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 ©2023

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ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES
(February 2023)

The Association of Official Seed Certifying Agencies (AOSCA) Alfalfa and Miscellaneous Legumes Variety Review Board reviewed the following varieties on February 6, 2023. 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,

Andrew Altishin, Chair
Alfalfa and Miscellaneous Legumes Variety Review Board

2023 AOSCA ALFALFA & MISC LEGUMES VARIETY REVIEW BOARD

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Alfalfa
FSG 240CR
AFX162003 (Exp)

Origin and Breeding History

FSG 240CR is a synthetic variety with 31 parent plants selected for high forage dry matter yield, high forage quality, dense crowns, high leaf to stem ratio, persistence, vigorous roots, and no stem, crown, or root rot. Parent plants were selected from a three year old Wisconsin selection nursery, and three and four year old Minnesota, and Wisconsin yield trials, crossed in the greenhouse, and bulk harvested as Synthetic generation 1. Source plants were composed of various populations that were developed by phenotypic recurrent selection for winter hardiness, high forage dry matter yield, high forage quality, and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), anthracnose (race 1), and Leptosphaerulina leaf spot. Parentage of FSG 240CR traces 100% to miscellaneous Alforex Seeds breeding populations. Breeder seed was produced under cage isolation near Woodland, California in 2016. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Areas of Probable Adaptation

FSG 240CR 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. FSG 240CR has been tested in Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

FSG 240CR is a dormant variety with fall dormancy similar to FD class 2 check varieties. Flower color observed in the Syn.2 generation is approximately 84% purple, 15% variegated, and a trace of cream, white, and yellow.
FSG 240CR has Moderate multifoliolate leaf expression rating similar to the Moderate MF check variety.
FSG 240CR has high resistance to Anthracnose (race 1), Aphanomyces root rot (race 1), Bacterial wilt, Fusarium wilt, Phytophthora root rot, and Verticillium wilt. It has resistance to Aphanomyces root rot (race 2), and Stem nematode. Reaction to Pea aphid, Spotted alfalfa aphid, Blue Alfalfa aphid, and Root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of FSG 240CR is on a limited generation basis with two generations of breeder, three generations of 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 2016. 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 FSG 240CR will be available in 2023. Certified acreage may not be published by AOSCA or member agencies.

Generations Allowed – Mark All That Apply

Foundation	Syn.2, Syn.3 or Syn.4
Registered	
Certified	Syn.3, Syn.4, or Syn.5

Length of Stand Limitation – If None, Please State

Foundation	3
Registered	
Certified	6

PVP Information

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

Alfalfa
FSG 430ST
AFX134030 (Exp)

Origin and Breeding History

FSG 430ST is a synthetic variety developed by Alforex Seeds with 32 parent clones selected for mature plant regrowth after repeated irrigation with 100 mM NaCl solution in the greenhouse. Parent plants were replicated by vegetative stem cuttings and 7 copies of each parental clone were randomly distributed throughout the breeder seed cage. Parent plants were selected from source varieties of various populations that were developed by phenotypic recurrent selection for tolerance to NaCl, winter hardiness, high forage dry matter yield, high forage quality, and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of FSG 430ST traces 100% to miscellaneous Alforex Seeds breeding populations. Breeder seed was produced under cage isolation near Woodland, California in 2013. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation

FSG 430ST is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. FSG 430ST has been tested in Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

FSG 430ST is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.1 generation is approximately 89% purple, 6% variegated, 2% cream, 2% white and a trace of yellow. FSG 430ST has tolerance to salt (NaCl) at germination. FSG 430ST has high resistance to Anthracnose (race 1), Aphanomyces root rot (race 1), Bacterial wilt, Fusarium wilt, Phytophthora root rot, and Verticillium wilt. It has resistance to Stem nematode. Reaction to Pea aphid, Spotted alfalfa aphid, Blue Alfalfa aphid, and Root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of FSG 430ST is on a limited generation basis with two generations of breeder, three generations of 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 2013. 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 FSG 430ST will be available in 2023. Certified acreage may not be published by AOSCA or member agencies.

Generations Allowed – Mark All That Apply

Foundation Syn.2, Syn.3 or Syn.4
Registered
Certified Syn.3, Syn.4, or Syn.5

Length of Stand Limitation – If None, Please State

Foundation 3
Registered
Certified 6

PVP Information

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

Alfalfa
AFX 647
DS1168 (Exp)

Origin and Breeding History
AFX 647 is a 12 clone synthetic variety. Parent plants were selected from 4 year old forage yield trial plots or 3 year old spaced plant nurseries. Parent plants were selected from various populations that were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, blue alfalfa aphid, and stem nematode. Parentage of AFX 647 traces to Costera (13%), Magnum V (7%), Legendairy 2.0 (6%), Thor (6%), GH 700 (3%), Radiant (2%), Starbuck (2%), and miscellaneous Alforex Seeds breeding populations (61%). Breeder seed (Syn.1) was produced under cage isolation near Sloughhouse, CA in 2011. Seed was bulk harvested from all parent plants.

Areas of Probable Adaptation
AFX 647 is adapted to the Moderately Winterhardy Intermountain area of the US and Argentina and is intended for use in the Moderately Winterhardy Intermountain area of the US and in Argentina, Australia, and Turkey. AFX 647 has been tested in California and Argentina.

Agronomic and Botanical Character
AFX 647 is a moderately dormant variety with fall dormancy similar to FD class 6 check varieties. Flower color observed in the Syn.2 generation is approximately 94% purple, 5% variegated, and with a trace of white, cream, and yellow.
AFX 647 has high resistance to anthracnose (race 1), Fusarium wilt, and bacterial wilt, with resistance to Phytophthora root rot, Verticillium wilt, spotted alfalfa aphid, and stem nematode, and moderate resistance to the pea aphid, blue alfalfa aphid, and cowpea aphid. Reaction to root knot nematode and Aphanomyces root rot (race 1) has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of AFX 647 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 Sloughhouse, California in 2011. 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 AFX 647 will be available in 2017. 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 Amendment-Name Change
FSG 420BR
AFX174085 (Exp)

Variety Name: FSG 420BR
Experimental Designation(s): AFX174085
Date A&MLVRB first recommended this variety: January 2022
Date(s) any previous amendments were recommended:
Date this amendment was submitted: November 30, 2022

Origin and Breeding History

FSG 420BR is a synthetic variety developed by Alforex Seeds with 150 parent plants selected sequentially for resistance to Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), and Anthracnose. Parent plants were selected from crosses between selections of various Alforex Seeds populations that were developed by phenotypic recurrent selection for high forage dry matter yield, high forage quality, persistence, and for resistance to one or more of the following pests: Bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), Anthracnose (race 1). Parentage of FSG 420BR traces 100% to miscellaneous Alforex Seeds breeding populations. Breeder seed was produced under cage isolation near Sloughhouse, California in 2017. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation

FSG 420BR is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. FSG 420BR has been tested in Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

FSG 420BR is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.1 generation is approximately 95% purple, 4% variegated and a trace of cream, white and yellow. FSG 420BR has Low multifoliolate leaf expression rating similar to the Low MF check variety.
FSG 420BR 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. It has resistance to Stem nematode. Reaction to Pea aphid, Spotted alfalfa aphid, Blue Alfalfa aphid, and Root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of FSG 420BR is on a limited generation basis with two generations of breeder, three generations of 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 Sloughhouse, California in 2017. 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 FSG 420BR will be available in 2022. Certified acreage may not be published by AOSCA or member agencies.

Generations Allowed – Mark All That Apply

Foundation	Syn.2, Syn.3 or Syn.4
Registered	
Certified	Syn.3, Syn.4, or Syn.5

Length of Stand Limitation – If None, Please State

Foundation	3
Registered	
Certified	6

PVP Information

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

Alfalfa Amendment-Name Change

Shift
AFX163009 (Exp)

Variety Name: Shift
Experimental Designation(s): AFX163009
Date A&MLVRB first recommended this variety: January 2021
Date(s) any previous amendments were recommended:
Date this amendment was submitted: August 24, 2022

Origin and Breeding History

Shift is a synthetic variety developed by Alforex Seeds with 225 parent plants selected sequentially for resistance to Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), and Anthracnose. Parent plants were selected from crosses between selections of various Alforex Seeds populations that were developed by phenotypic recurrent selection for high forage dry matter yield, high forage quality, persistence, and for resistance to one or more of the following pests: Bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), Anthracnose (race 1), and Leptosphaerulina leaf spot. Parentage of Shift traces 100% to miscellaneous Alforex Seeds breeding populations.. Breeder seed was produced under cage isolation near Woodland, California in 2016. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation

Shift is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. Shift has been tested in Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

Shift is a dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.1 generation is approximately 99% purple, and a trace of variegated, cream, white, and yellow. Shift has High multifoliolate leaf expression rating similar to the High MF check variety. Shift 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. Reaction to Blue aphid, Pea aphid, Spotted alfalfa aphid, Stem nematode, and Root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of Shift is on a limited generation basis with two generations of breeder, three generations of 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 2016. 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 Shift will be available in 2021. Certified acreage may not be published by AOSCA or member agencies.

Generations Allowed – Mark All That Apply

Foundation	Syn.2, Syn.3 or Syn.4
Registered	
Certified	Syn.3, Syn.4, or Syn.5

Length of Stand Limitation – If None, Please State

Foundation	3
Registered	
Certified	6

PVP Information

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

Alfalfa Amendment-Name Change
Shockwave II
AFX164046 (Exp.)

Variety Name: Shockwave II
Experimental Designation(s): AFX164046
Date A&MLVRB first recommended this variety: January 2021
Date(s) any previous amendments were recommended:
Date this amendment was submitted: August 24, 2022

Origin and Breeding History

Shockwave II is a synthetic variety developed by Alforex Seeds with 180 parent plants selected sequentially for resistance to Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), and Anthracnose. Parent plants were selected from crosses between selections of various Alforex Seeds populations that were developed by phenotypic recurrent selection for high forage dry matter yield, high forage quality, persistence, and for resistance to one or more of the following pests: Bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), Anthracnose (race 1), and Leptosphaerulina leaf spot. Parentage of Shockwave II traces to the following germplasm sources Shockwave 35%, AFX140311 10%, and 55% to miscellaneous Alforex Seeds breeding populations. Breeder seed was produced under cage isolation near Sloughhouse, California in 2016. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation

Shockwave II is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. Shockwave II has been tested in Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

Shockwave II is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.1 generation is approximately 93% purple, 2% cream, 4% white and a trace of variegated and yellow. Shockwave II has Low multifoliolate leaf expression rating similar to the Low MF check variety. Shockwave II 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. Reaction to Blue aphid, Pea aphid, Spotted alfalfa aphid, Stem nematode and Root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of Shockwave II is on a limited generation basis with two generations of breeder, three generations of 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 2016. 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 Shockwave II will be available in 2021. Certified acreage may not be published by AOSCA or member agencies.

Generations Allowed – Mark All That Apply

Foundation	Syn.2, Syn.3 or Syn.4
Registered	
Certified	Syn.3, Syn.4, or Syn.5

Length of Stand Limitation – If None, Please State

Foundation	3
Registered	
Certified	6

PVP Information

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

Alfalfa Amendment-Name Change
Stockpile II
AFX164048 (Exp.)

Variety Name: Stockpile II
Experimental Designation(s): AFX164048
Date A&MLVRB first recommended this variety: January 2021
Date(s) any previous amendments were recommended:
Date this amendment was submitted: August 24, 2022

Origin and Breeding History

Stockpile II is a synthetic variety developed by Alforex Seeds with 180 parent plants selected sequentially for resistance to Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), and Anthracnose. Parent plants were selected from crosses between selections of various Alforex Seeds populations that were developed by phenotypic recurrent selection for high forage dry matter yield, high forage quality, persistence, and for resistance to one or more of the following pests: Bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1 and race 2), Anthracnose (race 1), and Leptosphaerulina leaf spot. Parentage of Stockpile II traces to the following germplasm sources Stockpile 50%, and 50% to miscellaneous Alforex Seeds breeding populations. Breeder seed was produced under cage isolation near Sloughhouse, California in 2016. Seed was bulk harvested from all parent plants as Synthetic generation 1.

Areas of Probable Adaptation

Stockpile II is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, Great Plains, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the U.S. Stockpile II has been tested in Minnesota, and Wisconsin.

Agronomic and Botanical Characteristics

Stockpile II is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.1 generation is approximately 96% purple, 3% white and a trace of variegated, cream, and yellow. Stockpile II has Low multifoliolate leaf expression rating similar to the Low MF check variety. Stockpile II 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. Reaction to Blue aphid, Pea aphid, Spotted alfalfa aphid, Stem nematode and Root knot nematode has not been tested.

Procedures for Maintaining Seed Stock

Seed increase of Stockpile II is on a limited generation basis with two generations of breeder, three generations of 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 2016. 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 Stockpile II will be available in 2021. Certified acreage may not be published by AOSCA or member agencies.

Generations Allowed – Mark All That Apply

Foundation	Syn.2, Syn.3 or Syn.4
Registered	
Certified	Syn.3, Syn.4, or Syn.5

Length of Stand Limitation – If None, Please State

Foundation	3
Registered	
Certified	6

PVP Information

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

Alfalfa

WL 3521HQ.RR

FG R414M335 (Exp)

Origin and Breeding History:

FG R414M335 is a synthetic variety with 208 parent plants. Parent plants contained the commercial Roundup Ready event J101 and 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 knot nematode and Aphanomyces root rot (multiple races). Phenotypic and genotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested and bulked to form breeder seed from a field or cage isolation near Nampa, ID in August 2014.

Areas of Probable Adaptation:

FG R414M335 is adapted to the North Central and Winterhardy Intermountain regions. This variety has been tested in Idaho, Wisconsin and Minnesota and is intended for use in the North Central, East Central, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

FG R414M335 is Fall Dormant similar to FD3 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 99% purple with a trace of variegated, cream, yellow and white. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product. This variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check. This variety is Roundup Ready®.

FG R414M335 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot and Aphanomyces root rot (Race 1); with resistance to pea aphid, spotted alfalfa aphid, Aphanomyces root rot (Race 2) and stem nematode. Reaction to root knot nematode (M. hapla) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced in 2014 near Nampa, Idaho. 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). 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 the spring of 2023 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa
RR APHATRON AA
FG R0418A3648 (Exp)

Origin and Breeding History:

RR APHATRON AA is a synthetic variety with 100 parent plants. Parent plants contained the commercial Roundup Ready event J101 and were selected for forage yield, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (multiple races), Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (multiple races). Phenotypic and genotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested and bulked to form breeder seed from a field or cage isolation near Nampa, ID in August 2018.

Areas of Probable Adaptation:

RR APHATRON AA is adapted to the North Central and East Central regions. This variety has been tested in Pennsylvania, Wisconsin and Minnesota and is intended for use in the North Central, East Central, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

RR APHATRON AA is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 98% purple, 1% variegated, with a trace of cream, yellow and white. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product. This variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check. This variety is Roundup Ready®.

RR APHATRON AA 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 pea aphid, spotted alfalfa aphid, and stem nematode. Reaction to root knot nematode (M. hapla) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced in 2018 near Nampa, Idaho. 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). 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 the spring of 2023 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply	
Foundation	X
Registered	
Certified	X

Length of Stand Limitation – If None, Please State	
Foundation	3
Registered	None
Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa

WL 3451HQ.RR FG

R0418A3147 (Exp)

Origin and Breeding History:

WL 3451HQ.RR is a synthetic variety with 100 parent plants. Parent plants contained the commercial Roundup Ready event J101 and 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 knot nematode and Aphanomyces root rot (multiple races). Phenotypic and genotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested and bulked to form breeder seed from a field or cage isolation near Nampa, ID in August 2018.

Areas of Probable Adaptation:

WL 3451HQ.RR is adapted to the North Central and East Central regions. This variety has been tested in Pennsylvania, Wisconsin and Minnesota and is intended for use in the North Central, East Central, Great Plains, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

WL 3451HQ.RR 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, with a trace of cream, yellow and white. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product. This variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check. This variety is Roundup Ready®.

WL 3451HQ.RR 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 pea aphid, spotted alfalfa aphid, and stem nematode. Reaction to root knot nematode (M. hapla) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced in 2018 near Nampa, Idaho. 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). 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 the spring of 2023 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa

FG H0918TF557, FG 9571822H (Exp)

Origin and Breeding History:

FG H0918TF557, FG 9571822H is a synthetic variety with 95 parent plants. Parent plants contain the commercial HarvXtra event KK179 and the Roundup Ready event J101. Plants were selected from FGI breeding lines for reduced lignin as measured by ADL, glyphosate tolerance, forage yield, persistence and/or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (multiple races), Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (multiple races). Phenotypic and genotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested and bulked to form breeder seed from a field or cage isolation near Nampa, ID in August 2018.

Areas of Probable Adaptation:

FG H0918TF557, FG 9571822H is adapted to the Southwest region. This variety has been tested in California and Arizona and is intended for use in the Southwest region.

Agronomic and Botanical Characteristics

FG H0918TF557, FG 9571822H is Very Non-Dormant similar to FD9 check. Flower Color (Syn2) is 99% purple with a trace of cream, yellow, variegated and white. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product. This variety is Roundup Ready®.

FG H0918TF557, FG 9571822H has high resistance to anthracnose (Race 1), Fusarium wilt, Phytophthora root rot, pea aphid, and spotted alfalfa aphid; resistance to Verticillium wilt and stem nematode; with moderate resistance to bacterial wilt. Reaction to Aphanomyces root rot (Race 1), root knot nematode (M. hapla) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced in 2018 near Nampa, Idaho. 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). 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 the spring of 2023 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa

FG 614T515 (Exp)

Origin and Breeding History:

FG 614T515 is a synthetic variety with 150 parent plants. Parent plants were selected from FGI semi-dormant breeding lines for their yield, vigor and/or resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode, anthracnose (Race 1), and aphids. Phenotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed from all parents was harvested from a field or isolation near Holtville, California in 2014. Seed was harvested in total on all parents and bulked to form breeder seed.

Areas of Probable Adaptation:

FG 614T515 is adapted to the Moderately Winterhardy Intermountain US region and the semi-dormant region of Argentina. This variety has been tested in California and Argentina and is intended for use in the Moderately Winterhardy Intermountain US region and the semi-dormant region of Argentina.

Agronomic and Botanical Characteristics

FG 614T515 is Moderately Dormant similar to FD6 check. Flower Color (Syn2) is 99% purple with a trace of cream, yellow, variegated and white. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

FG 614T515 has high resistance to anthracnose (Race 1), Fusarium wilt, Phytophthora root rot, pea aphid, and spotted alfalfa aphid; resistance to blue alfalfa aphid, Aphanomyces root rot (Race 1), Verticillium wilt and stem nematode; with moderate resistance to bacterial wilt. Reaction to root knot nematode (M. hapla) has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced near Holtville, CA in 2014. 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 available for sale in the spring of 2023 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Description Change
FG C0515A3357 (Exp)

Experimental Designation(s): C0515A3357
Date A&MLVRB first recommended this variety: February 2021
Date(s) any previous amendments were recommended:
Date this amendment was submitted: December 1, 2022 - SN, SAA

Origin and Breeding History:

FG C0515A3357 is a synthetic variety with 73 parent plants. 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 (multiple races), Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (multiple races). Phenotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested and bulked to form breeder seed from a field or cage isolation near Nampa, ID in August 2015.

Areas of Probable Adaptation:

FG C0515A3357 is adapted to the North Central, East Central, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions. This variety has been tested in Iowa, Idaho, Pennsylvania, Wisconsin and Washington and is intended for use in the North Central, East Central, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

FG C0515A3357 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 97% purple, 1% yellow, 1% cream with a trace of variegated and white. This variety has high multifoliolate leaf expression. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

FG C0515A3357 has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), Aphanomyces root rot (Race 2) and spotted alfalfa aphid; with resistance to pea aphid and stem nematode. Reaction to root knot nematode (M. hapla) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced near Nampa, ID in 2015. 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 available for sale in the spring of 2021 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Name & Description Change
WL 3441HQ.RR

FG R413A316 (Exp)

Variety Name: WL 3441HQ.RR
Experimental Designation: FG R413A316
Date A&MLVRB first recommended this variety - January 26, 2018
Date any previous amendments were recommended - Jan. 2019-Salt Germ, March 2021-Name
Date this amendment was submitted - Dec, 2022 SAA & Name

Origin and Breeding History:

WL 3441HQ.RR is a synthetic variety with 110 parent plants. 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 knot 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: various FGI experimental populations (100%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2013.

Areas of Probable Adaptation:

WL 3441HQ.RR is adapted to the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions. This variety has been tested in Washington, Idaho, Iowa, Wisconsin and Pennsylvania and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

WL 3441HQ.RR is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 94% purple, 3% cream, 2% variegated with a trace of white and yellow. This variety has high multifoliolate leaf expression.

WL 3441HQ.RR 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 and spotted alfalfa aphid. Reaction to root knot nematode (*M. hapla*) and blue alfalfa aphid has not been tested. Test variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced in 2013 near Nampa, Idaho. 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). 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 the spring of 2018 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Description Change
Integra 8471R

FG R411M104 (Exp)

Variety Name: Integra 8471R
Experimental Designation: FG R411M104
Date A&MLVRB first recommended this variety - January 2021
Date this amendment was submitted - December 1, 2022, Aphanomyces Root Rot (Race 2)

Origin and Breeding History:

Integra 8471R is a synthetic variety with 110 parent plants. 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 knot 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: various FGI experimental populations (100%). Syn1 seed was harvested from a field or cage isolation near Nampa, ID in August 2011 and bulked to form breeder seed.

Areas of Probable Adaptation:

Integra 8471R is adapted to the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions. This variety has been tested in Washington, Idaho, Iowa and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

Integra 8471R is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 92% purple, 3% variegated, 2% cream, 2% white and 1% yellow. This variety has high multifoliolate leaf expression. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Integra 8471R has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and Aphanomyces root rot (Race 2); with resistance to stem nematode, spotted alfalfa aphid and pea aphid. Reaction to root knot nematode (*M. hapla*) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced in 2011 near Nampa, Idaho. 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). 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 the spring of 2021 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Description Change
6427R
FG R410M327 (Exp)

Date A&MLVRB first recommended this variety - February 2017
Date any previous amendments were recommended - Feb. 2020-Aph2, Feb. 2021-Salt Germ
Date this amendment was submitted - Dec.1, 2022-SAA

Origin and Breeding History:

6427R is a synthetic variety with 110 parent plants. Parent plants contained the commercial Roundup Ready event J101 and 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: various FGI experimental populations (100%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2010.

Areas of Probable Adaptation:

6427R is adapted to the North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in Idaho, Iowa, Wisconsin and Pennsylvania and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

6427R is Moderately Fall Dormant similar to FD4 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 99% purple with a trace of cream, variegated, yellow and white. This variety has high multifoliolate leaf expression. Test variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

6427R 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, Aphanomyces root rot (Race 2) and spotted alfalfa 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 in 2010 near Nampa, Idaho. 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). 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 the spring of 2017 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Description Change
FF 4215.HVX RR
FG RRL44M375 (Exp)

Date A&MLVRB first recommended this variety - January 2018
Date any previous amendments were recommended - Jan. 2019-Name, Jan. 2020-Aph2
Date this amendment was submitted - December 1, 2022-SAA

Origin and Breeding History:

FF 4215.HVX RR is a synthetic variety with 41 parent plants. Parent plants contain the commercial HarvXtra event KK179 and the Roundup Ready event J101. Plants were selected from FGI breeding lines for reduced lignin as measured by ADL, glyphosate tolerance, forage yield, persistence and/or resistance to one or more of the following pests: potato leafhopper, bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, stem nematode, northern root knot nematode, and Aphanomyces root rot (Race 1 and Race 2). Phenotypic and genotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2014.

Areas of Probable Adaptation:

FF 4215.HVX RR is adapted to the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions. This variety has been tested in Washington, Idaho, Iowa, Pennsylvania and Wisconsin and is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

FF 4215.HVX RR is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 87% purple, 5% cream, 3% white, 3% variegated and 2% yellow. This variety has high multifoliolate leaf expression.
FF 4215.HVX RR has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1); with resistance to stem nematode, spotted alfalfa aphid and Aphanomyces root rot (Race 2). Reaction to root knot nematode (*M. hapla*), pea aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced in 2014 near Nampa, Idaho. 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). 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 the spring of 2018 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply	
Foundation	X
Registered	
Certified	X

Length of Stand Limitation – f none, please state.

Foundation	3
Registered	None
Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Description Change
FF 4022.LH
FG 413H323 (Exp)

Date A&MLVRB first recommended this variety - January 2018
Date(s) any previous amendments were recommended - Jan. 2019-Name, Jan. 2020-PA
Date this amendments was submitted - Dec. 1, 2022-SA, Aphanomyces Root Rot (Race 2) & Stem Nematode

Origin and Breeding History:

FF 4022.LH is a synthetic variety with 110 parent clones. 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 knot nematode and Aphanomyces root rot (Race 1 and Race 2). A combination of phenotypic and genotypic selection was used to identify the parent clones. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2013.

Areas of Probable Adaptation:

FF 4022.LH is adapted to the North Central and East Central regions. This variety has been tested in Iowa, Indiana and Pennsylvania and is intended for use in the North Central and East Central regions.

Agronomic and Botanical Characteristics

FF 4022.LH is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 92% purple, 5% cream, 2% white with a trace yellow and variegated.

FF 4022.LH 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, Aphanomyces root rot (Race 2) and stem nematode. Reaction to other pests has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced near Nampa, ID in 2013. 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 available for sale in the spring of 2018 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment - Description Change
FF 42.A3
FG C0415C3364 (Exp)

Date A&MLVRB first recommended this variety - February 2019
Date(s) any previous amendments were recommended - March 2021-Name
Date this amendment was submitted - December 1, 2022-SAA

Origin and Breeding History
FF 42.A3 is a synthetic variety with 110 parent plants. 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 (multiple races), Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (multiple races). Phenotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2015.

Areas of Probable Adaptation:
FF 42.A3 is adapted to the North Central, East Central, Winterhardy Intermountain and Moderately Winterhardy Intermountain areas. This variety has been tested in Washington, Idaho, Iowa, Wisconsin and Pennsylvania and is intended for use in the North Central, East Central, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics
FF 42.A3 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 90% purple, 5% variegated, 2% yellow, 2% cream with a trace of white. This variety has high multifoliolate leaf expression. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

FF 42.A3 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); with resistance to stem nematode and spotted alfalfa aphid. Reaction to root knot nematode (*M. hapla*), pea aphid and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced near Nampa, ID in 2015. 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 available for sale in the spring of 2019 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information
No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment–Name Change
WL 3311HQ
FG C0317A3152 (Exp)

Variety Name: WL 3311HQ
Experimental Designation(s): FG C0317A3152
Date A&MLVRB first recommended this variety: January 2022
Date(s) any previous amendments were recommended:
Date this amendment was submitted: December 1, 2022

Origin and Breeding History:

WL 3311HQ is a synthetic variety with 165 parent plants. 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 (multiple races), Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (multiple races). Phenotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested and bulked to form breeder seed from a field or cage isolation near Nampa, ID in August 2017.

Areas of Probable Adaptation:

WL 3311HQ is adapted to the North Central, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain regions. This variety has been tested in Idaho, Washington, Pennsylvania and Wisconsin and is intended for use in the North Central, East Central, Great Plains, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

WL 3311HQ is Fall Dormant similar to FD3 check. Test variety is Extremely Winterhardy, similar to WS1 check. Flower Color (Syn2) is 99% purple with a trace of variegated, cream, yellow and white. This variety has high multifoliolate leaf expression. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product. Test variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

WL 3311HQ has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1) and Aphanomyces root rot (Race 2); with resistance to stem nematode, pea aphid and spotted alfalfa aphid. Reaction to root knot nematode (M. hapla) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced near Nampa, ID in 2017. 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 available for sale in the spring of 2022 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Name Change
4C450
FG C0416C4164 (Exp)

Variety Name: 4C450
Experimental Designation(s): FG C0416C4164
Date A&MLVRB first recommended this variety: January 2021
Date(s) any previous amendments were recommended:
Date this amendment was submitted: August 24, 2022

Origin and Breeding History:

4C450 is a synthetic variety with 279 parent plants. 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 (multiple races), Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (multiple races). Phenotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested and bulked to form breeder seed from a field or cage isolation near Nampa, ID in August 2016.

Areas of Probable Adaptation:

4C450 is adapted to the North Central and East Central regions. This variety has been tested in Iowa, Pennsylvania, Wisconsin and Minnesota and is intended for use in the North Central, East Central, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

4C450 is Moderately Fall Dormant similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 97% purple, 2% cream with a trace of variegated, yellow and white. This variety has high multifoliolate leaf expression. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

4C450 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 and spotted alfalfa aphid. Reaction to root knot nematode (M. hapla) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced near Nampa, ID in 2016. 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 available for sale in the spring of 2021 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Name Change
WL 3521HQ

Variety Name - WL 3521HQ
Experimental Designation - FG C0518A3663 (Exp)
Date A&MLVRB first recommended this variety: January 2022
Date this amendment was submitted: December 1, 2022-Name

Origin and Breeding History:

WL 3521HQ is a synthetic variety with 48 parent plants. 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 (multiple races), Phytophthora root rot, stem nematode, northern root knot nematode and Aphanomyces root rot (multiple races). Phenotypic selection was used to identify the parent plants. The following germplasm sources were used in the development of this variety: various FGI experimental populations (100%). Syn1 seed was harvested and bulked to form breeder seed from a field or cage isolation near Nampa, ID in August 2018.

Areas of Probable Adaptation:

WL 3521HQ is adapted to the North Central and East Central regions. This variety has been tested in Iowa, New York, Minnesota, Pennsylvania and Wisconsin and is intended for use in the North Central, East Central, Great Plains, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

WL 3521HQ is Moderately Fall Dormant similar to FD5 check. Test variety is Very Winterhardy, similar to WS2 check. Flower Color (Syn2) is 99% purple with a trace of variegated, cream, yellow and white. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product. Test variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

WL 3521HQ has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, pea aphid, spotted alfalfa aphid, Phytophthora root rot, Aphanomyces root rot (Race 1) and Aphanomyces root rot (Race 2); with resistance to stem nematode. Reaction to root knot nematode (M. hapla) and blue alfalfa aphid has not been tested.

Procedures for Maintaining Seed Stock:

Breeder seed (Syn1) was produced near Nampa, ID in 2018. 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 available for sale in the spring of 2022 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa Amendment-Name Change
ISS 37QS
FG C0316ML134 (Exp)

Variety Name: ISS 37QS
Experimental Designation(s): FG C0316ML134
Date A&MLVRB first recommended this variety: February 2019
Date(s) any previous amendments were recommended: Feb. 2020-Aph2; Feb. 2021-SN, Aph2
Date this amendment was submitted: August 24, 2022

Origin and Breeding History:

ISS 37Q is a synthetic variety with 115 parent plants. 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 knot 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: various FGI experimental populations (100%). Syn1 seed was harvested in total on all parents and bulked to form breeder seed in 2016.

Areas of Probable Adaptation:

ISS 37Q is adapted to the North Central, East Central and Moderately Winterhardy Intermountain areas. This variety has been tested in Washington, Iowa, Wisconsin and Pennsylvania and is intended for use in the North Central, East Central, Winterhardy Intermountain and Moderately Winterhardy Intermountain regions.

Agronomic and Botanical Characteristics

ISS 37Q is Fall Dormant similar to FD3 check. Test variety is Extremely Winterhardy similar to WS1 check. Flower Color (Syn2) is 98% purple, 1% cream with a trace of yellow, white and variegated. This variety has high multifoliolate leaf expression. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product. Test variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check.

ISS 37Q 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 pea aphid and stem nematode. Reaction to root knot nematode (*M. hapla*), stem nematode, 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 2016. 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 available for sale in the spring of 2019 if is accepted for certification.
The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3
Registered		Registered	None
Certified	X	Certified	6

PVP Information

No decision has been made regarding submission of an application for Plant Variety Protection. The information in this application may not be forwarded to the PVP office.

Alfalfa
LS 03JR (Exp)

Origin and Breeding History:

LS 03JR is a synthetic variety with 99 parent plants that were selected out of a space-plant nursery in Evansville, WI in the spring of 2018. Phenotypic selection was based on high forage yield, good winter survival, and the absence of root and crown diseases. Along with high plant yield and vigor, 13 plants were selected for being resistant plants out of a stem nematode screen. The plants were grown under cage in 2018 near Nampa, ID and seed from all 99 parent plants was bulk harvested to form the breeder seed (Syn 1).

Areas of Probable Adaptation:

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

Agronomic and Botanical Characteristics

LS 03JR is a moderately dormant variety, similar to the FD5 check. Flower color (Syn 1) is approximately 90% purple and 9% variegated, with trace amounts of white, yellow, and cream colored flowers.

LS 03JR has high resistance to *Anthracnose* (Race 1), Bacterial Wilt, *Fusarium* Wilt, *Verticillium* Wilt, *Phytophthora* Root Rot, *Aphanomyces* Root Rot (Race 1 and Race 2). It has not been tested for resistance to Stem Nematode, Pea Aphid, Spotted Alfalfa Aphid, Blue Alfalfa Aphid, Root Knot Nematode.

Procedures for Maintaining Seed Stock:

Legacy Seeds produced breeder seed near Nampa, ID in 2018; one generation of breeder seed (Syn 1) is recognized. Foundation seed was produced near Yuma, AZ in 2019; two generations (Syn 2 and/or Syn 3) are recognized. Two generations (Syn 3 and/or Syn 4) for certified seed are recognized. Legacy Seeds will maintain sufficient foundation seed stock in Idaho for the projected life of the variety.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed may be marketed in 2023; certified seed production acreage may not be published by AOSCA and member agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

PVP Information:

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

Alfalfa
LS 10RJ (Exp.)

Origin and Breeding History

LS 10RJ is a synthetic variety with 92 parent plants that were selected out of a space-plant nursery in Evansville, WI in the spring of 2018. Phenotypic selection was based on high forage yield, good winter survival, and the absence of root and crown diseases. The plants were grown under cage in 2018 near Nampa, ID and seed from all 92 parent plants was bulk harvested to form the breeder seed (Syn 1).

Areas of Probable Adaptation

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

Agronomic and Botanical Characteristics

LS 10RJ is a moderately dormant variety, similar to the FD 5 check. Flower color (Syn 1) is 95% purple and 4% variegated, with trace amounts of white, yellow, and cream colored flowers.

LS 10RJ has high resistance to *Anthracnose* (Race 1), Bacterial Wilt, *Fusarium* Wilt, *Verticillium* Wilt, *Phytophthora* Root Rot, *Aphanomyces* Root Rot (Race 1 and Race 2). It has not been tested for resistance to Stem Nematode, Pea Aphid, Spotted Alfalfa Aphid, Blue Alfalfa Aphid, Root Knot Nematode.

Procedures for Maintaining Seed Stock

Legacy Seeds produced breeder seed near Nampa, ID in 2018; one generation of breeder seed (Syn 1) is recognized. Foundation seed was produced near Yuma, AZ in 2019; two generations (Syn 2 and/or Syn 3) are recognized. Two generations (Syn 3 and/or Syn 4) for certified seed are recognized. Legacy Seeds will maintain sufficient foundation seed stock in Idaho for the projected life of the variety.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed may be marketed in 2023; certified seed production acreage may not be published by AOSCA and member agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

PVP Information

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

Alfalfa
LS 12JW (Exp.)

Origin and Breeding History

LS 12JW is a synthetic variety with 82 parent plants that were selected out of a space-plant nursery in Evansville, WI in the spring of 2018. Phenotypic selection was based on high forage yield, good winter survival, absence of root and crown diseases, and good forage quality. The plants were grown under cage in 2018 near Nampa, ID and seed from all 82 parent plants was bulk harvested to form the breeder seed (Syn 1).

Areas of Probable Adaptation

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

Agronomic and Botanical Characteristics

LS 12JW is a moderately dormant variety, very similar to the FD5 check. Flower color (Syn 1) is approximately 91% purple and 8% variegated, with trace amounts of white, yellow, and cream colored flowers.

LS 12JW has high resistance to *Anthracnose* (Race 1), Bacterial Wilt, *Fusarium* Wilt, *Verticillium* Wilt, *Phytophthora* Root Rot, *Aphanomyces* Root Rot (Race 1 and Race 2). It has not been tested for resistance to Stem Nematode, Pea Aphid, Spotted Alfalfa Aphid, Blue Alfalfa Aphid, Root Knot Nematode.

Procedures for Maintaining Seed Stock

Legacy Seeds produced breeder seed near Nampa, ID in 2018; one generation of breeder seed (Syn 1) is recognized. Foundation seed was produced near Yuma, AZ in 2019; two generations (Syn 2 and/or Syn 3) are recognized. Two generations (Syn 3 and/or Syn 4) for certified seed are recognized. Legacy Seeds will maintain sufficient foundation seed stock in Idaho for the projected life of the variety.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed may be marketed in 2023; certified seed production acreage may not be published by AOSCA and member agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

PVP Information

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

Red Clover
Blaze
RC0701 (Exp.)

Origin and Breeding History

Blaze was bred in the state of Indiana by FFR Cooperative. It was developed using phenotypic recurrent selection. Selection criteria included resistance to Fusarium and Mycoleptodicus root rot. Germplasm used to develop the variety traces to the following sources: Plus II = 26.0%, Rocket = 5.0%, Kenstar = 2.5% LS-9703 = 18.4%, Cinnamon = 4.2%, Persist = 1.9%, Royal Red = 16.0%, Wildcat = 4.0%, Renegade = 1.8%, RC9103 = 9.6%, Rudolph = 3.7%, Redlan II = 1.7%, Red Star = 5.3%. The first breeder seed was produced in 2010,

Areas of Probable Adaptation

Blaze has been tested in IN, KY and VA and is adapted to the East Central Region of the United States

Agronomic and Botanical Characteristics

Classification:	Multiple Cut	Productive Persistence	Perennial
Ploidy	Diploid	Flower Color	38% light pink, 45% medium pink, 15% dark pink, 2% red
% Flowering Seedling Year	59%	% Leaf Marking at 50% Flowering	80%
Stem Hairiness	97.5%		

Description of Variants: 2% Red flowers, 20% plants without watermarks, 2.5% plants without stem hairs

Additional Description and/or Information about Physiology, Pest Reaction, and Other Varietal Attributes

Blaze has shown higher resistance than Kenland to northern anthracnose (R vs. LR), southern anthracnose (HR vs. R) and powdery mildew (R vs. S).

Procedures for Maintaining Seed Stock

A residual supply of Syn-1 Breeder Seed Breeder is maintained by Mountain View Seeds, Salem, Oregon and may be used to produce Syn-2 breeder seed as needed. Foundation seed is maintained by Mountain View Seeds, Salem, Oregon. Seed increase of Blaze is limited to two generations each of breeder seed (Syn1 or Syn2), foundation (Syn2 or Syn3), and registered (Syn2, Syn3 or Syn4), and three generations of certified (Syn2, Syn3, Syn4, or Syn5) classes. Length of stand allowed is two years each for foundation, registered, and three years for the certified classes.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed may be available for sale in the spring of 2023 if the variety is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	2
Registered	X	Registered	2
Certified	X	Certified	3

PVP Information

Plant variety protection will not be applied for. Information in this application may be forwarded to the PVP Office.

Alfalfa

SW17ZPA03, W16ZPA42 (Exp.)

Origin and Breeding History

SW17ZPA03, W16ZPA42 (all experimental designations), is an intracross of 85 parent plants (Syn 1) in which all parents originated from S&W germplasms, and were selected for forage yield under potato leafhopper pressure, persistence, forage quality, and or resistance to one or more of the following diseases and/or pests: Bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race1&2), and potato leafhopper resistance. Parent plants were identified using phenotypic selection in selection nurseries for increased forage quality, persistence, agronomic characteristics, potato leafhopper resistance, and improved forage yield. Breeder seed (Syn 1) was grown in cage isolation in 2017 in Nampa, ID and was bulked in total.

Areas of Probable Adaptation

This variety is adapted to the North Central and East Central areas of the United States. SW17ZPA03 has been tested in Wisconsin and Ohio. Areas of intended use are: North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains areas of the United States and Canada and similar environments.

Agronomic and Botanical Characteristics

SW17ZPA03 is moderately dormant, similar to the FD 4 check. It is very winterhardy. Flower color (Syn 2) is 85% purple, 1% yellow, 12% variegated, 1% white, with trace amounts of cream. SW17ZPA03 is highly resistant to anthracnose (Race 1), Aphanomyces root rot (Race 1 and Race 2), bacterial wilt, Verticillium wilt, potato leafhopper, and Phytophthora root rot; with resistance to pea aphid and moderate resistance to spotted aphid. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or 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 cage isolation in 2017 in Nampa, ID. S&W Seed Co. will maintain sufficient breeder and 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 may be available for sale in the spring of 2024 if SW17ZPA03 is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

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

SW18XPQ62, W17XPQ62 (Exp.)

Origin and Breeding History

SW18XPQ62, W17XPQ62 (all experimental designations), is an intracross of 64 parent plants (Syn 1) in which all parents originated from S&W germplasms, and were selected for forage yield, persistence, forage quality, and or resistance to one or more of the following diseases and/or pests: Bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race1&2). Parent plants were identified using phenotypic selection in selection nurseries for increased forage quality, persistence, agronomic characteristics, and improved forage yield. Breeder seed (Syn 1) was grown in cage isolation in 2018 in Nampa, ID and was bulked in total.

Areas of Probable Adaptation

This variety is adapted to the North Central, Winterhardy Intermountain, and East Central areas of the United States. SW18XPQ62 has been tested in Wisconsin, Idaho, Minnesota, and Ohio, US; and Ontario, CAN. Areas of intended use are: North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains areas of the United States and Canada and similar environments.

Agronomic and Botanical Characteristics

SW18XPQ62 is moderately dormant, similar to the FD 4 check. It is very winterhardy. Flower color (Syn 2) is 72% purple, 27% variegated, with trace amounts of white, yellow and cream. SW18XPQ62 is highly resistant to anthracnose (Race 1), Aphanomyces root rot (Race 1 and Race 2), bacterial wilt, Verticillium wilt, and phytophthora root rot. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or 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 cage isolation in 2018 in Nampa, ID. S&W Seed Co. will maintain sufficient breeder and 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 may be available for sale in the spring of 2024 if SW18XPQ62 is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

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

SW18XPQ73, N17XPQ73 (Exp.)

Origin and Breeding History

SW18XPQ73, N17XPQ73 (all experimental designations), is an intracross of 141 parent plants (Syn 1) in which all parents originated from S&W germplasms, and were selected for forage yield, persistence, forage quality, and or resistance to one or more of the following diseases and/or pests: Bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race1&2). Parent plants were identified using phenotypic selection in selection nurseries for increased forage quality, persistence, agronomic characteristics, and improved forage yield. Breeder seed (Syn 1) was grown in cage isolation in 2018 in Nampa, ID and was bulked in total.

Areas of Probable Adaptation

This variety is adapted to the North Central, Winterhardy Intermountain, and East Central areas of the United States. SW18XPQ73 has been tested in Wisconsin, Idaho, Minnesota and Ohio, US; and Ontario, CAN. Areas of intended use are: North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains areas of the United States and Canada and similar environments.

Agronomic and Botanical Characteristics

SW18XPQ73 is moderately dormant, similar to the FD 4 check. It is very winterhardy. Flower color (Syn 2) is 81% purple, 18% variegated, with trace amounts of white, yellow and cream. SW18XPQ73 is highly resistant to anthracnose (Race 1), Aphanomyces root rot (Race 1 and Race 2), bacterial wilt, Verticillium wilt and phytophthora root rot; with resistance to pea aphid. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or 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 cage isolation in 2018 in Nampa, ID. S&W Seed Co. will maintain sufficient breeder and 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 may be available for sale in the spring of 2024 if SW18XPQ73 is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

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

SW18XPS76, W17XPS76 (Exp.)

Origin and Breeding History

SW18XPS76, W17XPS76 (all experimental designations), is an intracross of 72 parent plants (Syn 1) in which all parents originated from S&W germplasms, and were selected for forage yield, persistence, forage quality, and or resistance to one or more of the following diseases and/or pests: Bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race1&2). Parent plants were identified using phenotypic selection in selection nurseries for increased forage quality, persistence, agronomic characteristics, and improved forage yield. Breeder seed (Syn 1) was grown in cage isolation in 2018 in Nampa, ID and was bulked in total.

Areas of Probable Adaptation

This variety is adapted to the North Central, Winterhardy Intermountain, and East Central areas of the United States. SW18XPS76 has been tested in Wisconsin, Idaho, Minnesota, and Ohio, US; and Ontario, CAN. Areas of intended use are: North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains areas of the United States and Canada and similar environments.

Agronomic and Botanical Characteristics

SW18XPS76 is moderately dormant, similar to the FD 4 check. It is very winterhardy. Flower color (Syn 2) is 71% purple, 28% variegated, with trace amounts of white, yellow and cream. SW18XPS76 is highly resistant to anthracnose (Race 1), Aphanomyces root rot (Race 1), Verticillium wilt, and phytophthora root rot. It is resistant to Aphanomyces root rot (Race 2) and pea aphid and has moderate resistance to spotted aphid. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or 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 cage isolation in 2018 in Nampa, ID. S&W Seed Co. will maintain sufficient breeder and 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 may be available for sale in the spring of 2024 if SW18XPS76 is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

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

SW18YPQ81, W17YPQ81 (Exp.)

Origin and Breeding History

SW18YPQ81, W17YPQ81 (all experimental designations), is an intracross of 87 parent plants (Syn 1) in which all parents originated from S&W germplasms, and were selected for forage yield, persistence, forage quality, standability and or resistance to one or more of the following diseases and/or pests: Bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (Race1&2). Parent plants were identified using phenotypic selection in selection nurseries for increased forage quality, persistence, agronomic characteristics, standability and improved forage yield. Breeder seed (Syn 1) was grown in cage isolation in 2018 in Nampa, ID and was bulked in total.

Areas of Probable Adaptation

This variety is adapted to the North Central, East Central and Winterhardy Intermountain areas of the United States. SW18YPQ81 has been tested in Wisconsin, Idaho, Minnesota and Ohio, US; and Ontario, CAN. Areas of intended use are: North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains areas of the United States and Canada and similar environments.

Agronomic and Botanical Characteristics

SW18YPQ81 is moderately dormant, similar to the FD 4 check. It is very winterhardy. Flower color (Syn 2) is 83% purple, 16% variegated, with trace amounts of white and cream and yellow. SW18YPQ81 is highly resistant to anthracnose (Race 1), Aphanomyces root rot Race 1, bacterial wilt, Verticillium wilt, and Phytophthora root rot; with resistance to Aphanomyces root rot Race 2, and low resistance to pea aphid and spotted aphid. It has not been tested for other pest reactions. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or 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 cage isolation in 2018 in Nampa, ID. S&W Seed Co. will maintain sufficient breeder and 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 may be available for sale in the spring of 2024 if SW18YPQ81 is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

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 Amendment-Description & Name Change
SW3406

Variety Name: SW3406
Experimental Designation(s): SW3406, SW1406, 14XXP06, W13XXP60
Date A&MLVRB first recommended this variety: January 10, 2017
Date(s) any previous amendments were recommended: January 24, 2018 WS, BW, FW
Date this amendment was submitted: November 20, 2022 Salt Germ Tolerance

Origin and Breeding History

SW3406, (SW1406, 14XXP06, W13XXP60, experimental designations) is an intracross of 97 parent plants (Syn 1) selected by S&W Seed Company from S&W 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 increased forage quality, persistence, agronomic characteristics and improved forage yield. Breeder seed (Syn 1) was grown in the greenhouse in Arlington, WI in 2013. Seed was bulked equally.

Areas of Probable Adaptation

This variety is adapted to North Central, East Central and the Moderately Winterhardy Intermountain areas of the United States. SW3406 has been tested in Washington and Wisconsin. Areas of intended use are: North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains areas of the United States and Canada and similar environments.

Agronomic and Botanical Characteristics

SW3406 is dormant, similar to the FD 3 check. It is very winterhardy. Flower color (Syn 3) is 58% purple, 1% cream, 40% variegated with a trace of yellow and white. Test variety has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check. The variety is highly resistant to bacterial wilt, Fusarium wilt, Anthracnose (Race 1), Verticillium wilt, Phytophthora root rot, pea aphid and Aphanomyces root rot (Race 1 and 2). It is resistant to stem nematode 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 of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or 3), and certified (Syn 3, 4 or Syn 5) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed (Syn1) was produced in greenhouse isolation in 2013 in Arlington, Wisconsin. S&W Seed Co. will maintain sufficient breeder and 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 may be available for sale in the spring of 2017 if SW3406 is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		Length of Stand Limitation – If None, Please State	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

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 Amendment-Description & Name Change
SW3407

Variety Name: SW3407
Experimental Designation(s): SW3407, SW1407, 14XXP07, W13XXS61
Date A&MLVRB first recommended this variety: January 10, 2017
Date(s) any previous amendments were recommended: January 24, 2018 WS, BW, FW; August 25, 2022-Name Change
Date this amendment was submitted: November 20, 2022 Salt Germ Tolerance

Origin and Breeding History

SW3407, (SW1407, 14XXP07, W13XXS61, experimental designations) is an intracross of 56 parent plants (Syn 1) selected by S&W Seed Company from S&W experimentals selected for forage yield, persistence, forage quality, standability and or resistance to one or more of the following pests and/or diseases: 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 increased forage quality, persistence, agronomic characteristics and improved forage yield. Breeder seed (Syn 1) was grown in the greenhouse in Arlington, WI in 2013. Seed was bulked in total.

Areas of Probable Adaptation

This variety is adapted to North Central, East Central and the Moderately Winterhardy Intermountain areas of the United States. SW3407 has been tested in Washington and Wisconsin. Areas of intended use are: North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain and Great Plains areas of the United States and Canada and similar environments.

Agronomic and Botanical Characteristics

SW3407 is dormant, similar to the FD 3 check. It is winterhardy. Flower color (Syn 3) is 71% purple, 1% cream, 27% variegated with a trace of yellow and white. SW3407 has improved salt tolerance of germinating alfalfa seeds similar to the tolerant check. The variety is highly resistant to bacterial wilt, Anthracnose (Race 1), Fusarium wilt, Phytophthora root rot, Verticillium wilt, and Aphanomyces root rot (Race 1 and 2). It is resistant to pea aphid, stem nematode, 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 of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or 3), and certified (Syn 3, 4 or Syn 5) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed (Syn1) was produced in greenhouse isolation in 2013 in Arlington Wisconsin. S&W Seed Co. will maintain sufficient breeder and 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 may be available for sale in the spring of 2017 if SW3407 is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		
Foundation	_	X
Registered	_	
Certified	_	X

Length of Stand Limitation – If None, Please State	
Foundation	3 years
Registered	
Certified	6 years

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 Amendment-Description & Name Change
SW4107

Variety Name: SW4107
Experimental Designation(s): 11XXP07, W10XXP83
Date A&MLVRB first recommended this variety: January 12, 2016
Date(s) any previous amendments were recommended: September 30, 2016-Name Change
Date this amendment was submitted: November 30, 2022 Name Change & Winter Survival

Origin and Breeding History

SW4107, (SW4107, 11XXP07, W10XXP83, experimental designations) is a 168 plant intracross of S&W germplasm. Parent plants were identified using phenotypic recurrent selection in field selection nurseries for standability (lodging tolerance), forage quality, persistence, agronomic characteristics and improved forage yield. Parents of W10XXP83 originated from three S&W experimentals and 55Q27 selected for forage yield, persistence, forage quality, 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. Breeder seed (SYN 1) was grown in greenhouse isolation in 2010 in Arlington, WI. Seed was bulked in total.

Areas of Probable Adaptation

SW4107 is adapted to the north central, moderately winterhardy intermountain regions of the U.S., Canada and similar environments. The variety has been tested in Washington, Wisconsin, and Ontario, Canada. Intended use will be in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain, Great Plains areas of the United States and Canada.

Agronomic and Botanical Characteristics

SW4107 is Moderately Dormant, similar to FD4 check. It is very winterhardy. Flower color (Syn 3) is 99% purple, with traces of yellow, cream, variegated and white. SW4107 is highly resistant to A*nthracnose* (Race 1), *Aphanomyces* root rot (Race 1), *Aphanomyces* root rot (Race 2), bacterial wilt, *Verticillium* wilt, *Fusarium* wilt, and *Phytophthora* root rot; with resistance to stem nematode and pea aphid; with moderate resistance to spotted alfalfa aphid. Reaction to other pests have not been tested. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

Procedures for Maintaining Seed Stock

S&W Seed Company will maintain sufficient breeder seed (Syn 1) and/or foundation seed (Syn 2 or Syn 3) and/or certified seed (Syn 3, Syn 4 or Syn 5) for the projected life of the variety. Production of Syn 4 foundation seed requires the consent of the breeder. Seed stock will be maintained in secure climate controlled S&W Seed Company seed storage facilities.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed may be available for sale in 2016 of SW4107.

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

Generations Allowed – Mark All That Apply

Foundation	_	X
Registered	_	
Certified	_	X

Length of Stand Limitation – If None, Please State

Foundation	___	3 years
Registered	___	
Certified	___	6 years

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.

Alfalfa Amendment-Description & Name Change
SW9720

Variety Name: SW9720
Experimental Designation(s): SW9720, SW9907
Date A&MLVRB first recommended this variety: January 2001
Date(s) any previous amendments were recommended:
Date this amendment was submitted: November 30, 2022 Salt Germ Tolerance

Origin & Breeding History:

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

Areas of Probable Adaptation:

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

Agronomic and Botanical Characteristics:

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

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

Procedures for Maintaining Seed Stock:

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

Certified Seed Availability and Publication of Certified Seed Production:

Certified seed will be available for sale in the Fall of 2001.
No decision has been made regarding Plant Variety Protection.
This information may be sent to the P.V.P. office.
Variety name: SW 9720 Date submitted: November 1, 2000.
Experimental designations: SW 9720, SW 9907.

Alfalfa Amendment-Description & Name Change
SW9812S

Variety Name: SW9812S
Experimental Designation(s): SW9812
Date A&MLVRB first recommended this variety: February 6, 2013
Date(s) any previous amendments were recommended: Feb. 17, 2022-Forage Salt Tolerance, Name Change
Date this amendment was submitted: November 30, 2022 Salt Germ Tolerance

Origin and Breeding History

This synthetic variety, SW9812S, was developed by S&W Seed Company, Bob Sheesley, and Tim Jacobsen, using the outdoor cages crossing method with both honey bees and leaf cutting bees from selections from two parent lines. The selection criteria used in the development of this variety include forage yield and resistance to Spotted Alfalfa Aphid, Bacterial Wilt, Fusarium Wilt, Pea Aphid, Phytophthora Root Rot, Blue Alfalfa Aphid, and Stem Nematode. Breeder seed was produced in 2008.

Areas of Probable Adaptation

SW9812S is adapted to the Southwestern region. This variety has been tested in the Central Valley of California and Tucson, Arizona and is intended for use in the Southwest area.

Agronomic and Botanical Characteristics

This variety is a non-dormant similar to FD 9 check. Flower color (Syn 2) is 98% purple and 2% variegated. SW9812S has high resistance to Spotted Alfalfa Aphid: with resistance to Bacterial Wilt and Fusarium Wilt, Pea Aphid, and moderate resistance to Phytophthora Root Rot, Blue Alfalfa Aphid, and Stem Nematode. Reaction to Aphanomyces root rot, Root Knot nematode, Verticillium Wilt, and Anthracnose has not been tested. SW9812S is forage and germination salt tolerant.

Procedures for Maintaining Seed Stock

Breeder seed was produced in 2008. S & W Seed Company will maintain sufficient breeder seed (Syn 2) in cold storage in the applicant's research facility. Under certification, the classes of seed will be breeder (Syn 2), foundation (Syn 3 or Syn 4), and certified (Syn 3 or Syn 4 or Syn 5). Stands of foundation and certified seed fields are limited to 4 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed will be marketed in 2013. Certified seed 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 Amendment-Description & Name Change
SW9813S

Variety Name: SW9813S
Experimental Designation(s): SW9813
Date A&MLVRB first recommended this variety: February 6, 2013
Date(s) any previous amendments were recommended: September 2020-Name Change, November 30, 2021-Salt Forage Tolerance
Date this amendment was submitted: February 17, 2022-Salt Germ Tolerance

Origin and Breeding History

This synthetic variety, SW9813S, experimental SW 9813, was developed by S&W Seed Company, Bob Sheesley, and Tim Jacobsen, using the outdoor cages crossing method with both honey bees and leaf cutting bees from selections from two parent lines. The selection criteria used in the development of this variety include forage yield and resistance to Blue Alfalfa Aphid, Bacterial Wilt, Fusarium Wilt, Phytophthora Root Rot, Pea Aphid, Spotted Alfalfa Aphid, and Stem Nematode. Breeder seed was produced in 2008.

Areas of Probable Adaptation

SW9813S is adapted to the Southwestern region. This variety has been tested in the Central Valley of California and Tucson, Arizona and is intended for use in the Southwest area.

Agronomic and Botanical Characteristics

This variety is a non-dormant similar to FD 9 check. Flower color (Syn 2) is 98% purple, 1.5% variegated, and 0.5% white. SW9813S has high resistance to Blue Alfalfa Aphid: with resistance to Bacterial Wilt, Fusarium Wilt, Phytophthora Root Rot, Pea Aphid, and Spotted Alfalfa Aphid; moderate resistance to Stem Nematode. Reaction to Aphanomyces root rot, Root Knot nematode, Verticillium Wilt, and Anthracnose has not been tested. SW9813S is salt tolerant (germination and forage production).

Procedures for Maintaining Seed Stock

Breeder seed was produced in 2008. S & W Seed Company will maintain sufficient breeder seed (Syn 2) in cold storage in the applicant's research facility. Under certification, the classes of seed will be breeder (Syn 2), foundation (Syn 3 or Syn 4), and certified (Syn 3 or Syn 4 or Syn 5). Stands of foundation and certified seed fields are limited to 4 and 6 years, respectively.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed will be marketed in 2013. Certified seed 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 Amendment-Description & Name Change
SW5637S

Variety Name: SW5637S
Experimental Designation(s): SW5637S, SW16XPS37, N15XPS62
Date A&MLVRB first recommended this variety: February 6, 2020
Date(s) any previous amendments were recommended:
Date this amendment was submitted: August 23, 2022

Origin and Breeding History

SW5637S, SW16XPS37, N15XPS62, (all experimental designations), is an intercross of 164 parent plants (Syn 1) selected by S&W Seed Company from 4 S&W experimental varieties selected for forage yield, persistence, germination/growth under salt, and or resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Anthracnose (Race 1), Aphanomyces root rot Race 1, and stem nematode. Parent plants were identified using phenotypic selection in selection nurseries for increased forage quality, persistence, agronomic characteristics and improved forage yield. Breeder seed (Syn 2) was grown in cage isolation in Connell, WA in 2016. Seed was bulked in total.

Areas of Probable Adaptation

This variety is adapted to the North Central, East Central and Winterhardy Intermountain regions of the United States. SW5637S has been tested in Idaho, Wisconsin, Minnesota and Pennsylvania Areas of intended use are: North Central, East Central, Moderately Winterhardy Intermountain, Winter hardy Intermountain and Great Plains areas of the United States and Canada and similar environments.

Agronomic and Botanical Characteristics

SW5637S is moderately dormant, similar to the FD 5 check. It is moderately winterhardy. Flower color (Syn 3) is 99% purple, and traces of white, yellow, variegated and cream. The variety is highly resistant to Anthracnose (Race 1), bacterial wilt, Aphanomyces root rot (Race 1), Phytophthora root rot, and Verticillium wilt. It is resistant to Fusarium wilt, and Aphanomyces root rot (Race2). SW5637S has improved forage production under salt stress similar to the tolerant check 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

S&W Seed Company will maintain sufficient breeder seed (Syn 2) and/or foundation seed (Syn 3, or Syn 4) and/or certified seed (Syn 3, Syn 4 or Syn 5) for the projected life of the variety. Production of Syn 4 foundation seed requires the consent of the breeder. Seed stock will be maintained in secure climate controlled S&W Seed Company seed storage facilities. Breeder seed (Syn 2) was grown in cage isolation in Connell, WA in 2016.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed may be available for sale in the spring of 2020 if SW5637S is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3 years
Registered		Registered	
Certified	X	Certified	6 years

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 Amendment-Description & Name Change
SW7408

Variety Name: SW7408
Experimental Designation(s): SW7408, 04U08CI1
Date A&MLVRB first recommended this variety: February 17, 2021
Date(s) any previous amendments were recommended:
Date this amendment was submitted: August 23, 2022

Origin and Breeding History:

SW7408**,** 04U08CI1 (both experimental designations), is a 216 plant, synthetic in which 12 elite clonal 1/2 sib families were classified using half sib testing for agronomics, field appearance and forage production in Wagga Wagga, New South Wales, Australia. Each half sib family selections were made for disease and insect resistance that were present in the field from those 12 elite families. 216 plants were transplanted to cage in Wagga Wagga New South Wales, Australia in 2004, crossed and seed bulked in total creating the first year of Breeder seed (Syn 1).

Areas of Probable Adaptation

This variety is adapted to the Southwest, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the US. SW7408 is intended for Australia, the Southwest, Southeast, Great Plains, East Central, Moderately Winterhardy Intermountain and Winterhardy Intermountain areas of the US and similar environments. This variety has been tested in California, Idaho and New Mexico.

Agronomic and Botanical Characteristics

SW7408 is non dormant, similar to the FD 7 check. Flower color (Syn 2) is 97% purple, 2% variegated with traces of cream, yellow and white. This variety is suitable for use in producing hay, haylage, greenchop, and dehydrated product.

The variety is highly resistant to anthracnose (Race 1), spotted alfalfa aphid, blue alfalfa aphid, pea aphid, Fusarium wilt and Phytophthora root rot. It is resistant to Verticillium wilt, bacterial wilt, and stem nematode. It has low resistance to Aphanomyces root rot (Race 1). It has not been tested for other pest reactions.

Procedures for Maintaining Seed Stock

Seed increase is on a limited generation basis with one generation of breeder, two generations of foundation and three generations of certified seed classes. Breeder (Syn 1), foundation (Syn 2 or 3), and certified (Syn 3, 4 or Syn 5) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. S&W Seed Co. will maintain sufficient breeder and foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively. Seed stock will be maintained in secure climate-controlled S&W Seed Company seed storage facilities. Breeder seed (Syn1) was produced in Wagga Wagga, New South Wales Australia in 2004.

Certified Seed Availability and Publication of Certified Seed Production

Certified seed may be available for sale in the spring of 2021 if SW7408 is recommended for certification. The applicant requests that certified seed acreage not be published by AOSCA and its agencies.

Generations Allowed – Mark All That Apply		**Length of Stand Limitation – If None, Please State**	
Foundation	X	Foundation	3 Years
Registered		Registered	
Certified	X	Certified	6 Years

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
AFX131071 (Exp)

Origin and Breeding History
AFX131071 is a synthetic variety with 17 parent plants that were selected for aphid resistance, leaf disease resistance, persistence and agronomic characteristics from 4 year old California yield trials, crossed in the greenhouse and bulk harvested as Synthetic generation 1. Parent plants were selected from various populations which were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, blue alfalfa aphid, and stem nematode. Parentage of AFX131071 traces 100% to miscellaneous Alforex Seeds germplasm sources. Breeder seed was produced under cage isolation near Woodland, California in 2013. Seed was bulk harvested from all parent plants as Synthetic generation 2.

Areas of Probable Adaptation
AFX131071 is adapted to the Southwest areas of the US and Argentina and is intended for use in the Moderately Winterhardy Intermountain and Southwest areas of the US, and Argentina. AFX131071 has been tested in California and Argentina.

Agronomic and Botanical Characteristics
AFX131071 is a very non-dormant variety with fall dormancy similar to FD class 11 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple, and a trace of variegated, white, cream, and yellow. AFX131071 has high resistance to, Fusarium wilt, Blue Alfalfa aphid, Pea aphid, and Spotted alfalfa aphid. It has resistance to Anthracnose (race 1), Phytophthora root rot, Verticillium wilt, Cowpea aphid, and Stem nematode. It has moderate resistance to Bacterial wilt. Reaction to Aphanomyces root rot (race 1), and Root knot nematode has not been tested.

Procedures for Maintaining Seed Stock
Seed increase of AFX131071 is on a limited generation basis with two generations of breeder, three generations of 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 2013. 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 AFX131071 will be available in 2023. Certified acreage may not be published by AOSCA or member agencies.

Generations Allowed – Mark All That Apply
Foundation	Syn.2, Syn.3 or Syn.4
Registered	
Certified	Syn.3, Syn.4, or Syn.5

Length of Stand Limitation – If None, Please State
Foundation	3
Registered	
Certified	6

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