A REPORT OF THE

ALFALFA AND MISCELLANEOUS LEGUMES

VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

ALFALFA AND MISCELLANEOUS LEGUMES
VARIETY REVIEW BOARD REPORT ©2015

APR 2015

ALFALFA AND MISCELLANEOUS LEGUMES
VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES
(JANUARY 2015)

The Association of Official Seed Certifying Agencies (AOSCA) Alfalfa and Miscellaneous Legumes Variety Review Board reviewed the following varieties on January 13, 2015, 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 Alfalfa and Miscellaneous Legumes Variety Review Board by the applicants. The 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 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 Alfalfa and Miscellaneous Legumes Variety Review Board can be obtained from:

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Respectfully submitted,

Victor Shaul, Chair
Alfalfa and Miscellaneous Legumes Variety Review Board

2015 AOSCA ALFALFA & MISC LEGUMES VRB

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Company	Page	Amendment	Variety Name	Experimental Designation	Type
Legacy Seeds, Inc.	36		GA-409	LS 706	Alfalfa
Legacy Seeds, Inc.	37	A	Kingfisher 4020	LS 604	Alfalfa
USDA-ARS	38	A, B	FF 9615	DFRC1	Red Clover
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PLACING THE CURSOR OVER THE DESIRED VARIETY/EXPERIMENTAL DESIGNATION & CLICKING WILL TAKE YOU DIRECTLY TO THE SUMMARY DESCRIPTION.

Alfalfa

Hi-Gest 1060

Origin and Breeding History
Hi-Gest 1060 (experimental designation CW 090075), developed by Alforex Seeds, is a synthetic variety with 209 parent plants which were selected for resistance to Cowpea Aphid and Phytophthora root rot from a polycross among twenty plants which were selected for low Acid Detergent Lignin (ADL) from spaced plant breeding nurseries. This pedigree is derived from various diverse 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 and for low ADL. Breeder seed was produced under cage isolation near Woodland, California in 2009. Seed was bulk harvested from all parent plants as Synthetic generation 1 (Syn.1).

Areas of Probable Adaptation
Hi-Gest 1060 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, Australia, Mexico, South Africa, Mid-East, and Argentina. Hi-Gest 1060 has been tested in California.

Agronomic and Botanical Characteristics
Hi-Gest 1060 is a very non-dormant 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.

Hi-Gest 1060 has high resistance to cowpea aphid; resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, Verticillium wilt, and blue alfalfa aphid; and low resistance to bacterial wilt. Reaction to spotted alfalfa aphid, pea aphid, stem nematode, root knot nematode, and Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of Hi-Gest 1060 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 2009. 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 Hi-Gest 1060 will be available in 2015. 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 24, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

Hi-Gest 360

Origin and Breeding History

Hi-Gest 360 (CW 103009) is a synthetic variety with 12 parent plants selected for low Acid Detergent Lignin (ADL), 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 low Acid Detergent Lignin (ADL), 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 (race 1), Aphanomyces root rot (race 2), Anthracnose (race 1), and Leptosphaerulina leaf spot. Parentage of Hi-Gest 360 (CW 103009) traces to the following germplasm sources: CW 10-017 (50%), CW 10-018 (50%). Breeder seed was produced under cage isolation near Woodland, California in 2010. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Areas of Probable Adaptation

Hi-Gest 360 (CW 103009) 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. Hi-Gest 360 (CW 103009) has been tested in Iowa, Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

Hi-Gest 360 (CW 103009) is a dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.2 generation is approximately 100% purple and a trace variegated. Hi-Gest 360 (CW 103009) has Moderate multifoliolate leaf expression rating similar to the Moderate MF check variety.

Hi-Gest 360 (CW 103009) has high resistance to anthracnose (race 1), Aphanomyces root rot (race 1), Aphanomyces root rot (race 2), bacterial wilt, Fusarium wilt, Phytophthora root rot, and Verticillium wilt; and resistance to Blue Alfalfa Aphid and Cowpea Aphid. Reaction to pea aphid, spotted alfalfa aphid, root knot nematode, and stem nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of Hi-Gest 360 (CW 103009) 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 2010. 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 Hi-Gest 360 (CW 103009) will be available in 2015. 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 26, 2014

Date recommended by the VRB: Apr 09, 2015

Alfalfa

Hi-Gest 660

Origin and Breeding History
Hi-Gest 660 (experimental designation CW 096043), developed by Alforex Seeds, is a synthetic variety with 215 parent plants which were selected for resistance to Cowpea Aphid from a polycross among eight plants which were selected for low Acid Detergent Lignin (ADL) from spaced plant breeding nurseries. This pedigree is derived from various diverse 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 and for low ADL. Breeder seed was produced under cage isolation near Woodland, California in 2009. Seed was bulk harvested from all parent plants as Synthetic generation 1 (Syn.1).

Areas of Probable Adaptation
Hi-Gest 660 is adapted to the Moderately Winterhardy Intermountain and Southwest areas of the US and Argentina and is intended for use in the Moderately Winterhardy Intermountain and Southwest areas of the US, Australia and Argentina. Hi-Gest 660 has been tested in California and Argentina.

Agronomic and Botanical Characteristics
Hi-Gest 660 is a semi-dormant variety with fall dormancy similar to FD class 6 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, and a trace of variegated, white, cream, and yellow.

Hi-Gest 660 has high resistance to anthracnose (race 1) and Fusarium wilt; resistance to bacterial wilt, Phytophthora root rot, blue alfalfa aphid, and cowpea aphid; and moderate resistance to Verticillium wilt. Reaction to spotted alfalfa aphid, pea aphid, stem nematode, root knot nematode, and Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of Hi-Gest 660 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 2009. 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 Hi-Gest 660 will be available in 2015. 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 24, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

Hi-Gest 960

Origin and Breeding History
Hi-Gest 960 (experimental designation CW 099079), developed by Alforex Seeds, is a synthetic variety with 209 parent plants which were selected for resistance to Blue Alfalfa Aphid, Stem Nematode, and Phytophthora root rot from a polycross among fifteen plants which were selected for low Acid Detergent Lignin (ADL) from spaced plant breeding nurseries. This pedigree is derived from various diverse 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 and for low ADL. Breeder seed was produced under cage isolation near Woodland, California in 2009. Seed was bulk harvested from all parent plants as Synthetic generation 1 (Syn.1).

Areas of Probable Adaptation
Hi-Gest 960 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, Australia, Mexico, South Africa, Mid-East, and Argentina. Hi-Gest 960 has been tested in California.

Agronomic and Botanical Characteristics
Hi-Gest 960 is a very non-dormant 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.

Hi-Gest 960 has high resistance to anthracnose (race 1), Fusarium wilt, blue alfalfa aphid, and cowpea aphid; resistance to Phytophthora root rot; moderate resistance to Verticillium wilt: and low resistance to bacterial wilt. Reaction to spotted alfalfa aphid, pea aphid, stem nematode, root knot nematode, and Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of Hi-Gest 960 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 2009. 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 Hi-Gest 960 will be available in 2015. 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 24, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

HybriForce-3400
(Amended – Name Change)

Variety Name: HybriForce-3400 Experimental Designation(s): msSunstra-803

Date A&MLVRB first accepted this variety: January, 2013

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 01, 2014 Date recommended by the VRB: Jan 13, 2015

Breeding History
HybriForce-3400 is a five clone 75-95% hybrid alfalfa variety consisting of a female, maintainer and restorer clones. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent clones were tested for male sterility, maintaining and restoration ability. The parent clones were also progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, anthracnose (Race 1), *Verticillium* wilt and *Aphanomyces* root rot (Race 1). The female clone, maintainer clone and restorer clone trace to Dairyland experimental germplasm. Female seed (D-1010) was generated by crossing a cytoplasmic male sterile female clone by a maintainer clone by hand greenhouse crosses in 2006. The female clones were harvested to produce the female Breeder Seed near Sloughhouse, California in 2007-09. Female seed was kept separate each year to produce Breeder seed. Male Breeder seed (Syn. 1) (DS764M) was produced in isolation in 2003 and bulked near Sloughhouse, CA**.** The female, maintainer and restorer clones were propagated by vegetative cuttings for Breeder Seed increase. HybriForce-3400 was developed by Dairyland Seed Company and it experimental designation is HybriForce-3400.

Area of Probable Adaptation
HybriForce-3400 is adapted to the North Central Region of the United States and intended for use across the North Central Region of the United States. The states where it has been tested are Wisconsin, Minnesota, Nebraska and Pennsylvania.

Agronomic and Botanical Characteristics
HybriForce-3400 is a moderately dormant variety similar to the fall dormancy 4 check. HybriForce-3400 is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 90% purple, 9% variegated with trace amounts of cream, white and yellow. DS764M is 1% white seed.

HybriForce-3400 has high resistance to bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, *Verticillium* wilt, anthracnose (Race 1), *Aphanomyces* root rot (Race1), stem nematode, northern root-knot nematode; resistance to), pea aphid and southern root-knot nematode and moderate resistance to *Aphanomyces* root rot (Race 2). HybriForce-3400 has not been tested for resistance to spotted alfalfa aphid and blue alfalfa aphid.

Procedures for Maintaining Seed Stock
Female Breeder seed was produced by crossing the cytoplasmic male sterile clone (A) by the maintainer clone (B) in field isolation near Sloughhouse, CA in 2007-09. Female seed (D-1010) was kept separate across production years. Male Breeder seed (Syn. 1) (DS764M) was produced in isolation in 2003 and bulked near Sloughhouse, CA**.** Male Foundation seed (Syn. 2) (DS764M) was produced from Breeder seed. The 75-95% hybrid seed (D-1010xDS764M=F1) was produced from crossing female seed by either Syn. 1 or Syn. 2 male seed. Two generations of male seed are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient seed for the projected life of the variety.

Date Certified Seed to be First Offered for Sale
Certified Seed will be available spring of 2014. Certified seed acres are not to be published.

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

Alfalfa

Magna 715
(Amended – Name Change)

Variety Name: Magna 715 Experimental Designation(s): DS715, DS098217

Date A&MLVRB first accepted this variety: January, 2012

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 01, 2014 Date recommended by the VRB: Jan 13, 2015

Origin and Breeding History

Magna 715 is a 50 clone synthetic variety composed of seed from plants selected out of breeding nurseries. These plants trace back to Magna788 (52%), Magna787 (24%) and Dairyland experimental lines (24%). These plants were evaluated for the following: seed yield, spring vigor, fall dormancy, *Phytophthora* root rot, anthracnose, leaf disease resistance and persistence. Selected plants were grown in isolation in Sloughhouse, CA in 2008 to produce Syn. 1 Breeder seed. Seed from parent plants was bulked to produce Breeder seed. Magna 715, experimental code was developed by Dairyland Seed Company.

Areas of Probable Adaptation

Magna 715 is adapted to the Southwest Region of the United States and Argentina and intended for use across the Southwest Region of the United States and Argentina. The states where it has been tested are California and Arizona.

Agronomic and Botanical Characteristics

Magna 715 is a semi-dormant alfalfa variety similar to the dormancy 7 check. Flower color of the Syn.2 generation is 97% purple and 3% variegated with trace amounts of cream, white and yellow.

Magna 715 has high resistance to anthracnose (Race 1), *Fusarium* wilt, pea aphid, northern root-knot nematode, and southern root-knot nematode; resistance to bacterial wilt, *Phytophthora* root rot, *Verticillium* wilt, and stem nematode. Magna 715 has not been tested for resistance to spotted alfalfa aphid, blue alfalfa aphid or *Aphanomyces* root rot.

Procedures for Maintaining Seed Stock

Breeder seed (Syn. 1) was produced by bulking seed of parent plants in isolation. Syn.2 Breeder seed is allowed. Foundation seed (Syn.2 or 3) can be produced from Breeder seed. Certified seed (Syn. 3 or 4) can be produced from either Syn. 2 Breeder seed or Foundation seed. Two generations of Breeder, Foundation, and Certified seed classes are recognized. A maximum of two harvest years is permitted on stands producing Breeder, a maximum of three harvest years on stands producing Foundation seed, and a maximum of five years for Certified seed. Dairyland Seed will maintain the original Breeder seed for the projected life of the variety.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed will be available in the fall of 2012. Certified seed acres are not to be published.

PVP Information

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

Alfalfa

StarGold

Origin and Breeding History
StarGold is a synthetic variety with 164 parent plants selected for dense crowns, high leaf to stem ratio, vigorous roots, and no stem, crown, or root rot. Parent plants were selected from four year old Kansas, four year old Pennsylvania, four year old Wisconsin, three year old Iowa, three year old Minnesota, and three 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 StarGold traces to the following germplasm sources: 5010 (9%), Ascend (3%), Charger (7%), PGI 557 (9%), Shepherd (2%), SHOWDOWN (3%), SpringGold (20%), Summit (9%), CW 06-068 (32%), CW 06-071 (6%). 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
StarGold 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. StarGold has been tested in Iowa, Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics
StarGold is a moderately dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple and a trace variegated. StarGold has Low multifoliolate leaf expression rating similar to Low MF check variety.

StarGold has high resistance to anthracnose (race 1), Aphanomyces root rot (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, and Verticillium wilt; and resistance to Blue Alfalfa Aphid and Cowpea Aphid. Reaction to pea aphid, spotted alfalfa aphid, root knot nematode, and stem nematode has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of StarGold 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 2009. 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 StarGold will be available in 2015. 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 24, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

Sundance III
(Amended – Name Change)

Variety Name: Sundance III Experimental Designation(s): CW 095026

Date A&MLVRB first accepted this variety: Jan, 2014

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 01, 2014 Date recommended by the VRB: Apr 09, 2015

Origin and Breeding History

Sundance III 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 Sundance III 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 Sundance II (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

Sundance III 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. Sundance III has been tested in Iowa, Minnesota, and Wisconsin

Agronomic and Botanical Characteristics Sundance III 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, trace yellow, and trace variegated. Sundance III has moderate multifoliolate leaf expression rating similar to Moderate MF check variety.

Sundance III has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, and Phytophthora root rot; with resistance to Aphanomyces root rot (race 1), and Verticillium wilt. 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 Sundance III 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 2009. 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 Sundance III 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.

Alfalfa

WinterKing III

Origin and Breeding History

WinterKing III is a synthetic variety with 27 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 WinterKing III traces to the following germplasm sources: Adrenalin (4%), Exalt (8%), SpringGold (4%), WinterKing II (26%), CW 06-049 (29%), CW 06-050 (29%). 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

WinterKing III 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. WinterKing III has been tested in Iowa, Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

WinterKing III is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, 1% variegated, and a trace white. WinterKing III has High multifoliolate leaf expression rating similar to High MF check variety.

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

Procedures for Maintaining Seed Stock

Seed increase of WinterKing III 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 WinterKing III will be available in 2015. 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: Dec 02, 2014

Date recommended by the VRB: Apr 09, 2015

ALFALFA

CW 87090 (Exp)

Origin and Breeding History
CW 87090 is a synthetic variety with 148 parent plants. Parent plants were selected for persistence and vigor following two years of close continuous grazing with beef cattle at Woodland, California. Pastures were established in October 1995 and grazed for 180 days in 1996 and 195 days in 1997. Breeder seed was produced under field isolation near Woodland, California in 1998. Seed was bulk harvested from all parent plants.

Areas of Probable Adaptation
CW 87090 is adapted to the Moderately Winterhardy Intermountain and Southwest areas of the US and Australia and is intended for use in the Southwest areas of the US, Australia, and South Africa. CW 87090 has been tested in California and Australia.

Agronomic and Botanical Characteristics
CW 87090 is a non-dormant variety with fall dormancy similar to FD class 7 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, and a trace of variegated, white, cream, and yellow.

CW 87090 has high resistance to Fusarium wilt, pea aphid, stem nematode, and northern root knot nematode; resistance to bacterial wilt, Phytophthora root rot, spotted alfalfa aphid, and southern root knot nematode; and moderate resistance to anthracnose (race 1), Verticillium wilt, blue alfalfa aphid, and cowpea aphid. Reaction to Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of CW 87090 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 field isolation near Woodland, California in 1998. 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 87090 will be available in 2015. 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: Dec 02, 2014

Date recommended by the VRB: Apr 09, 2015

Alfalfa

54Q14

Origin and Breeding History

54Q14(Experimental designation 10YXP14, N09PY92) is an intracross of 168 parent plants (Syn 1) selected by DuPont Pioneer Hi-Bred International from Pioneer experimentals selected for forage yield, persistence, improved digestible fiber based on ADL and various fiber digestibility measurements using NIR, standability and or resistance to one or more of the following pests: bacterial wilt, *Fusarium* wilt, *Verticillium wilt*, *Phytophthora* root rot, *Aphanomyces* root rot (Race1&2) and stem nematode. Parent plants were identified using phenotypic selection in selection nurseries for standability (lodging tolerance), forage quality, increased pectin, persistence, agronomic characteristics and improved forage yield. Breeder seed (Syn 2) was grown in cage isolate in 2010 in Connell WA on 220 plants that were started in the greenhouse and transplanted to field. Seed was bulked in total.

Areas of Probable Adaptation

54Q14 is adapted to the moderately winterhardy and winterhardy intermountain regions of the U.S. and similar environments. The variety has been tested in Washington, Wisconsin, and Ontario, Canada

Agronomic and Botanical Characteristics

54Q14 is moderately dormant, similar to the FD 4 check. Flower color (Syn 3) is 97% purple, 1% variegated 1% white with a trace of yellow and cream. The variety is highly resistant to *Aphanomyces* root rot (race 1), bacterial wilt, *Verticillium* wilt, *Fusarium* wilt, Phytophthora root rot and anthracnose. It is resistant to Northern root knot nematode (*M. hapla*), *Aphanomyces* root rot (race 2), pea aphid 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 cage isolation in 2010 in Connell, WA. 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 the spring of 2015 of 54Q14

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 02, 2014

Date recommended by the VRB: Mar 24, 2015

Alfalfa

54V13
(Amended – Name Change)

Variety Name: 54V13 Experimental Designation(s): 05N16PY

Date A&MLVRB first accepted this variety: Jan, 2012

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 01, 2014 Date recommended by the VRB: Jan 13, 2015

Origin and Breeding History

54V13 (experimental names: 05N16PY and N05PY43) is a synthetic cultivar with 128 parent plants selected by Pioneer Hi-Bred, all screened phenotypically for resistance to one or more of the following: bacterial wilt, Fusarium wilt, Verticillium wilt, Aphanomyces root rot race 1 and race 2, stem nematode, Phytophthora root, and spotted alfalfa aphid. Parent plants were also selected based on performance for early spring vigor, forage growth, fall dormancy, and resistance to lodging. Germplasm sources for 54V13 trace to two elite Pioneer experimental lines. Breeder seed (Syn 2) was first produced in 2005.

Areas of Probable Adaptation

54V13 is adapted to North Central, East Central and the Moderately Winterhardy Intermountain regions of the US and to Canada. This variety has been tested in Minnesota, Wisconsin, and Washington, and is intended to use in the North Central, East Central, the Moderately Winterhardy Intermountain, Winterhardy Intermountain and the Great Plains regions of the US and Canada.

Agronomic and Botanical Characteristics

54V13 is Moderately Dormant, similar to FD4 check. Flower color (Syn2) is 99% purple and 1% white. 54V13 is highly resistant to A*nthracnose* (Race 1), *Aphanomyces* root rot (Race 1), *Verticillium* wilt, *Phytophthora* root rot, stem nematode, pea aphid, spotted alfalfa aphid and root knot nematode (*hapla*) ; with resistance to bacterial wilt, *Fusarium* wilt and Moderately resistant to *Aphanomyces* root rot (Race 2) Reaction to blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock

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

Certified Seed Availability and Publication of Certified Seed Production

Certified seed may be marketed in 2012.

Certified seed production acreage may not be published by AOSCA and/or member agencies.

PVP Information

Application for Plant Variety Protection may be made and the certification option will not be requested.
As a means of added varietal protection, information included with the Application for Review of Alfalfa Varieties for Certification may be provided to the PVP office.

Alfalfa

55VR08

Origin and Breeding History

55VR08 (Experimental designation 12XXP84R, R12XXP01) is an intracross of 71 parent plants that were selected by DuPont Pioneer Hi-Bred International from Pioneer Roundup® ready experimentals selected for forage yield, persistence, forage quality, standability and or resistance to one or more of the following pests: bacterial wilt, *Fusarium* wilt, *Verticillium wilt*, *Phytophthora* root rot, *Aphanomyces* root rot (Race1&2) and stem nematode. Parent plants were identified using phenotypic selection in selection nurseries for standability (lodging tolerance), forage quality, persistence, agronomic characteristics and improved forage yield and Roundup® resistance. Parent plant had the 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). Breeder seed (Syn 1) was produced in greenhouse isolation in 2011 in Arlington, WI. Seed was bulked in total.

Areas of Probable Adaptation

55VR08 is adapted to the moderately winterhardy and winterhardy intermountain regions of the U.S. and similar environments. The variety has been tested in Washington and Wisconsin. Areas of intended us are: North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain, Great Plains, and Canada.

Agronomic and Botanical Characteristics

55VR08 is moderately dormant, similar to the FD 5 check. Flower color (Syn 3) is 98% purple, 1% variegated, with a traces of yellow, white and cream. 55VR08 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.55VR08 is highly resistance to A*nthracnose* (Race 1), *Fusarium* wilt, *Phytophthora* root rot, *Aphanomyces* root rot (Race 1), *Aphanomyces* root rot (Race 2), pea aphid and *Verticillium* wilt and resistant to 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 1), foundation (Syn 2-3), and certified (Syn 2, 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed (Syn 1) was produced in greenhouse isolation in 2011 in Arlington, WI. 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 the spring of 2016 of 55VR08.

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.

Date this application was submitted: Dec 02, 2014

Date recommended by the VRB: Mar 30, 2015

Alfalfa

12XXP13, W11XXP29 (Exp)

Origin and Breeding History

12XXP13, W11XXP29 (both experimental designations) is an intracross of 192 parent plants (Syn 1) selected by DuPont Pioneer Hi-Bred International from Pioneer experimentals selected for forage yield, persistence, forage quality, standability and or resistance to one or more of the following pests: bacterial wilt, *Fusarium* wilt, *Verticillium wilt*, *Phytophthora* root rot, *Aphanomyces* root rot (Race1&2) and stem nematode. Parent plants were identified using phenotypic selection in selection nurseries for forage quality, increased pectin, persistence, agronomic characteristics and improved forage yield. Breeder seed (Syn 1) was grown in the greenhouse in Arlington WI. Seed was bulked in total.

Areas of Probable Adaptation

12XXP13 is adapted to the north central, east central, moderately winterhardy intermountain regions of the U.S., Canada and similar environments. The variety has been tested in Washington, Minnesota, Wisconsin, New York and Ontario, Canada. Intended use will be in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain, Great Plains, and Canada areas.

Agronomic and Botanical Characteristics

12XXP13 is moderately dormant, similar to the FD 5 check. Flower color (Syn 3) is 97% purple, 1% variegated 1% cream with a trace of yellow and white. The variety is highly resistant to *Aphanomyces* root rot (race 1), *Aphanomyces* root rot (race 2), *Fusarium* wilt, *Verticillium* wilt, Phytophthora root rot, bacterial wilt, pea aphid, and anthracnose. It is resistant to 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 1), foundation (Syn 2-3), and certified (Syn 2, 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed (Syn 1) was grown in the greenhouse in Arlington WI. 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 the spring of 2016 of 12XXP13.

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 02, 2014

Date recommended by the VRB: Mar 30, 2015

Alfalfa

Heritage RR

Origin and Breeding History

Heritage RR is a synthetic variety with 110 parent plants. Forage Genetics International experimental designation is FG R48M132. Parent plants contained the commercial Roundup Ready event J101 and 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). Phenotypic and 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 2008.

Areas of Probable Adaptation

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

Agronomic and Botanical Characteristics

Heritage RR is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 91% purple, 7% variegated, 1% white with a trace of cream and yellow. This variety has high multifoliolate leaf expression.

Heritage RR is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. Heritage 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 moderate resistance to spotted alfalfa aphid and stem nematode. Reaction to root knot nematode (Northern *M. hapla,)* and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation 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 2015.
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 26, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

RR Six Shooter
(Amended – Add Blue Alfalfa Aphid Insect)

Variety Name: RR Six Shooter Experimental Designation(s): FG R65M299

Date A&MLVRB first accepted this variety: Jan, 2014

Date(s) previous amendments were accepted:

Date this amendment was submitted: Nov 30, 2014 Date recommended by the VRB: Jan 23, 2015

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 checks. 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*).and blue 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
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 if FG R65M299 is accepted for certification
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.

Alfalfa

FG 46M444 (Exp)

Origin and Breeding History

FG 46M444 is a synthetic variety with 26 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 46M444 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 46M444 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 95% purple, 2% yellow, 1% white and 2% cream. This variety has high multifoliolate leaf expression.

FG 46M444 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot and Aphanomyces root rot (Race 1); with resistance to stem nematode and pea aphid. Reaction to 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 2015.
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, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

FG 69M001 (Exp)

Origin and Breeding History

FG 69M001 is a synthetic variety with 225 parent plants. Parent plants were selected from old forage yield trials. Phenotypic selection was used to identify the parent plants (persistence, vigor and freedom from leaf diseases). The germplasm sources used in the development traces to TruTest (100%). In 2008 Syn1 seed was produced near Marcos Juarez, Argentina, harvested in total on all parents and bulked to form breeder seed.

Areas of Probable Adaptation

FG 69M001 is adapted to the Winter Active regions of the Argentina and similar environments. This variety has been tested in Argentina.

Agronomic and Botanical Characteristics

FG 69M001 is Moderately Fall Dormant similar to the FD 6 check. Flower color (Syn2) is 98% Purple, 1 % Variegated, with a trace of Yellow, Cream and White. This variety has low multifoliolate leaf expression.

The variety is highly resistant to anthracnose and Fusarium wilt; with resistant to bacterial wilt, Verticillium wilt, Phytophthora root rot, stem nematode and pea aphid. It has not been tested for other pest reactions.

Procedures for Maintaining Seed Stock

Breeder (Syn 1), foundation (Syn 2) and certified (Syn 2 or Syn 3) 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. Breeder seed (Syn1) was produced in 2008 near Marcos Juarez, Argentina. 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 2015 if FG 69M001 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 can be provided to the PVP office.

Date this application was submitted: Dec 02, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

FG 98T091 ST (Exp)
(Amended – Add Blue Alfalfa Aphid Insect)

Variety Name: _____ Experimental Designation(s): FG 98T091 ST

Date A&MLVRB first accepted this variety: Jan, 2013

Date(s) previous amendments were accepted: _____

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Jan 13, 2015

Origin and Breeding History

FG 98T091 ST is a synthetic variety with 234 parent plants. Parent plants were selected from forage salt trials. Phenotypic selection was used to identify the parent plants (persistence, vigor and freedom from leaf diseases). The germplasm sources used in the development trace to Mireya (19%), Milonga (15%), DK 193 (14%), WL 903 (12%), Rosillo (12%), Bacana (8%), Beacon (7%), 59N49 (7%) and Coronado (6%). In 2007 Syn1 seed was produced near Marcos Juarez, Argentina, harvested in total on all parents and bulked to form breeder seed.

Areas of Probable Adaptation

FG 98T091 ST is adapted to the winter active regions of the Argentina and similar environments. The variety has been tested in Argentina

Agronomic and Botanical Characteristics

FG 98T091 ST is very nondormant similar to the FD 9 check. Flower color (Syn 2) is 100% Purple, with a trace of Variegated, Yellow, Cream and White. The variety is highly resistant to *Fusarium* wilt, Phytophthora root rot, Pea aphid and blue alfalfa aphid, resistant to anthracnose, moderately resistant to bacterial wilt and low resistance to *Aphanomyces* Root Rot (race 1). It has not been tested for other pest reactions. Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check. 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) and certified (Syn 2 or Syn 3) 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 Marcos Juarez, Argentina. 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 2012 if FG 98T091 ST 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 can be provided to the PVP office.

Alfalfa

FG 79T094 (Exp)
(Amended – Add Blue Alfalfa Aphid Insect)

Variety Name: _____ Experimental Designation(s): FG 79T094

Date A&MLVRB first accepted this variety: Jan, 2013

Date(s) previous amendments were accepted: _____

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Jan 13, 2015

Origin and Breeding History

FG 79T094 is a synthetic variety with 251 parent plants. Parent plants were selected from old forage yield trials. Phenotypic selection was used to identify the parent plants (persistence, vigor and freedom from leaf diseases). The germplasm sources used in the development trace to WL 611 (35%) and FGI breeding lines (65%). In 2008 Syn1 seed was produced near Marcos Juarez, Argentina, harvested in total on all parents and bulked to form breeder seed.

Areas of Probable Adaptation

FG 79T094 is adapted to the winter active regions of Argentina and similar environments. The variety has been tested in Argentina and is intended for use in Argentina.

Agronomic and Botanical Characteristics

FG 79T094 is nondormant similar to the FD 8 check. Flower color (Syn 2) is 100% Purple, with a trace of Variegated, Yellow, Cream and White.

The variety is highly resistant pea aphid and stem nematode; resistant to Anthracnose, bacterial wilt, Fusarium wilt, Phytophthora root rot and blue alfalfa aphid; and has low resistance to Aphanomyces Root Rot (race 1). 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. Breeder seed (Syn1) was produced in 2008 near Marcos Juarez, Argentina. 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 79T094 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.

Alfalfa

AmeriStand 901 TS
(Amended – Name Change)

Variety Name: AmeriStand 901 TS Experimental Designation(s): _____

Date A&MLVRB first accepted this variety: Jan, 2009

Date(s) previous amendments were accepted: Nov 30, 2011

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Apr 10, 2015

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

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

Agronomic and Botanical Characteristics
Test variety is Very Non-Dormant similar to FD9 check. Flower Color (Syn2) is 100% purple with a trace of variegated, cream, white and yellow. Test variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

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

Certified Seed Availability and Publication of Certified seed Production
Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2002. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

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

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

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

Alfalfa

RR AphaTron 2XT

Origin and Breeding History

RR AphaTron 2XT is a synthetic variety with 105 parent plants. Forage Genetics International experimental designation is FG R410A138. 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). Phenotypic and 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 2010.

Areas of Probable Adaptation

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

Agronomic and Botanical Characteristics

RR AphaTron 2XT 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, 1% white, 1% cream and 1% yellow. This variety has high multifoliolate leaf expression.

RR AphaTron 2XT is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. RR AphaTron 2XT 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 root knot nematode (Northern *M. hapla,)*, blue alfalfa aphid and spotted 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 2015.
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, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

PLUSS III

Origin and Breeding History
PLUSS III is a synthetic variety with 87 parent plants. Forage Genetics International experimental designation is FG 49A120. 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. The following germplasm sources were used in the development of this variety: PLUSS II (50%) and various FGI experimental populations (50%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2009.

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

Agronomic and Botanical Characteristics
PLUSS III is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 95% purple, 3% variegated, 1% white and 1% yellow. This variety has high multifoliolate leaf expression.

PLUSS III has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and Aphanomyces root rot (Race 2). Reaction to root knot nematode (Northern *M. hapla,)*, stem nematode, 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 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. 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 2015.
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, 2014

Date recommended by the VRB: Feb 20, 2015

Alfalfa

RRALF 6R200
(Amended – Add Blue Alfalfa Aphid Insect

Origin and Breeding History

RRALF 6R200 is a synthetic variety with 120 parent plants developed by Forage Genetics. 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: 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 2006.

Areas of Probable Adaptation

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

Agronomic and Botanical Characteristics

Test variety has fall dormancy similar to FD6 checks. Flower color (Syn2) is 99% purple, 1% variegated, with a trace of cream, yellow and white. Test variety is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the cp4-epsps transgene. RRALF 6R200 has moderate multifoliolate leaf expression and exhibits salt tolerance in germinating seeds similar to the tolerant check.

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

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation 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.

Alfalfa

FSG 524
(Amended – Name Change

Variety Name: FSG 524 Experimental Designation(s): FG 58K387

Date A&MLVRB first accepted this variety: Jan, 2014

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Jan 13, 2015

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. 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.
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.

Alfalfa

Fertilac 11
(Amended – Name Change)

Variety Name: Fertilac 11 Experimental Designation(s): FG 115T288

Date A&MLVRB first accepted this variety: Nov 26, 2008

Date(s) previous amendments were accepted: January, 2013

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Jan 13, 2015

Breeding History
Fertilac 11 is a synthetic variety consisting of 120 parent plants. Plants were selected based on forage yield, fall dormancy reaction, persistence and pest resistance. A combination of genotypic and phenotypic recurrent selection was used in the development of this variety.

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

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

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

Procedures for Maintaining Seed Stock
Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2005. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.

Date Certified Seed to be First Offered for Sale
Certified seed will be marketed in 2009.

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

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

Alfalfa

SGS 47M

Origin and Breeding History
SGS 47M is a synthetic variety with 11 parent clones. Forage Genetics International experimental designation is FG 47M314. 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 2007.

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

Agronomic and Botanical Characteristics
SGS 47M is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 83% purple, 7% variegated, 5% yellow, 4% white and 1% cream. This variety has high multifoliolate leaf expression.

SGS 47M 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 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. 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 2015.
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, 2014

Date recommended by the VRB: Feb 20, 2015

Alfalfa

FF 42.A2

Origin and Breeding History

FF 42.A2 is a synthetic variety with 88 parent plants. Forage Genetics International experimental designation is FG 48A180. 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

FF 42.A2 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

FF 42.A2 is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 96% purple, 2% variegated, 1% cream, with a trace of yellow and white. This variety has high multifoliolate leaf expression.

FF 42.A2 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 2015.
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, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

DKA40-16
(Amended – Name Change

Variety Name: DKA40-16 Experimental Designation(s): FG 48M365

Date A&MLVRB first accepted this variety: Jan, 2014

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Feb 20, 2015

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. 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.
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.

Alfalfa

DKA40-51RR
(Amended – Name Change)

Variety Name: DKA40-51RR Experimental Designation(s): FG R49A132

Date A&MLVRB first accepted this variety: Jan, 2014

Date(s) previous amendments were accepted:

Date this amendment was submitted: Oct 13, 2014 Date recommended by the VRB: Jan 13, 2015

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.

Alfalfa

6829R
(Amended – Name Change)

Variety Name: 6829R Experimental Designation(s): FG R77T729

Date A&MLVRB first accepted this variety: Feb 08, 2013

Date(s) previous amendments were accepted: Jan 14, 2014

Date this amendment was submitted: Oct 06, 2014 Date recommended by the VRB: Jan 23, 2015

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.

Alfalfa

Two Gold
(Amended – Name Change)

Variety Name: Two Gold Experimental Designation(s): FG 46A117

Date A&MLVRB first accepted this variety: Jan, 2013

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Jan 23, 2015

Origin and Breeding History
Two Gold is a synthetic variety with 56 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
Two Gold 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. Variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

Agronomic and Botanical Characteristics
Two Gold 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.

Two Gold 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), spotted alfalfa aphid, 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 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.

Descriptive information cannot be provided to the PVP office.

Alfalfa

WL 359LH.RR

Origin and Breeding History

WL 359LH.RR is a synthetic variety with 108 parent plants. Forage Genetics International experimental designation is FG R49H410. Parent plants contained the commercial Roundup Ready event J101 and 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). Phenotypic and 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

WL 359LH.RR is adapted to the North Central and East Central regions. This variety has been tested in Iowa and Pennsylvania and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics

WL 359LH.RR is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 84% purple, 5% variegated, 5% white, 4% cream and 2% yellow. WL 359LH.RR is "Roundup Ready®" expressing tolerance to Roundup® herbicide conferred by the *cp4-epsps* transgene. WL 359LH.RR has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and potato leafhopper; with resistance to pea aphid. Reaction to root knot nematode (Northern *M. hapla,)*, stem nematode, spotted alfalfa aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation 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 2015.
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, 2014

Date recommended by the VRB: Jan 13, 2015

Alfalfa

WL 365HQ
(Amended – Name Change)

Variety Name: WL 365HQ Experimental Designation(s): FG 59M109

Date A&MLVRB first accepted this variety: Feb 14, 2014

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Jan 13, 2015

Origin and Breeding History

WL 365HQ 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

WL 365HQ 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

WL 365HQ 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.

WL 365HQ 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.

Alfalfa

WL 358LH
(Amended – Name Change)

Variety Name: WL 358LH Experimental Designation(s): FG 49H345

Date A&MLVRB first accepted this variety: Jan, 2014

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 02, 2014 Date recommended by the VRB: Feb 20, 2015

Origin and Breeding History
WL 358LH 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
WL 358LH 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
WL 358LH 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.

WL 358LH 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. 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.
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.

Alfalfa

GA-409

Origin and Breeding History

Ga-409 (LS 706) is a synthetic variety with 86 parent plants that was developed by Legacy Seeds, Inc. The parent plants trace to two Legacy Seeds breeding populations that were selected for Aphanomyces root rot (race 2). The Aphanomyces resistant plants were transplanted to a performance nursery near Evansville, WI. The 86 parent plants were selected phenotypically based on high forage yield, good winter survival, dark green color, low-set crowns, and the absence of root and crown diseases. The breeder seed (Syn 1) was produced in an isolation field near Nampa, ID. Seed was harvested from all plants and bulked to form the breeder seed in 2007.

Areas of Probable Adaptation

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

Agronomic and Botanical Characteristics

GA-409 is a Moderately Fall Dormant cultivar similar to the FD4 check. Flower color (Syn 2) is 83% purple and 16% variegated with traces of white, cream, and yellow.

This variety has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), and Aphanomyces root rot (race 2). Resistance to stem nematode, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and root-knot nematode has not been determined.

Procedures for Maintaining Seed Stock

Breeder seed (Syn 1) was produced near Nampa, ID is 2007. Seed classes for this variety will be breeder (Syn 1), foundation (Syn 2) and certified (Syn 2 or Syn 3). There are no geographical limitations to seed production in the breeder and certified seed classes; foundation seed production is limited to Idaho, Oregon and Wyoming. Stand life will be limited to 1, 3 and 6 years for breeder, foundation and certified seed, respectively. Legacy Seeds will maintain sufficient seed stocks for the projected life of this variety.

Certified Seed Availability and Publication of Certified Seed Production

Seed may be marketed in 2015. Certified seed production acreage may not be published by AOSCA and member agencies.

PVP Information

No decision has been made concerning Plant Variety Protection of this variety.
This information can be forwarded to the PVP office.

Date this application was submitted: Nov 19, 2014

Date recommended by the VRB: Feb 04, 2015

Alfalfa

Kingfisher 4020
(Amended-Name Change)

Variety Name: Kingfisher 4020 Experimental Designation(s): LS 604

Date A&MLVRB first accepted this variety: Feb 15, 2010

Date(s) previous amendments were accepted:

Date this amendment was submitted: Nov 19, 2014 Date recommended by the VRB: Feb 20, 2015

Origin and Breeding History

Kingfisher 4020 (LS 604) is a 94 plant synthetic variety. Plants were selected from performance nurseries near Evansville, WI in the spring of 2006. Phenotypic selection was based on high forage yield, high forage quality, good winter survival, and the absence of root and crown diseases. Seed of the selected plants was produced in an isolation field near Nampa, ID.

Areas of Probable Adaptation

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

Agronomic and Botanical Characteristics

Kingfisher 4020 is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 2 generation is approximately 92% purple and 8% variegated with traces of yellow, cream and white.

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

Procedures for Maintaining Seed Stock

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

Certified Seed Availability and Publication of Certified Seed Production

Seed may be marketed in 2009. Certified seed acreage may 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.

Red Clover

FF 9615
(Amended – Name Change, Add Northern and Southern Anthracnose, Add Powdery Mildew)

Variety Name: FF 9615 Experimental Designation(s): DFRC1

Date A&MLVRB first accepted this variety: Jan, 2013

Date(s) previous amendments were accepted:

Date this amendment was submitted: Dec 01, 2014 Date recommended by the VRB: Feb 04, 2015

Origin and Breeding History

FF 9615 is a 144 parent synthetic produced under isolated insect pollinated field conditions in Nampa, ID in 2009 by bulk harvesting seed off of parental plants. The 144 parents were obtained from equal number of plants grown from remnant seed of six halfsib families out of synthetic C328-05 (C328-05-A05, C328-05-B05, C328-05-B03, C328-05-C12, C382-05-F02, and C328-05-F10). C328-05 is a 96 parent synthetic produced at Prairie du Sac, WI in 2005 under screen isolated bumble bee pollinated field conditions, with maternal halfsib seed harvested from each plant. Twelve space planted progeny plants of the highest 71 seed yielding maternal halfsib families were evaluated at the US Dairy Forage Research Center Farm at Prairie du Sac, WI for biomass accumulation and persistence using visual rating scores from 2006 through 2009. Remnant seed of the top six performing maternal halfsib families based on 2006 to 2008 field data were used as parents of FF 9615. The 96 parents of C328-05 were obtained from Syn 2 seed of C328 an experimental variety developed in the US Dairy Forage Research Center red clover breeding program. C328 is a 35 parent synthetic produced under screened isolated pollination conditions at the University of Wisconsin Agricultural Research Station in Arlington, WI in 1990. The 35 parents of C328 were dug in 1989 out of a 4 year old 1986 established sward experimental variety trial at the University of Wisconsin Agricultural Research Station in Marshfield, WI out of plots from experimental populations C11, HC29 (Syn 2 of C827), and HC30 (Syn 2 of C813) developed in the US Dairy Forage Research Center red clover breeding program. C11 is a 1984 synthetic based on progeny selected out of C827 from a 1981 established trial. C827 is 45 parent synthetic of plants dug out of Marshfield, WI swards in 1979. C813 is a 1979 created synthetic based on red clover selections made in 1978 at Arlington, WI. The 2009 Nampa, ID polycross was used to generate Syn 1 breeder seed.

Areas of Probable Adaptation

FF 9615 is adapted to the cool humid regions of United States. This variety has been tested in Indiana, Michigan, New York, and Wisconsin. FF 9615 is intended for use in its area of adaptation.

Agronomic and Botanical Characteristics

Classification: Medium	Productive Persistence: Perennial
Ploidy: Diploid	Flower Color: Red
% Flowering Seedling Year: 100%	% Leaf Marking at 50% Flowering: 62%
Stem Hairiness: 100%	

Description of Variants:

Additional description and/or information about physiology, pest reaction, and other varietal attributes:

FF 9615 good forage yield, persistence, high frequency of non-leaf-mark plants, and a darker-green less green-yellow foliage color. FF 9615 is highly resistant to northern anthracnose, resistant to powdery mildew, and moderately resistant to southern anthracnose.

Procedures for Maintaining Seed Stock

Seed increase of FF 9615 is on a limited generation basis with two generations of breeder seed class, two generations of foundation seed class, and three generations of certified seed class allowed. Syn 1 breeder seed was produced in Nampa, ID in 2009. Breeder (Syn 1 or Syn 2), foundation (Syn 2 or Syn 3), and certified (Syn 2, Syn 3, or Syn 4) classes of seed will be recognized. Production of Syn 2 breeder seed requires consent of the breeder. Stands of breeder, foundation, and certified seed are limited to 2 years. Sufficient breeder seed will be maintained by the US Dairy Forage Research Center in Madison, WI for the life of the variety.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed of FF 9615 will be available in 2015.

PVP Information

PVP protection will be sought for FF 9615. Title V certification will not be sought for FF 9615. AOSCA may provide descriptive information about this variety to the PVP office.