan, Argentina in 2003. Sufficient foundation seed for the projected life of the variety will be maintained by Alforex Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed of CW 39102 will be available in 2014. Certified acreage may not be published by AOSCA or member agencies.

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

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Feb 04, 2014

CW 39104 (Exp)

Origin and Breeding History
CW 39104 is a synthetic variety with 323 parent plants which were selected for aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from selection trials in Buenos Aires, Cordoba, La Pampa, and Santa Fe Provinces Argentina that had been grazed for three years. Parent plants were selected from a population which was developed by selection for aphid resistance, drought tolerance, frost tolerance, leaf disease resistance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parentage of CW 39104 traces to DK 194 (100%). Breeder seed was produced under cage isolation near Tunuyan, Argentina in 2003. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation
CW 39104 is adapted to the Moderately Winterhardy Intermountain and Southwest areas of the US and to Argentina and is intended for use in the Southwest areas of the US and to Argentina. CW 39104 has been tested in California and Argentina

Agronomic and Botanical Characteristics
CW 39104 is a very nondormant variety with fall dormancy similar to FD class 9 check varieties. Flower color observed in the Syn.2 generation is approximately 97% purple, 2% variegated, and a trace of white, cream, and yellow.

CW 39104 has high resistance to anthracnose (race 1), Fusarium wilt, pea aphid, and spotted alfalfa aphid,; resistance to Phytophthora root rot, blue alfalfa aphid, southern root knot nematode and stem nematode; moderate resistance to bacterial wilt and cow pea aphid; low resistance to Verticillium wilt,. Reaction to Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of CW 39104 is on a limited generation basis with two generations of breeder, and three generations of the foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2, Syn.3, or Syn.4), and certified (Syn.3, Syn.4, or Syn.5) classes will be recognized. Production of Syn.2 breeder, Syn.3 foundation, or Syn.4 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Tunuyan, Argentina in 2003. Sufficient foundation seed for the projected life of the variety will be maintained by Alforex Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed of CW 39104 will be available in 2014. Certified acreage may not be published by AOSCA or member agencies.

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

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Feb 04, 2014

CW 050085 (Exp)

Origin and Breeding History

CW 050085 is a synthetic variety with 137 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 CW 050085 traces to Super 10 (18%), PGI 1007BA (13%), CW 1010 (12%), A-1086 (7%), and miscellaneous Alforex Seeds breeding populations (50%). Breeder seed was produced under cage isolation near Woodland, California in 2005. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation

CW 050085 is adapted to the Moderately Winterhardy Intermountain and Southwest areas of the US and is intended for use in the Southwest areas of the US and to Argentina, Australia, and the Mideast. CW 050085 has been tested in California.

Agronomic and Botanical Characteristics

CW 050085 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 99% purple, and a trace of variegated, white, cream, and yellow. CW 050085 has forage production under salt stress similar to the tolerant check variety. Germination of CW 050085 under salt stress is similar to the tolerant check variety**.**

CW 050085 has high resistance to anthracnose (race 1), Fusarium wilt, pea aphid, and blue alfalfa aphid; resistance to Phytophthora root rot, stem nematode, and cowpea aphid; moderate resistance to bacterial wilt and Verticillium wilt. Reaction to spotted alfalfa aphid, root knot nematode, and Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of CW 050085 is on a limited generation basis with two generations of breeder, and three generations of the foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2, Syn.3, or Syn.4), and certified (Syn.3, Syn.4, or Syn.5) classes will be recognized. Production of Syn.2 breeder, Syn.3 foundation, 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 Alforex Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of CW 050085 will be available in 2014. Certified acreage may not be published by AOSCA or member agencies.

PVP Information

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

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Feb 04, 2014

CW 058071 (Exp)

Origin and Breeding History

CW 058071 is a synthetic variety with 170 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 CW 058071 traces to DK 189 (32%), SP 8900 (4%), Millenia (4%), West Star (2%), Condor (2%), and miscellaneous Alforex Seeds breeding populations (56%). Breeder seed was produced under cage isolation near Woodland, California in 2005. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation

CW 058071 is adapted to the Moderately Winterhardy Intermountain and Southwest areas of the US and is intended for use in the Southwest areas of the US and to Argentina, Australia, and the Mideast. CW 058071 has been tested in California.

Agronomic and Botanical Characteristics

CW 058071 is a nondormant variety with fall dormancy similar to FD class 8 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, and a trace of variegated, white, cream, and yellow. CW 058071 has forage production under salt stress similar to the tolerant check variety. Germination of CW 058071 under salt stress is similar to the tolerant check variety**.**

CW 058071 has high resistance to anthracnose (race 1), Phytophthora root rot, pea aphid, blue alfalfa aphid, northern root knot nematode and stem nematode; resistance to Fusarium wilt, Verticillium wilt, southern root knot nematode and cow pea aphid; low resistance to bacterial wilt. Reaction to spotted alfalfa aphid and Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of CW 058071 is on a limited generation basis with two generations of breeder, and three generations of the foundation, and certified seed classes. Breeder (Syn.1 or Syn.2), foundation (Syn.2, Syn.3, or Syn.4), and certified (Syn.3, Syn.4, or Syn.5) classes will be recognized. Production of Syn.2 breeder, Syn.3 foundation, 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 Alforex Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of CW 058071 will be available in 2014. Certified acreage may not be published by AOSCA or member agencies.

PVP Information

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

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Feb 04, 2014

CW 065033 (Exp)

Origin and Breeding History

CW 065033 is a synthetic variety with 65 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 Wisconsin selection nursery, crossed in the greenhouse, and bulk harvested as Synthetic generation 1. Nursery source plants 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 leaf spot. Parentage of CW 065033 traces to the following germplasm sources: QWEST (2%), Radar (2%), STEALTH SF (3%), STELLAR FG (8%), CW 500 (4%), and CW 06-102 (81%). Breeder seed was produced under cage isolation near Woodland, California in 2006. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Areas of Probable Adaptation

CW 065033 is adapted to the North Central area 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. CW 065033 has been tested in Iowa, Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

CW 065033 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, 1% white, and a trace variegated, cream, and yellow. CW 065033 has moderate multifoliolate leaf expression rating similar to Moderate MF check variety.

CW 065033 has high resistance to anthracnose (race 1), Aphanomyces root rot (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt, and stem nematode; with resistance to pea aphid and northern root knot nematode; with moderate resistance to blue alfalfa aphid and cow pea aphid. Reaction to spotted alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of CW 065033 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 2006. Sufficient foundation seed for the projected life of the variety will be maintained by Alforex Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of CW 065033 will be available in 2014. Certified acreage may not be published by AOSCA or member agencies.

PVP Information

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

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Feb 04, 2014

CW 085029 (Exp)

Origin and Breeding History

CW 085029 is a synthetic variety with 58 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 Wisconsin selection nursery, crossed in the greenhouse, and bulk harvested as Synthetic generation 1. Nursery source plants 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 leaf spot. Parentage of CW 085029 traces to the following germplasm sources: Attention II (2%), CW 500 (2%), SunDance II (2%), PGI 437 (15%), and CW 08-201 (79%). Breeder seed was produced under cage isolation near Woodland, California in 2008. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Areas of Probable Adaptation

CW 085029 is adapted to the North Central area 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. CW 085029 has been tested in Iowa, Minnesota, and Wisconsin

Agronomic and Botanical Characteristics

CW 085029 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. CW 085029 has low multifoliolate leaf expression rating similar to Low MF check variety.

CW 085029 has high resistance to anthracnose (race 1), Aphanomyces root rot (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, and Verticillium wilt; with resistance to pea aphid, spotted alfalfa aphid, and stem nematode; with moderate resistance to Aphanomyces root rot (race 2) and blue alfalfa aphid; with low resistance to cow pea aphid. Reaction to root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of CW 085029 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 2008. Sufficient foundation seed for the projected life of the variety will be maintained by Alforex Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of CW 085029 will be available in 2014. Certified acreage may not be published by AOSCA or member agencies.

PVP Information

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

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Jan 14, 2014

CW 095026 (Exp)

Origin and Breeding History

CW 095026 is a synthetic variety with 50 parent plants selected for dense crowns, high leaf to stem ratio, vigorous roots, and no stem, crown, or root rot, high forage dry matter yield, high forage milk per acre using Milk 2000, and/or high forage NDFD. Parent plants were selected from three-year old Iowa, Minnesota, and Wisconsin yield trials, four-year old Pennsylvania and Wisconsin yield trials, and from three-year old Wisconsin nurseries, crossed in the greenhouse, and bulk harvested as Synthetic generation 1. Yield trial and nursery source plants were selected from 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 leaf spot. Parentage of CW 095026 traces to the following germplasm sources: GH 717 (5%), PGI 459 (12%), Charger (2%), CW 043033 (7%), CW 043034 (7%), CW 045006 (8%), CW 055027 (3%), CW 055028 (4%), CW 055029 (5%), and CW 09-107 (47%). Breeder seed was produced under cage isolation near Woodland, California in 2009. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Areas of Probable Adaptation

CW 095026 is adapted to the North Central area 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. CW 095026 has been tested in Iowa, Minnesota, and Wisconsin

Agronomic and Botanical Characteristics

CW 095026 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, with a trace of cream, white, yellow, and variegated. CW 095026 has moderate multifoliolate leaf expression rating similar to Moderate MF check variety.

CW 095026 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, and Phytophthora root rot; with resistance to Aphanomyces root rot (race 1). Reaction to pea aphid, blue alfalfa aphid, spotted alfalfa aphid, stem nematode, and root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of CW 095026 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 2006. Sufficient foundation seed for the projected life of the variety will be maintained by Alforex Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of CW 095026 will be available in 2014. Certified acreage may not be published by AOSCA or member agencies.

PVP Information

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

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Feb 04, 2014

PGI 424

(Amended – Add Very Winterhardy, Similar to WS Class 2 Check Varieties, Add High Resistance to Verticillium Wilt)

Origin and Breeding History:

PGI 424 is a synthetic variety with 200 parent plants that were selected sequentially for high winter hardiness, large deep-set crowns and multifoliolate leaf expression. Parent plants were selected from five-year old Pennsylvania and three-year old Wisconsin yield trials. Yield trial source varieties were derived from various populations that were developed by phenotypic recurrent selection for high relative feed value (using Near Infrared Reflectance Spectroscopy), and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of PGI 424 traces to the following germplasm sources: BigHorn, Hunter, DK 133, WinterGold, 9429, Alliant, HayMaker II, Trialfalon, Stallion, Cyclone, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcata (6%), Ladak (5%), M.varia (27%), Turkistan (5%), Flemish (50%), and Chilean (7%).

Areas of Probable Adaptation:

PGI 424 is adapted to and intended for use in the North Central, East Central, and Great Plains areas of the U.S. PGI 424 has been tested in Wisconsin, Iowa, Minnesota, South Dakota, Nebraska, Pennsylvania, and New York.

Agronomic and Botanical Characteristics

PGI 424 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. PGI 424 is very Winterhardy, similar to WS class 2 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 424 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt, and stem nematode, with resistance to pea aphid, Aphanomyces root rot (race 1), and northern root knot nematode (*Meloidogyne hapla*). Reaction to spotted alfalfa aphid and blue alfalfa aphid has not been tested

Procedures for Maintaining Seed Stock:

Seed increase of PGI 424 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.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of PGI 424 will be available in 2003. Certified acreage may not be published by AOSCA or member agencies.

PVP Information:

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

Variety Name PGI 424

Experimental Designation(s) CW 94008

Date NA&MLVRB first accepted this variety January, 2004

Date(s) previous amendments were accepted January, 2006

Date amendment submitted December 2, 2013

Date amendment recommendeded Jan 14, 2014

PGI 427
(Amended – Add Tolerance to Salt (NaCl) at Germination)

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 tolerance to salt (NaCl) at germination.

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. Certified acreage may not be published by AOSCA or member agencies.

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 January, 2010

Date amendment submitted December 2, 2013

Date amendment recommendeded Jan 14, 2014

PGI 529
(Amended – Name Change)

Origin and Breeding History
PGI 529 is a synthetic variety with 10 parent plants selected for dense crowns, high leaf to stem ratio, vigorous roots, and no stem, crown, or root rot, and for high raceme number and florets per raceme. Parent plants were selected from a three-year old Iowa yield trial and four-year old Wisconsin yield trials, crossed in the greenhouse, and bulk harvested as Synthetic generation 1. Yield trial source plants 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 leaf spot. Parentage of PGI 529 traces to the following germplasm sources: Pillar (10%), Charger (10%), STEALTH SF (20%), SunDance II (10%), GH 717 (20%), CW 32041 (10%), CW 35005 (10%), and CW 35035 (10%). Breeder seed was produced under cage isolation near Woodland, California in 2008. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Areas of Probable Adaptation
PGI 529 is adapted to the North Central area 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 529 has been tested in Iowa, Minnesota, and Wisconsin

Agronomic and Botanical Characteristics
PGI 529 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. PGI 529 has low multifoliolate leaf expression rating similar to Low MF check variety.

PGI 529 has high resistance to anthracnose (race 1), Aphanomyces root rot (race 1), bacterial wilt, Fusarium wilt, and Phytophthora root rot; with resistance to Verticillium wilt, pea aphid, and stem nematode; with moderate resistance to blue alfalfa aphid and spotted alfalfa aphid; with low resistance to cow pea aphid. Reaction to root knot nematode has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of PGI 529 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 2008. 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.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed of PGI 529 will be available in 2013. Certified acreage may not be published by AOSCA or member agencies.

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

Variety Name PGI 529

Experimental Designation(s) CW 085028

Date NA&MLVRB first accepted this variety January, 2013

Date(s) previous amendments were accepted

Date amendment submitted December 2, 2013

Date amendment recommendeded Jan 14, 2014

10XXP11

Origin and Breeding History

10XXP11 (Experimental designation N09SX81) is a synthetic variety from 96 parent plants that trace back to Pioneer experimentals. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (Race 1), Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2), stem nematode, spotted alfalfa aphid and various leaf diseases. Phenotypic selection was used to identify parent plants from long term nurseries. Syn 1 seed was produced on 96 parent plants in the greenhouse in 2009 in Connell, WA and bulked equally by plant and mixed. Breeder seed (Syn 2) was produced on 238 plants that were started in the greenhouse from Syn 1 seed and transplanted April 2010 to cage isolation in Connell, WA with seed harvested October 2010 on all plants and bulked in total.

Areas of Probable Adaptation

10XXP11 is adapted to the North Central and Moderately Winterhardy Intermountain regions of the U.S. and similar environments. The variety has been tested in Wisconsin, Washington, Minnesota and Ontario Canada.

Agronomic and Botanical Characteristics

10XXP11 is moderately dormant, similar to the FD 5 check. Flower color (Syn 2) is 99% purple and 1% cream with a trace of variegated, yellow and white. 10XXP11 is highly resistant to anthracnose; *Aphanomyces* root rot (race 1), Phytophthora root rot, bacterial wilt, *Verticillium* wilt, Northern root knot nematode (*M. hapla*) and stem nematode. It is resistant to pea aphid, *Aphanomyces* root rot (race 2), and spotted alfalfa aphid. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

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 3-4), and certified (Syn 3, 4 or Syn 5) classes will be recognized. Production of Syn 4 foundation seed requires consent of the breeder. Breeder seed was produced in the cage isolation near Connell, WA in 2010. DuPont Pioneer 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.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed will be available for sale in 2015.

The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. If application is made, the Title V certification option will not be selected.

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

Date this application was submitted: Dec 10, 2013

Date recommended by the NVRB: Feb 05, 2014

55VR06

Origin and Breeding History

55VR06 (Experimental designation 11XXP83R and R10XXP83) is a synthetic variety from 73 parent plants that trace back to Pioneer experimentals. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (Race 1), Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2) and various leaf diseases. Phenotypic selection was used to identify parent plants from long term nurseries. Parent plants contain tolerance to Roundup® (glyphosate) herbicide conferred by the CP4 5-enolpyruvylshikimate-3-phosphate synthase (*cp4-epsps*) transgene, specifically, the USDA deregulated Roundup Ready® alfalfa transgenic events J101 (OECD unique identifiers: MON-00101). Syn 1 seed was produced on 73 parent plants in the greenhouse 2010-2011 in Arlington WI. Syn 2 seed was produced on 225 plants in 2011 at Connell, WA in caged field isolation and harvested in total on all parents and bulked to form breeder seed in 2011.

Areas of Probable Adaptation

55VR06 is adapted to the North Central and Moderately Winterhardy Intermountain regions of the US. This variety has been tested in Washington & Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains regions of the US.

Agronomic and Botanical Characteristics

55VR06 is Moderately Dormant, similar to FD5 check. Flower color (Syn2) is 99% purple, 1 % cream with a trace of variegated, yellow and white. 55VR06 is "Roundup Ready®" with a minimum of 90% of the plants expressing tolerance to Roundup® herbicide as measured in a greenhouse grow-out seedling evaluation. 55VR06 is highly resistant to anthracnose, *Aphanomyces* root rot (race 1), Phytophthora root rot, bacterial wilt and *Verticillium* wilt. It is resistant to *Fusarium* wilt, pea aphid and spotted alfalfa aphid. 55VR06 is moderately resistant to stem nematode and *Aphanomyces* root rot (race 2). It has not been tested for other pest reactions. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

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 3-4), and certified (Syn 3, 4 or Syn 5) classes will be recognized. Production of Syn 4 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2011. DuPont Pioneer 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. At least one glyphosate application is required during early stand establishment so that *cp4-epsps* null segregant plants are removed from the seed field prior to pollination. (Null segregant plants are the plants that do not contain the Roundup Ready® trait due to normal genetic segregation in this variety).

Certified Seed Availability and Publication of Certified Seed Production

Certified seed will be marketed in 2015.

The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. If application is made, the Title V certification option will not be selected.

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

Date this application was submitted: Dec 10, 2013

Date recommended by the NVRB: Feb 05, 2014

6401N
(Amended – Add Spotted Alfalfa Aphid Resistance)

Origin and Breeding History
6401N is a synthetic variety with ten parent plants developed by Forage Genetics. Parent plants were selected for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode and Aphanomyces root rot (Race 1). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
6401N is adapted to the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions. It has been tested in Idaho and Colorado and is intended for use in the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
6401N is Moderately Fall Dormant similar to FD4 check. Flower Color (Syn2) is 97% purple, 1% variegated, 1% yellow and 1% white with a trace cream. 6401N has moderate multifoliolate leaf expression. Test variety exhibits salt tolerance in germinating seeds similar to the tolerant check.

6401N has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, pea aphid, root knot nematode (Northern *M. Hapla*) and stem nematode; with resistance to Aphanomyces root rot (Race 1) and spotted alfalfa aphid. Reaction to blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2012.
Certified seed production acreage may be published by AOSCA and member agencies.

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 6401N

Experimental Designation(s) FG 48W201

Date NA&MLVRB first accepted this variety January 2012

Date(s) previous amendments were accepted January 2013

Date amendment submitted December 2, 2013

Date amendment recommended Jan 14, 2014

6472A
(Amended – Name Change)

Origin and Breeding History
6472A is a synthetic variety with 77 parent plants. Parent plants were selected for resistance to Aphanomyces root rot resistance (Race 1 and Race2) from FGI breeding populations previously selected for forage yield, persistence and 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). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
6472A is adapted to the North Central and East Central regions. This variety has been tested in Minnesota, Pennsylvania, Iowa and Wisconsin and is intended for use in the North Central and East Central.

Agronomic and Botanical Characteristics
6472A is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 93% purple, 4% variegated, 2% white and 1% yellow with a trace of cream. This variety has high multifoliolate leaf expression. Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

6472A 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 pea aphid; 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
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2013.
Certified seed production acreage may not be published by AOSCA and member agencies.

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 6472A

Experimental Designation(s) FG 48A172

Date NA&MLVRB first accepted this variety January 2013

Date(s) previous amendments were accepted _____

Date amendment submitted December 2, 2013

Date amendment recommended Jan 14, 2014

AmeriStand 427TQ
(Amended – Name Change)

Origin and Breeding History
AmeriStand 427TQ is a synthetic variety with 84 parent plants that was developed by Forage Genetics International. Parent plants were selected for resistance to Aphanomyces root rot resistance (Race 1 and Race2) from FGI breeding populations previously selected for forage yield, persistence and 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). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
AmeriStand 427TQ is adapted to the North Central and East Central regions. This variety has been tested in Minnesota, Pennsylvania, Iowa and Wisconsin and is intended for use in the North Central and East Central.

Agronomic and Botanical Characteristics
AmeriStand 427TQ is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 92% purple, 4% variegated, 2% white and 2% yellow with a trace of cream. This variety has high multifoliolate leaf expression. Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

AmeriStand 427TQ 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 stem nematode; with resistance to 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
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2013.
Certified seed production acreage may not be published by AOSCA and member agencies.

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 427TQ

Experimental Designation(s) FG 48A179

Date NA&MLVRB first accepted this variety January 2013

Date(s) previous amendments were accepted

Date amendment submitted December 2, 2013

Date amendment recommended Jan 14, 2014

Camas
(Amended – Name Change, Add Spotted Alfalfa Aphid Resistance & Verticillium Wilt)

Origin and Breeding History
Camas is a synthetic variety with 20 parent plants developed by Forage Genetics. Parent plants were selected for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode and Aphanomyces root rot (Race 1). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
Camas is adapted to the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions. It has been tested in Idaho and Colorado and is intended for use in the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
Camas is Moderately Fall Dormant similar to FD4 check. Flower Color (Syn2) is 94% purple, 4% white and 2% cream with a trace of yellow and variegated. FG 48W203 has moderate multifoliolate leaf expression.

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

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2012.
Certified seed production acreage may be published by AOSCA and member agencies.

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 Camas

Experimental Designation(s) FG 48W203

Date NA&MLVRB first accepted this variety January 2012

Date(s) previous amendments were accepted

Date amendment submitted December 2, 2013

Date amendment recommended Jan 14, 2014

GA-535

Origin and Breeding History
GA-535 a synthetic variety with 18 parent clones. Forage Genetics International experimental designation is FG 54M349. Parent clones were selected for forage yield, persistence and 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 phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2004.

Areas of Probable Adaptation
GA-535 is adapted to the North Central, East Central and Great Plains regions. This variety has been tested in Nebraska, Iowa, Pennsylvania and Wisconsin and is intended for use in the North Central, East Central and Great Plains regions.

Agronomic and Botanical Characteristics
GA-535 is Moderately Fall Dormant similar to FD5 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 94% purple, 6% variegated with a trace of cream, white and yellow. This variety has high multifoliolate leaf expression.

GA-535 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 stem nematode 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
Breeder seed (Syn1) was produced near Nampa, ID in 2004. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Nov 22, 2013

Date recommended by the NVRB: Mar 25, 2014

Integra 8420
(Amended – Add Spotted Alfalfa Aphid Resistance & Verticillium Wilt)

Origin and Breeding History
Integra 8420 is a synthetic variety with 17 parent plants developed by Forage Genetics. Parent plants were selected for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode and Aphanomyces root rot (Race 1). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
Integra 8420 is adapted to the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions. It has been tested in Idaho and Colorado and is intended for use in the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
Integra 8420 is Moderately Fall Dormant similar to FD4 check. Flower Color (Syn2) is 96% purple, 2% variegated, 1% yellow and 1% white with a trace cream. Integra 8420 has moderate multifoliolate leaf expression.

Integra 8420 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), root knot nematode (Northern *M. Hapla*), stem nematode, spotted alfalfa aphid and Verticillium wilt; with resistance to pea aphid. Reaction to blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2012.
Certified seed production acreage may be published by AOSCA and member agencies.

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 Integra 8420

Experimental Designation(s) FG 48W202

Date NA&MLVRB first accepted this variety January 2012

Date(s) previous amendments were accepted January 2013

Date amendment submitted December 2, 2013

Date amendment recommended January 14, 2014

Leafy 430

Origin and Breeding History
Leafy 430 is a synthetic variety with 12 parent clones. Forage Genetics International experimental designation is FG 48M385. Parent clones were selected for forage yield, persistence and 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 phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
Leafy 430 is adapted to the North Central and East Central regions. This variety has been tested in Minnesota, Pennsylvania, Iowa and Wisconsin and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
Leafy 430 is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 94% purple, 4% variegated, 1% white, 1% yellow with a trace of cream. This variety has high multifoliolate leaf expression. Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

Leafy 430 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and stem nematode; with resistance to pea aphid. Reaction to root knot nematode (Northern *M. hapla,)*, spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

Marathon 500

Origin and Breeding History
Marathon 500 is a synthetic variety with 74 parent plants. Forage Genetics International experimental designation is FG 48A187. Parent plants were selected for resistance to Aphanomyces root rot resistance (Race 1 and Race2) from FGI breeding populations previously selected for forage yield, persistence and 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). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
Marathon 500 is adapted to the North Central and East Central regions. This variety has been tested in Minnesota, Pennsylvania, Iowa and Wisconsin and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
Marathon 500 is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 94% purple, 4% variegated, 1% white, 1% yellow with a trace of cream. This variety has high multifoliolate leaf expression. Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

Marathon 500 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 stem nematode; with resistance to pea aphid. Reaction to root knot nematode (Northern *M. hapla,)*, spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

Nimbus
(Amended – Name Change)

Origin and Breeding History
Nimbus is a synthetic variety with seven parent plants that was developed by Forage Genetics International. Parent plants were selected for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode, northern root rot nematode and Aphanomyces root rot (Race 1). Phenotypic selection was used to identify the parent plants. The germplasm sources used in the development trace to Rebound 5.0 (14%), MasterPiece II (14%), 6441 (14%) and four FGI experimental populations (58%). In 2007 Syn1 seed was produced in Nampa, ID and harvested in total on all parents and bulked to form breeder seed.

Areas of Probable Adaptation
Nimbus is adapted to the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions of the U.S. and similar environments. The variety has been tested in Washington, Oregon, Idaho and Colorado and intended use is in the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions

Agronomic and Botanical Characteristics
Nimbus is moderately dormant similar to the FD 5 check. Flower color (Syn 2) is 95% Purple, 4% Variegated, 1% Yellow with a trace of Cream and White. It expresses a moderate degree of multifoliolate leafiness. Test variety has improved forage yield under saline stress similar to the salt tolerant check.

The variety is highly resistant to anthracnose, bacterial wilt, *Fusarium* wilt, Phytophthora root rot, *Aphanomyces* root rot (race 1), Pea aphid, Northern root knot nematode and stem nematode. It is resistant to *Verticillium* wilt. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock
Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Seed increase is on a limited generation basis with one generation each of breeder and two generations of foundation classes and certified seed classes. Production of Syn 2 foundation seed requires consent of the breeder. Breeder seed (Syn1) was produced in 2007 near Nampa, ID. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years respectively.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be available for sale in 2013 if FG 57W207 is accepted for certification.

The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

PVP Information
No decision has been made regarding submission of an application for Plant Variety Protection. If application is made, the Title V certification option will not be selected.

Descriptive information may not be provided to the PVP office.

Variety Name Nimbus

Experimental Designation(s) FG 57W207

Date NA&MLVRB first accepted this variety January 2013

Date(s) previous amendments were accepted

Date amendment submitted December 2, 2013

Date amendment recommended January 14, 2014

PowerHouse RR
(Amended – Name Change)

Origin and Breeding History
PowerHouse RR is a synthetic variety with 105 parent plants developed by Forage Genetics. Parent plants contain the commercial Roundup Ready event J101 and were selected from F1 progeny from a cross between two populations previously selected for glyphosate tolerance, 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). Genotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2007.

Areas of Probable Adaptation
PowerHouse RR is adapted to the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions. This variety has been tested in Washington, Pennsylvania, Idaho and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
PowerHouse RR is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 94% purple, 3% variegated, 1% white and 2% yellow with a trace of cream. This variety has high multifoliolate leaf expression.
PowerHouse RR is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. PowerHouse RR has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and stem nematode; with resistance to 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 each of breeder and foundation and two generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2), and certified (Syn 2 or Syn 3) classes will be recognized. Production of Syn 2 foundation seed requires consent of the breeder. 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. At least one glyphosate application is required during early stand establishment so that cp4-epsps null segregant plants are removed from the seed field prior to pollination. (Null segregant plants are the plants that do not contain the Roundup Ready® trait due to normal genetic segregation in this variety).

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2012.
Certified seed production acreage may be published by AOSCA and member agencies.

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 PowerHouse RR

Experimental Designation(s) FG R47M318

Date NA&MLVRB first accepted this variety January 2012

Date(s) previous amendments were accepted

Date amendment submitted December 2, 2013

Date amendment recommended January 14, 2014

RR Six Shooter

Origin and Breeding History

RR Six Shooter is a synthetic variety with 24 parent plants developed by Forage Genetics International. Parent plants contained both commercial Roundup Ready events (dihomogenic) and were selected from F1 progeny from a cross between two populations previously selected for glyphosate tolerance, 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 and Aphanomyces root rot (Race 1 and Race 2). Genotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2005.

Areas of Probable Adaptation

RR Six Shooter is adapted to Moderately Winterhardy Intermountain and Southwest regions of the U.S. This variety has been tested in California, Idaho and Washington and intended use is in the Moderately Winterhardy Intermountain and Southwest.

Agronomic and Botanical Characteristics

RR Six Shooter is moderately fall dormancy similar to FD6 check. Flower color (Syn2) is 100% purple, with a trace of variegated, cream, yellow and white. Test variety is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. RR Six Shooter has high multifoliolate leaf expression.

RR Six Shooter has high resistance to anthracnose, Fusarium wilt, Phytophthora root rot, pea aphid, bacterial wilt, Verticillium wilt, spotted alfalfa aphid and stem nematode: with resistance to root knot nematode (Southern *M. Incognita*). It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock

Breeder seed (Syn1) was produced near Nampa, ID in 2005. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2) seed for the projected life of the variety. Production of (Syn2) foundation seed requires the consent of the breeder. Production of foundation (Syn3) seed from foundation (Syn2) seed is not permitted. Stands of foundation and certified seed fields are limited to 3 and 6 years respectively.

The breeder requires that at least one glyphosate application be made during early stand establishment so *cp4-epsps* null segregant plants are removed from the seed field prior to pollination. (Null segregant plants are the plants that do not contain the Roundup Ready® trait due to normal genetic segregation in this variety.) The Roundup Ready® trait is a patent protected trait; any and all seed increase on this variety requires a FGI seed production contract for Roundup Ready Alfalfa.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed will be available for sale in 2014.
Certified seed production acreage may be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Jan 29, 2014

WL 336HQ.RR

Origin and Breeding History

WL 336HQ.RR is a synthetic variety with 105 parent plants. Forage Genetics International experimental designation is FG R48M150. Parent plants contained the commercial Roundup Ready event J101and were selected from breeding populations previously selected for glyphosate tolerance, 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 rot nematode, and Aphanomyces root rot (Race 1 and Race 2). A combination of phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation

WL 336HQ.RR is adapted to the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions. This variety has been tested in Washington, Iowa, Idaho, Pennsylvania and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

WL 336HQ.RR is Fall Dormant similar to FD3 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 96% purple, 2% variegated, 1% white, 1% yellow with a trace of cream. This variety has high multifoliolate leaf expression. Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

WL 336HQ.RR is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. WL 336HQ.RR has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and pea aphid; with resistance to spotted alfalfa aphid and moderate resistance to 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 each of breeder and foundation and two generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2), and certified (Syn 2 or Syn 3) classes will be recognized. Production of Syn 2 foundation seed requires consent of the breeder. 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. At least one glyphosate application is required during early stand establishment so that *cp4-epsps* null segregant plants are removed from the seed field prior to pollination. (Null segregant plants are the plants that do not contain the Roundup Ready® trait due to normal genetic segregation in this variety).

Certified Seed Availability and Publication of Certified Seed Production

Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

WL 552HQ.RR
(Amended – Name Change)

Origin and Breeding History
WL 552HQ.RR is a synthetic variety with 10 parent plants that was developed by Forage Genetics International. Parent plants contain the commercial Roundup Ready event J101 and were selected from FGI breeding lines for glyphosate tolerance, forage yield, persistence and/or resistance to one or more of the following pests: spotted alfalfa aphid and stem nematode. A combination of Genotypic and Phenotypic selection was used to identify the parent plants. The germplasm sources used in the development trace to Triple Play (20%) and to various FGI experimental populations (80%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
WL 552HQ.RR is adapted to the Southwest U.S. The variety has been tested in California and intended use is the Southwest.

Agronomic and Botanical Characteristics
WL 552HQ.RR is nondormant similar to the FD 8 check. Flower color (Syn 2) is 100% Purple, with a trace of Variegated, Yellow, Cream and White. Test variety is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. This variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

The variety is highly resistant to Phytophthora root rot, spotted alfalfa aphid; resistant to anthracnose, bacterial wilt, *Fusarium* wilt, *Verticillium* wilt, pea aphid and stem nematode. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2) seed for the projected life of the variety. Production of Syn2 foundation seed requires the consent of the breeder. Production of foundation (Syn3) seed from foundation (Syn2) seed is not permitted. Stands of foundation and certified seed fields are limited to 3 and 6 years respectively.

The breeder requires that at least one glyphosate application be made during early stand establishment so that cp4-epsps null segregant plants are removed from the seed field prior to pollination. (Null segregant plants are the plants that do not contain the Roundup Ready® trait due to normal genetic segregation in this variety.) The Roundup Ready® trait is a patent protected trait; any and all seed increase on this variety requires a FGI seed production contract for Roundup Ready Alfalfa.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be available for sale in 2013 if R78T823 is accepted for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

PVP Information:
No decision has been made regarding submission of an application for Plant Variety Protection. If application is made, the Title V certification option will not be selected.

Descriptive information cannot be provided to the PVP office.

Variety Name WL 552HQ.RR

Experimental Designation(s) FG R78T823

Date NA&MLVRB first accepted this variety January 2013

Date(s) previous amendments were accepted

Date amendment submitted December 02, 2013

Date amendment recommended January 14, 2014

FG 46A122 (Exp)

Origin and Breeding History
FG 46A122 is a synthetic variety with 96 parent plants that was developed by Forage Genetics International. Parent plants were selected for resistance to Aphanomyces root rot resistance (Race 1 and Race2) from FGI breeding populations previously selected for forage yield, persistence and 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). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2006.

Areas of Probable Adaptation
FG 46A122 is adapted to the North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in New York, Idaho and Wisconsin and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FG 46A122 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 97% purple, 1% variegated, 1% white, 1% yellow with a trace of cream. This variety has high multifoliolate leaf expression.

FG 46A122 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and Aphanomyces root rot (Race 2); with resistance to stem nematode and pea aphid. Reaction to root knot nematode (Northern *M. hapla,)*, spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2006. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG 46M329 (Exp)

Origin and Breeding History
FG 46M329 a synthetic variety with 13 parent clones that was developed by Forage Genetics International. Parent clones were selected for forage yield, persistence and 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 phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2006.

Areas of Probable Adaptation
FG 46M329 is adapted to the North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in New York, Idaho and Wisconsin and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FG 46M329 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 95% purple, 2% variegated, 2% yellow, 1% white with a trace of cream. This variety has high multifoliolate leaf expression.

FG 46M329 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 and pea aphid. Reaction to root knot nematode (Northern *M. hapla)* and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2006. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG 47A110 (Exp)

Origin and Breeding History
FG 47A110 is a synthetic variety with 77 parent plants that was developed by Forage Genetics International. Parent plants were selected for resistance to Aphanomyces root rot resistance (Race 1 and Race2) from FGI breeding populations previously selected for forage yield, persistence and 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). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2007.

Areas of Probable Adaptation
FG 47A110 is adapted to the North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in Pennsylvania, Idaho and Wisconsin and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FG 47A110 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 94% purple, 3% variegated, 2% white, 1% yellow with a trace of cream.

FG 47A110 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 stem nematode; with resistance to pea aphid. Reaction to root knot nematode (Northern *M. hapla,)*, spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2007. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG 47A311 (Exp)

Origin and Breeding History
FG 47A311 is a synthetic variety with 59 parent plants that was developed by Forage Genetics International. Parent plants were selected for resistance to Aphanomyces root rot resistance (Race 1 and Race2) from FGI breeding populations previously selected for forage yield, persistence and 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). Phenotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2007.

Areas of Probable Adaptation
FG 47A311 is adapted to the North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in Pennsylvania, Idaho and Wisconsin and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FG 47A311 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 96% purple, 2% variegated, 1% white, 1% yellow with a trace of cream.

FG 47A311 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 stem nematode; with resistance to pea aphid. Reaction to root knot nematode (Northern *M. hapla,)*, spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2007. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG 48H396 (Exp)

Origin and Breeding History
FG 48H396 is a synthetic variety with 21 parent clones developed by Forage Genetics International. Parent clones were selected for forage yield, persistence and resistance to one or more of the following pests: potato leafhopper, bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root rot nematode and Aphanomyces root rot (Race 1 and Race 2). A combination of phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
FG 48H396 is adapted to the North Central and East Central regions. This variety has been tested in Pennsylvania and Iowa and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
FG 48H396 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 49% purple, 34% variegated, 6% yellow, 6% cream and 5% white.

FG 48H396 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), potato leafhopper and stem nematode. Reaction to root knot nematode (Northern *M. hapla,)*, spotted alfalfa aphid, pea aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Jan 29, 2014

DKA40-16

Origin and Breeding History
DKA40-16 is a synthetic variety with 13 parent clones that was developed by Forage Genetics International. Parent clones were selected for forage yield, persistence and 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 phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
DKA40-16 is adapted to the North Central and East Central regions. This variety has been tested in Minnesota, Pennsylvania, Iowa and Wisconsin and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
DKA40-16 is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 93% purple, 5% variegated, 1% white, 1% yellow with a trace of cream. This variety has high multifoliolate leaf expression. Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

DKA40-16 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and stem nematode; with resistance to pea aphid. Reaction to root knot nematode (Northern *M. hapla,)*, spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG 49H345 (Exp)

Origin and Breeding History
FG 49H345 is a synthetic variety with 15 parent clones developed by Forage Genetics International. Parent clones were selected for forage yield, persistence and resistance to one or more of the following pests: potato leafhopper, bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root rot nematode and Aphanomyces root rot (Race 1 and Race 2). A combination of phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2009.

Areas of Probable Adaptation
FG 49H345 is adapted to the North Central and East Central regions. This variety has been tested in Pennsylvania and Iowa and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
FG 49H345 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 52% purple, 33% variegated, 6% cream, 5% white and 4% yellow.

FG 49H345 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and potato leafhopper. Reaction to root knot nematode (Northern *M. hapla,)*, spotted alfalfa aphid, pea aphid, stem nematode and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2009. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Jan 29, 2014

FG 49W201 (Exp)

Origin and Breeding History
FG 49W201 is a synthetic variety with 28 parent plants that was developed by Forage Genetics International. Parent plants were selected for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode, and Aphanomyces root rot (Race 1). Phenotypic selection was used to identify the parent plants. In 2009 Syn1 seed was produced in Nampa, ID, harvested in total on all parents and bulked to form breeder seed.

Areas of Probable Adaptation
FG 49W201 is adapted to the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions. The variety has been tested in Washington, Oregon and Idaho and intended use is in the Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FG 49W201 is moderately fall dormant similar to the FD 5 check. Flower color (Syn 2) is 98% Purple, 2% Variegated, with a trace of Yellow, Cream and White. It expresses a high degree of multifoliolate leaf expression.

The variety is highly resistant to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt, Aphanomyces root rot (race 1), pea aphid, and stem nematode. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock
Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation classes and certified seed classes. Production of Syn 2 foundation seed requires consent of the breeder. Breeder seed (Syn1) was produced in 2009 near Nampa, ID. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years respectively.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

PVP Information
No decision has been made concerning Plant Variety Protection Act.
Descriptive information cannot be provided to the PVP office

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Jan 29, 2014

FSG 524

Origin and Breeding History
FSG 524 is a synthetic variety with 14 parent clones developed by Forage Genetics International. Parent clones were selected for forage yield, persistence and 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 phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2008.

Areas of Probable Adaptation
FSG 524 is adapted to the North Central, East Central and Great Plains regions. This variety has been tested in Minnesota, Nebraska, Iowa, Pennsylvania and Wisconsin and is intended for use in the North Central, East Central and Great Plains regions.

Agronomic and Botanical Characteristics
FSG 524 is Moderately Fall Dormant similar to FD5 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 91% purple, 6% variegated, 2% white, 1% yellow with a trace of cream. This variety has high multifoliolate leaf expression.

FSG 524 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot and Aphanomyces root rot (Race 1); with resistance to pea aphid and 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
Breeder seed (Syn1) was produced near Nampa, ID in 2008. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Mar 25, 2014

FG 59M107 (Exp)

Origin and Breeding History
FG 59M107 is a synthetic variety with 12 parent clones developed by Forage Genetics International. Parent clones were selected for forage yield, persistence and 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 phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2009.

Areas of Probable Adaptation
FG 59M107 is adapted to North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in New York, Idaho and Wisconsin and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FG 59M107 is Moderately Fall Dormant similar to FD5 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 95% purple, 3% variegated, 1% yellow and 1% white with a trace of cream.

FG 59M107 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot and Aphanomyces root rot (Race 1); with resistance to pea aphid and stem nematode. Reaction to root knot nematode (Northern *M. hapla,),* spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2009. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG 59M108 (Exp)

Origin and Breeding History
FG 59M108 is a synthetic variety with 13 parent clones developed by Forage Genetics International. Parent clones were selected for forage yield, persistence and 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 phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2009.

Areas of Probable Adaptation
FG 59M108 is adapted to North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in New York, Idaho and Wisconsin and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FG 59M108 is Moderately Fall Dormant similar to FD5 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 91% purple, 7% variegated, 2% yellow with a trace of cream and white.

FG 59M108 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 stem nematode. Reaction to root knot nematode (Northern M. *hapla*,), spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2009. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG 59M109 (Exp)

Origin and Breeding History
FG 59M109 is a synthetic variety with 10 parent clones developed by Forage Genetics International. Parent clones were selected for forage yield, persistence and 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 phenotypic and genotypic selection was used to identify the parent clones. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2009.

Areas of Probable Adaptation
FG 59M109 is adapted to North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in New York, Idaho and Wisconsin and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FG 59M109 is Moderately Fall Dormant similar to FD5 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 93% purple, 7% variegated with a trace of cream, white and yellow.

FG 59M109 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), pea aphid and spotted alfalfa aphid; with resistance to stem nematode. Reaction to root knot nematode (Northern *M. hapla,)* and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2009. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Production of Syn3 foundation seed requires the consent of the breeder.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG 910M01 (Exp)

Origin and Breeding History
FG 910M01 is a synthetic variety with 11 parent plants developed by Forage Genetics International. Parent plants were selected from old forage yield trials. Phenotypic selection was used to identify the parent plants (persistence, vigor, multifoliolate expression and freedom from leaf diseases). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2010.

Areas of Probable Adaptation
FG 910M01 is adapted to the Southwest and winter active regions of Mexico. This variety has been tested in California and Mexico and is intended for use in the Southwest and Mexico.

Agronomic and Botanical Characteristics
FG 910M01 is very nondormant similar to the FD 10 check. Flower color (Syn 2) is 100% Purple, with a trace of Variegated, Yellow, Cream and White. FG 910M01 has moderate multifoliolate leaf expression.

The variety is highly resistant to Fusarium wilt, pea aphid and stem nematode; with resistance to anthracnose, bacterial wilt, Phytophthora root rot and Verticillium wilt. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock
Breeder (Syn 1), foundation (Syn 2 or Syn 3) and certified (Syn 3 or Syn 4) classes will be recognized. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation classes and certified seed classes. Breeder seed (Syn1) was produced in 2010 near Holtville, CA. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years respectively.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be available for sale in 2014.

The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

PVP Information
No decision has been made regarding submission of an application for Plant Variety Protection. If application is made, the Title V certification option will not be selected.

Descriptive information cannot be provided to the PVP office.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Jan 29, 2014

FG 910M106 (Exp)

Origin and Breeding History
FG 910M106 is a synthetic variety with 72 parent plants developed by Forage Genetics International. Parent plants were selected from old forage yield trials. Phenotypic selection was used to identify the parent plants (persistence, vigor, multifoliolate expression and freedom from leaf diseases). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2010.

Areas of Probable Adaptation
FG 910M106 is adapted to the Southwest and winter active regions of Mexico. This variety has been tested in California and Mexico and is intended for use in the Southwest and Mexico.

Agronomic and Botanical Characteristics
FG 910M106 is very nondormant similar to the FD 10 check. Flower color (Syn 2) is 100% Purple, with a trace of Variegated, Yellow, Cream and White. FG 910M106 has moderate multifoliolate leaf expression.

The variety is highly resistant to Fusarium wilt, pea aphid and stem nematode; with resistance to anthracnose, bacterial wilt, Phytophthora root rot and Verticillium wilt. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock
Breeder (Syn 1), foundation (Syn 2 or Syn 3) and certified (Syn 3 or Syn 4) classes will be recognized. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation classes and certified seed classes. Breeder seed (Syn1) was produced in 2010 near Holtville, CA. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2 or Syn3) seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years respectively.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be available for sale in 2014.

The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

PVP Information
No decision has been made regarding submission of an application for Plant Variety Protection. If application is made, the Title V certification option will not be selected.

Descriptive information cannot be provided to the PVP office.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Jan 29, 2014

DKA40-51RR

Origin and Breeding History
DKA40-51RR is a synthetic variety with 105 parent plants. Parent plants contained the commercial Roundup Ready event J101and were selected from breeding populations previously selected for glyphosate tolerance, 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 rot nematode, and Aphanomyces root rot (Race 1 and Race 2). Genotypic selection was used to identify the parent plants. Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2009.

Areas of Probable Adaptation
DKA40-51RR is adapted to the North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in Wisconsin, Iowa, Idaho and Pennsylvania and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
DKA40-51RR is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 96% purple, 3% variegated, 1% yellow with a trace of white and cream.

DKA40-51RR is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. DKA40-51RR has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and Aphanomyces root rot (Race 2); with resistance to spotted alfalfa aphid and stem nematode. 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 each of breeder and foundation and two generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2), and certified (Syn 2 or Syn 3) classes will be recognized. Production of Syn 2 foundation seed requires consent of the breeder. 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. At least one glyphosate application is required during early stand establishment so that *cp4-epsps* null segregant plants are removed from the seed field prior to pollination. (Null segregant plants are the plants that do not contain the Roundup Ready® trait due to normal genetic segregation in this variety).

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

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.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Feb 05, 2014

FG R49W215 (Exp)

Origin and Breeding History

FG R49W215 is a synthetic variety with 24 parent plants that was developed by Forage Genetics International. Parent plants contain the commercial Roundup Ready event J101 and were selected from FGI breeding lines for glyphosate tolerance, Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode, northern root rot nematode and Aphanomyces root rot (Race 1). Phenotypic and genotypic selection was used to identify the parent plants. In 2009 Syn1 seed was produced in Nampa, ID, harvested in total on all parents and bulked to form breeder seed.

Areas of Probable Adaptation

FG R49W215 is adapted to the Great Plains, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions. The variety has been tested in Kansas, Washington, Oregon and Idaho and intended use is in the Great Plains, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

FG R49W215 is moderately fall dormant similar to the FD 4 check. Flower color (Syn 2) is 97% Purple, 2% White, with a trace of Variegated, Yellow and Cream. Test variety is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. It has moderate multifoliolate leaf expression.

The variety is highly resistant to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt, Aphanomyces root rot (race 1), spotted alfalfa aphid, Northern root knot nematode (*M. hapla)* and stem nematode; and resistant to pea aphid. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation of breeder and foundation and two generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2), and certified (Syn 2 or Syn 3) classes will be recognized. Production of Syn 2 foundation seed requires consent of the breeder. 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. At least one glyphosate application is required during early stand establishment so that *cp4-epsps* null segregant plants are removed from the seed field prior to pollination. (Null segregant plants are the plants that do not contain the Roundup Ready® trait due to normal genetic segregation in this variety).

Certified Seed Availability and Publication of Certified Seed Production

Certified seed will be marketed in 2014.

The applicant requests that certified seed acreage not be published by AOSCA and its agencies

PVP Information

No decision has been made concerning Plant Variety Protection Act
Descriptive information cannot be provided to the PVP office.

Date this application was submitted: Dec 02, 2013

Date recommended by the NVRB: Jan 29, 2014

6829R
(Amended – Add Spotted Alfalfa Aphid Resistance)

Origin and Breeding History
6829R is a synthetic variety with 107 parent plants that was developed by Forage Genetics International. Parent plants contain the commercial Roundup Ready event J101 and were selected from FGI breeding lines for glyphosate tolerance, forage yield, persistence and/or resistance to one or more of the following pests: Fusarium wilt, Phytophthora root rot and stem nematode. A combination of Genotypic and Phenotypic selection was used to identify the parent plants. The germplasm sources used in the development trace to various FGI experimental populations (100%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2007.

Areas of Probable Adaptation
6829R is adapted to the Southwest U.S. This variety has been tested in California and intended use is the Southwest.

Agronomic and Botanical Characteristics
6829R is nondormant similar to the FD 7 check. Flower color (Syn 2) is 100% Purple, with a trace of Variegated, Yellow, Cream and White. Test variety is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. This Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

The variety is highly resistant to anthracnose, Phytophthora root rot, pea aphid, stem nematode and spotted alfalfa aphid; resistant to bacterial wilt, *Fusarium* wilt and *Verticillium* wilt. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock
Breeder seed (Syn1) was produced near Nampa, ID in 2007. Forage Genetics will maintain sufficient breeder (Syn1) and/or foundation (Syn2) seed for the projected life of the variety. Production of Syn2 foundation seed requires the consent of the breeder. Production of foundation (Syn3) seed from foundation (Syn2) seed is not permitted. Stands of foundation and certified seed fields are limited to 3 and 6 years respectively.

The breeder requires that at least one glyphosate application be made during early stand establishment so that cp4-epsps null segregant plants are removed from the seed field prior to pollination. (Null segregant plants are the plants that do not contain the Roundup Ready® trait due to normal genetic segregation in this variety.) The Roundup Ready® trait is a patent protected trait; any and all seed increase on this variety requires a FGI seed production contract for Roundup Ready Alfalfa.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed will be available for sale in 2013 if 6829R is accepted for certification.

The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

PVP Information
No decision has been made regarding submission of an application for Plant Variety Protection. If application is made, the Title V certification option will not be selected.

Descriptive information cannot be provided to the PVP office.

Variety Name 6829R

Experimental Designation(s) FG R77T729

Date NA&MLVRB first accepted this variety January 2013

Date(s) previous amendments were accepted

Date amendment submitted December 2, 2013

Date amendment recommended January 14, 2014

Enduro Elite

Origin and Breeding History
Enduro Elite (LS 804) is a synthetic variety with 101 parent plants that was developed by Legacy Seeds, Inc. The parent plants trace to 3 populations that were selected for resistance to Aphanomyces root rot (race 2). The Aphanomyces resistant plants were transplanted to a performance nursery near Evansville, WI. The 101 parent plants were selected phenotypically based on high forage yield, good winter survival, and the absence of root and crown diseases. The Syn 1 seed was produced in an isolation field near Nampa, ID. Seed was harvested from all parent plants and bulked to form the breeder seed in 2008.

Areas of Probable Adaptation
This variety is adapted to the North Central and East Central regions of the U.S. It has been tested in Wisconsin and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
This variety is a Moderately Fall Dormant cultivar with a fall dormancy similar to the FD4 check. Flower color is approximately 94% purple and 5% variegated with traces of cream, yellow and white.

Enduro Elite (LS 804) has high resistance to Anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), and Aphanomyces root rot (Race 2). Resistance to stem nematode, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and root-knot nematode has not been determined.

Procedures for Maintaining Seed Stock
Seed classes for this variety will be breeder (Syn 1), foundation (Syn 2) and certified (Syn 2 or Syn 3). Legacy Seeds will maintain sufficient seed stocks for the life of this variety. Breeder seed was produced near Nampa, ID in 2008. There are no limitations to seed production in the Breeder and Certified seed classes; Foundation seed production is limited to Idaho, Oregon, and Wyoming.

Certified Seed Availability and Publication of Certified Seed Production
Seed may be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

PVP Information
Plant Variety Protection will not be applied for.
This information can be forwarded to the PVP office.

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Jan 22, 2014

Fierce

Origin and Breeding History
Fierce (LS 803) is a synthetic variety with 98 parent plants that was developed by Legacy Seeds, Inc. The parent plants trace to 3 populations that were selected for resistance to Aphanomyces root rot (race 2). The Aphanomyces resistant plants were transplanted to a performance nursery near Evansville, WI. The 98 parent plants were selected phenotypically based on high forage yield, good winter survival, and the absence of root and crown diseases. The Syn 1 seed was produced in an isolation field near Nampa, ID. Seed was harvested from all parent plants and bulked to form the breeder seed in 2008.

Areas of Probable Adaptation
This variety is adapted to the North Central and East Central regions of the U.S. It has been tested in Wisconsin and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
This variety is a Moderately Fall Dormant cultivar with a fall dormancy similar to the FD4 check. Flower color is approximately 95% purple and 4% variegated with traces of cream, yellow and white.

Fierce (LS 803) has high resistance to Anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), and Aphanomyces root rot (Race 2). Resistance to stem nematode, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and root-knot nematode has not been determined.

Procedures for Maintaining Seed Stock
Seed classes for this variety will be breeder (Syn 1), foundation (Syn 2) and certified (Syn 2 or Syn 3). Legacy Seeds will maintain sufficient seed stocks for the life of this variety. Breeder seed was produced near Nampa, ID in 2008. There are no limitations to seed production in the Breeder and Certified seed classes; Foundation seed production is limited to Idaho, Oregon, and Wyoming.

Certified Seed Availability and Publication of Certified Seed Production
Seed may be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

PVP Information
Plant Variety Protection will not be applied for.
This information can be forwarded to the PVP office.

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Jan 22, 2014

L-455HD

Origin and Breeding History
L-455HD (LS 904) is a synthetic variety with 101 parent plants that was developed by Legacy Seeds, Inc. The parent plants trace to 3 populations that were selected for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). The resistant plants were transplanted to a performance nursery near Evansville, WI. The 101 parent plants were selected phenotypically based on high forage yield, high forage quality, good winter survival, and the absence of root and crown diseases. The Syn 1 seed was produced in an isolation field near Nampa, ID. Seed was harvested from all parent plants and bulked to form the breeder seed in 2009.

Areas of Probable Adaptation
This variety is adapted to the North Central and East Central regions of the U.S. It has been tested in Wisconsin and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
This variety is a Moderately Fall Dormant cultivar with a fall dormancy similar to the FD4 check. Flower color is approximately 93% purple and 6% variegated with traces of cream, yellow and white.

L-455HD (LS 904) has high resistance to Anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (Race 1). Resistance to stem nematode, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and root-knot nematode has not been determined.

Procedures for Maintaining Seed Stock
Seed classes for this variety will be breeder (Syn 1), foundation (Syn 2) and certified (Syn 2 or Syn 3). Legacy Seeds will maintain sufficient seed stocks for the life of this variety. Breeder seed was produced near Nampa, ID in 2009. There are no limitations to seed production in the Breeder and Certified seed classes; Foundation seed production is limited to Idaho, Oregon, and Wyoming.

Certified Seed Availability and Publication of Certified Seed Production
Seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

PVP Information
Plant Variety Protection will not be applied for.
This information can be forwarded to the PVP office.

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Jan 22, 2014

LS 905 (Exp)

Origin and Breeding History
LS 905 is a synthetic variety with 100 parent plants that was developed by Legacy Seeds, Inc. The parent plants trace to 2 populations that were selected for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). The resistant plants were transplanted to a performance nursery near Evansville, WI. The 100 parent plants were selected phenotypically based on high forage yield, high forage quality, good winter survival, and the absence of root and crown diseases. The Syn 1 seed was produced in an isolation field near Nampa, ID. Seed was harvested from all parent plants and bulked to form the breeder seed in 2009.

Areas of Probable Adaptation
This variety is adapted to the North Central and East Central regions of the U.S. It has been tested in Wisconsin and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics
This variety is a Moderately Fall Dormant cultivar with a fall dormancy similar to the FD4 check. Flower color is approximately 91% purple and 8% variegated with traces of cream, yellow and white.

LS 905 has high resistance to Anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (Race 1). Resistance to stem nematode, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and root-knot nematode has not been determined.

Procedures for Maintaining Seed Stock
Seed classes for this variety will be breeder (Syn 1), foundation (Syn 2) and certified (Syn 2 or Syn 3). Legacy Seeds will maintain sufficient seed stocks for the life of this variety. Breeder seed was produced near Nampa, ID in 2009. There are no limitations to seed production in the Breeder and Certified seed classes; Foundation seed production is limited to Idaho, Oregon, and Wyoming.

Certified Seed Availability and Publication of Certified Seed Production
Seed will be marketed in 2014.
Certified seed production acreage may not be published by AOSCA and member agencies.

PVP Information
Plant Variety Protection will not be applied for.
This information can be forwarded to the PVP office.

Date this application was submitted: Nov 27, 2013

Date recommended by the NVRB: Jan 22, 2014

RC0501 (Exp) (Red Clover)

Origin and Breeding History

RC0501 medium red clover was developed using phenotypic recurrent selection. A total of 180 plants were selected from a 4th year replicated yield trial in Indiana from the following sources: FP345, LS 9703, Raven, Rocket, Royal Red, and an elite breeding line. These plants were intercrossed, and the resulting population screened two cycles for resistance to Mycoleptodiscus root rot in the greenhouse at Buck Creek, IN. Approximately 400 resistant plants from the second cycle of screening were placed in an isolated crossing block at Touchet, WA, and bulk-harvested as breeder seed (syn-1) in 2008.

Areas of Probable Adaptation

RC0501 I adapted to the east central United States and is intended for use in that area. It has been tested in Indiana, Kentucky, and Virginia.

Agronomic and Botanical Characteristics

Classification: double cut (medium) Productive Persistence perennial
Ploidy diploid Flower Color 3% red, 28% dark pink, 55% medium pink, 14% light pink
% Flowering Seedling Year 60 % Leaf Marking at 50% Flowering 78
Stem Hairiness 97%, with 97% perpendicular or pointing down

Description of Variants: 3% of plants without stem hairs; 22% without leaf marks.

Additional description and/or information about physiology, pest reaction, and other varietal attributes:
RC0501 is highly resistant to northern anthracnose, and resistant to southern anthracnose and powdery mildew.

Procedures for Maintaining Seed Stock

Seed increase of RC0501 is limited to two generations each of breeder (Syn-1 or Syn-2), foundation (Syn-2 or Syn-3), and certified (Syn-3 or Syn-4) classes. Breeder seed was produced in 2008 (Syn-1) and 2012 (Syn-2) sufficient for the life of the variety, and will be maintained by FFR Cooperative. Length of stand allowed is 2 years and 3 years each for the foundation and certified classes, respectively. Production of foundation seed is limited to the northwest United States, specifically the states of Idaho, Oregon, and Washington.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of RC0501 will be available in 2015. Certified seed production acreage may not be published by AOSCA and member agencies.

PVP Information

Application will not be made for Plant Variety Protection. Information in this application may be forwarded to the PVP office.

Date this application was submitted: Nov 22, 2013

Date recommended by the NVRB: Jan 21, 2014

FSG 401RC (Red Clover)
(Amended – Name Change)

Origin and Breeding History
FSG 401RC medium red clover was developed using phenotypic recurrent selection. A total of 104 plants were selected from a 2-year old yield trial in Tennessee from the following sources: FSG 9601, FP-345, LS 9703, Rocket, and 4 FFR breeding line. These plants were intercrossed, and the resulting population screened two cycles for resistance to Mycoleptodiscus root rot in the greenhouse at Buck Creek, IN. Approximately 400 resistant plants from the second cycle of screening were placed in an isolated crossing block at Touchet, WA and bulk-harvested as breeder seed (syn-1) in 2007.

Areas of Probable Adaptation
FSG 401RC is adapted to the east central United States, and is intended for use in that area. It has been tested in Indiana, Kentucky, Tennessee, and Virginia.

Agronomic and Botanical Characteristics

Classification: double cut (medium)	Productive Persistence: perennial
Ploidy: diploid	Flower color: 9% red, 38% DP, 38% MP, 15% LP
% Flowering Seeding Year: 64	% Leaf Marking at 50% Flowering: 91

Stem Hairiness: 98% perpendicular or pointing down

Description of Variants: 2% of plant without stem hairs, 9% without leaf marks.

Additional description: FSG 401RC is highly resistant to northern and southern anthracnose, and resistant to powdery mildew.

Procedures for Maintaining Seed Stock
Seed increase of FSG 401RC is limited to two generations each of breeder (Syn-1 or Syn-2), foundation (Syn-2 or Syn-3), and certified (Syn-3 or Syn-4) classes. Breeder seed was produced in 2007 (Syn-1) and 2010 (Syn-2) sufficient for the life of the variety, and will be maintained by FFR Cooperative. Length of stand allowed is 2 years and 3 years each for the foundation and certified classes, respectively. Production of foundation seed is limited to the northwest United States.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed of FSG 401RC will be available in 2013. Certified seed production acreage may not be published by AOSCA and member agencies.

PVP Information
Application will not be made for Plant Variety Protection. Information in this application may be forwarded to the PVP office.

Accepted by NAMLVRB: January 2012

Variety Name FSG 401RC

Experimental Designation(s) RC0401

Date NA&MLVRB first accepted this variety January 2012

Date(s) previous amendments were accepted

Date amendment submitted November 20, 2013

Date amendment recommended Jan 14, 2014

SS-0303RCG (Red Clover)
(Amended – Name Change)

Origin and Breeding History
SS-0303RCG medium red clover was developed using phenotypic recurrent selection. A total of 56 plants were selected from a 2-year old beef cattle grazing trial in Kentucky from the following sources: Rocket and one FFR breeding line. These plants were intercrossed, and the resulting population screened two cycles for resistance to Mycoleptodiscus root rot in the greenhouse at Buck Creek, IN. Approximately 400 resistant plants from the second cycle of screening were placed in an isolated crossing block at Touchet, WA and bulk-harvested as breeder seed (syn-1) in 2006.

Areas of Probable Adaptation
SS-0303RCG is adapted to the east central United States, and is intended for use in that area. It has been tested in Indiana, Kentucky, Pennsylvania, Tennessee, and Virginia.

Agronomic and Botanical Characteristics
Classification: double cut (medium)
Productive Persistence: perennial
Ploidy: diploid
Flower color: 3% red, 19% DP, 48% MP, 30% LP
% Flowering Seeding Year: 64
% Leaf Marking at 50% Flowering: 84
Stem Hairiness: 95%, with 88% perpendicular or pointing down, 7% pointing up
Description of Variants: 5% of plants without stem hairs, 16% without leaf marks.

Additional description: SS-0303RCG is highly resistant to northern and southern anthracnose, and resistant to powdery mildew.

Procedures for Maintaining Seed Stock
Seed increase of SS-0303RCG is limited to two generations each of breeder (Syn-1 or Syn-2), foundation (Syn-2 or Syn-3), and certified (Syn-3 or Syn-4) classes. Breeder seed was produced in 2006 (Syn-1) and 2010 (Syn-2) sufficient for the life of the variety, and will be maintained by FFR Cooperative. Length of stand allowed is 2 years and 3 years each for the foundation and certified classes, respectively. Production of foundation seed is limited to the northwest United States.

Certified Seed Availability and Publication of Certified Seed Production
Certified seed of SS-0303RCG will be available in 2013. Certified seed production acreage may not be published by AOSCA and member agencies.

PVP Information
Application will not be made for Plant Variety Protection. Information in this application may be forwarded to the PVP office.

Accepted by NAMLVRB: January 2012

Variety Name SS-0303RCG

Experimental Designation(s) RC0303G

Date NA&MLVRB first accepted this variety January 2012

Date(s) previous amendments were accepted

Date amendment submitted November 20, 2013

Date amendment recommended Jan 14, 2014