A REPORT OF THE

NATIONAL ALFALFA AND MISCELLANEOUS LEGUMES VARIETY REVIEW BOARD



ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

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NATIONAL ALFALFA AND MISCELLANEOUS LEGUMES VARIETY REVIEW BOARD

ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES (JANUARY 2005)

The Association of Official Seed Certifying Agencies (AOSCA), National Alfalfa and Miscellaneous Legumes Variety Review Board reviewed the following varieties, January 17, 2005, in Las Vegas, NV. The Board recommended the inclusion of these varieties for certification. Seed of these varieties may be certified, providing production meets all standards of the Certifying Agency of the state in which the seed is grown.

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

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

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Respectively submitted,

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6200HT

- 6200HT was selected for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt,
 Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2), lesion nematode, high
 stem digestibility, high stem protein and winter survival. Phenotypic recurrent selection was used. Final
 selections were made from 2-3 year old space plant selection nurseries near Napier, Iowa, Livingston,
 Wisconsin and Marshfield, Wisconsin based on yield, winter survival, fall dormancy, leafhopper yellowing
 and leaf disease.
- 2. 6200HT appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.
- 3. Fall dormancy of 6200HT is similar to the FD 2 check. Flower color of Syn 2 generation is approximately 73% purple and 27% variegated with traces of yellow, white and cream.
- 4. 6200HT has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot (race 1) and pea aphid, resistance to Aphanomyces root rot (race 2), moderate resistance to stem nematode and is susceptible to spotted alfalfa aphid. It has not been evaluated for resistance to blue alfalfa aphid and root knot nematode. Tolerant to continuous grazing.
- 5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed (syn 2 or 3) may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 1998. ABI will maintain sufficient seed stocks for the life of the variety.
- 6. Certified seed will be available in 2004.

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

Variety name 6200HT					
Experiment designation ZN 9833					
Date NA&MLVRB first accepted this variety January 2004					
Dates previous amendments were accepted					
Date amendment submitted December 2004					

1

FC 1055 (November 19, 2004)

1. FC 1055 is a synthetic variety with 200 parental clones. Parent clones trace to one population selected for resistance to Phytophthora root rot, anthracnose (race1), bacterial wilt, Fusarium wilt, Verticillium wilt, blue alfalfa aphid, spotted alfalfa aphid, pea aphid, stem nematode, and northern root-knot nematode.

Recurrent phenotypic selection was used. Final selections were made from four and five year old nurseries near Nampa, Idaho. Selections were based on survival under intensive grazing, wheel traffic, and overall root and crown health.

Parentage traces to an experimental closely related to the variety Archer (100%).

Approximate germplasm source contributes are:

M. falcata (6%), Ladak (6%), M. varia (19%), Turkistan (13%), Flemish (30%), Chilean (9%), Peruvian (2%), Indian (2%), African (1%), Arabian (0%) and unknown (12%).

- Areas of adaptation is the Winterhardy Intermountain Region and Moderately Winterhardy Intermountain regions. FC 1055 has been tested in Idaho and California, and is intended to be used in the pacific Northwest and Northern California.
- 3. FC 1055 is a fall dormancy 5, similar to the FD of Archer. Flower color is 90% purple, 9% variegated, and a trace of cream, yellow, and white.
- 4. FC 1055 has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, northern root-knot nematode, and stem nematode, and resistant to anthracnose (race 1), pea aphid, spotted alfalfa aphid, blue alfalfa aphid, Moderate resistance to Aphanomyces root rot (race 1).
- 5. Seed increase is limited to one generation each of breeder (Syn 1), foundation (Syn 2) and certified (Syn 3) seed classes. Certified may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Breeder and Foundation seed Production, is limited to the Pacific Northwest. Breeder seed was produced in 2000. ABI will maintain sufficient stocks for the projected life of the variety.
- 6. Certified seed will be available in 2005.
- 7. Plant variety protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

9. Variety Name: FC 10	<u> </u>	Date submitted	November 19, 2004	
Experimental designations:	ZG 0050A			

Integrity

- 1. Integrity was selected for tolerance to continuous grazing and for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2). Phenotypic recurrent selection was used.
- 2. Integrity appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.
- 3. Fall dormancy of Integrity is similar to the FD 4 check. Flower color of Syn 2 generation is approximately 64% purple and 36% variegated with a trace of yellow, white and cream.
- 4. Integrity has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot (race 1) and resistance to Aphanomyces root rot (race 2). It has not been evaluated for resistance to pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode and root knot nematode. Tolerant to continuous grazing.
- 5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed (syn 2 or 3) may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 2001. ABI will maintain sufficient seed stocks for the life of the variety.
- 6. Certified seed will be available in 2004.

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

Variety name Integrity					
Experiment designation ZG 0145					
Date NA&MLVRB first accepted this variety January 2004					
Dates previous amendments were accepted					
Date amendment submitted December 2004					
Date amonation submitted December 2007					

ZG 0146A

- 1. ZG 0146A was selected for tolerance to continuous grazing and for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2). Phenotypic recurrent selection was used.
- 2. ZG 0146A appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.
- 3. Fall dormancy of ZG 0146A is similar to the FD 4 check. Winter survival is similar to the WS 1 check. Flower color of Syn 2 generation is approximately 72% purple and 28% variegated with a trace of yellow, white and cream. **Tolerant to continuous grazing.**
- 4. ZG 0146A has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot races 1 and 2. It has not been evaluated for resistance to pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode and root knot nematode.
- 5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed (syn 2 or 3) may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 2001. ABI will maintain sufficient seed stocks for the life of the variety.
- 6. Certified seed will be available in 2004.

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

Variety name		~	
Experiment designation	ZG 0146A		
Date NA&MLVRB first accepted	this variety	January 2004	
Dates previous amendments were	accepted		
Date amendment submitted	December 2004		

ZG 0246

- 1. ZG 0246 was selected for tolerance to continuous grazing and for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2). Phenotypic recurrent selection was used.
- ZG 0246 appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.
- 3. Fall dormancy of ZG 0246 is similar to the FD 4 check. Winter survival is similar to the WS 1 check. Flower color of Syn 2 generation is approximately 66% purple and 34% variegated with a trace of yellow, white and cream. Tolerant to continuous grazing.
- 4. ZG 0246 has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot (races 1 and 2) and resistance to stem nematode. It has not been evaluated for resistance to pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and root knot nematode.
- Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed (syn 2 or 3) may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 2002. ABI will maintain sufficient seed stocks for the life of the variety.
- Certified seed will be available in 2005

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8.	This	inform	nation	can be	forwarded	to	the PVP	office.
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Plant Variety Protection will not be applied for.		
This information can be forwarded to the PVP office.		
Variety Name:	Date submitted	November 2004
Experimental designations: ZG 0246		
*Results should be reported as Test variety is check.	, similar to the FD _	check. Test variety

5

AmeriStand 444NT (November 19, 2004)

1. AmeriStand 444NT is a synthetic variety with 300 parental clones. Parent clones trace to one population selected for resistance to Phytophthora root rot, anthracnose (race1), bacterial wilt, Fusarium wilt, Verticillium wilt, blue alfalfa aphid, spotted alfalfa aphid, pea aphid, stem nematode, and northern root-knot nematode.

Recurrent phenotypic selection was used. Final selections were made from four and five year old nurseries near Nampa, Idaho. Selections were based on survival under intensive grazing, wheel traffic, and overall root and crown health.

Parentage traces to an experimental closely related to the variety Archer (100%).

Approximate germplasm source contributes are: M. falcata (6%), Ladak (6%), M. varia (19%), Turkistan (13%), Flemish (30%), Chilean (9%), Peruvian (2%), Indian (2%), African (1%), Arabian (0%) and unknown (12%).

- 2. Areas of adaptation is the Winterhardy Intermountain Region. AmeriStand 444NT has been tested in Idaho and Colorado and is intended to be used in the Pacific Northwest and areas of the western U.S. requiring a FD 5.
- 3. AmeriStand 444NT is a fall dormancy 4, similar to the FD of Saranac. Flower color is 90% purple, 9% variegated, and trace of cream, yellow, and white.
- 4. AmeriStand 444NT has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, and stem nematode, resistance to Verticillium wilt, pea aphid, spotted alfalfa aphid, and northern root-knot nematode; and moderate resistance to Aphanomyces root rot (race 1), and blue alfalfa aphid.
- 5. Seed increase is limited to one generation each of breeder (Syn 1), foundation (Syn 2) and certified (Syn 3) seed classes. Certified may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Breeder and Foundation seed Production, is limited to the Pacific Northwest. Breeder seed was produced in 1996. ABI will maintain sufficient stocks for the projected life of the variety.
- 6. Certified seed will be available in 2005.
- 7. Plant variety protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

9.	Variety Name:	AmeriS	meriStand 444NT		Date submitted	November 19, 2004	-
Exp	perimental designa	ations:	ZG 9650A				

ZN 0235

- 1. ZN 0235 was selected for resistance to the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), Aphanomyces root rot (races 1 and 2). Phenotypic recurrent selection was used.
- 2. ZN 0235 appears to be adapted to the North Central Region of the U.S. It is intended for use in the North Central Regions of the U.S. It has been tested in Wisconsin, Iowa and Illinois.
- 3. Fall dormancy of ZN 0235 is similar to the FD 3 check. Flower color of Syn 2 generation is approximately 64% purple and 36% variegated with a trace of yellow, white and cream.
- 4. ZN 0235 has high resistance to bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot and Aphanomyces root rot (race 1) and resistance to Aphanomyces root rot (race 2). It has not been evaluated for resistance to pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode and root knot nematode.
- 5. Seed increase is limited to one generation each of breeder (syn 1), foundation (syn 2) and certified (syn 3) seed classes. Certified seed (syn 2 or 3) may be produced from either breeder or foundation classes. A 1, 3 and 6 year stand life is permitted on fields producing breeder, foundation and certified seed classes respectively. Foundation seed production is limited to the Pacific Northwest. Breeder seed was produced in 2002. ABI will maintain sufficient seed stocks for the life of the variety.
- 6. Certified seed will be available in 2005.

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

Variety Name:		Date submitted	November 2004
Experimental designations:	ZN 0235		
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*Results should be reported as Test is, similar to the WS	variety ischeck.	, similar to the FD _	check. Test variet

ZS 0300 November 19, 2004

1. ZS 0300 is a synthetic variety with 200 parent clones. Parent clones trace to one population selected for increased germination and forage yield under saline (NaCl) stress; and resistance to Phytophthora root rot, anthracnose (race1), bacterial wilt, Fusarium wilt, Verticillium wilt, blue alfalfa aphid, spotted alfalfa aphid, pea aphid, stem nematode, and southern root-knot nematode.

Phenotypic recurrent selection was used. Final selections were made from salinity trials in California and Arizona.

Approximate germplasm source contributions are:

M. Falcata (0%), Ladak (0%), M. varia (0%), Turkistan (0%), Flemish (0%), Chilean (0%), Peruvian (0%), Indian (50%), African (0%), Arabian (0%) and unknown (50%). Breeder seed (Syn 1) was produced under field isolation near Nampa, Idaho in 2000.

- 2. Area of intended use is Central and Southern California, and the lower elevations of Arizona and New Mexico. Area of adaptation are the Southwest Regions of the U.S. ZS 0300 has been tested for yield in California.
- 3. ZS 0300 is a fall dormancy 10, similar to the FD of UC 1887. Flower color is approximately 98% purple, 1% variegated, and a trace of Cream, yellow and white.
- 4. ZS 0300 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid, blue alfalfa aphid; and resistance to Verticillium wilt, pea aphid, southern root-knot nematode; and moderate resistance to bacterial wilt, Aphanomyces (race 1), and stem nematode.
- 5. Seed increase is limited to one generation each of breeder (Syn 1), foundation (Syn 2) and certified (Syn 3) seed classes. Certified may be produced from either breeder or foundation classes. A 1, 3 and 5 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Foundation seed production, outside the area of adaptation is limited to single-season production (non-over wintering). Second year of production may be allowed with inspection and approval by breeder prior to second year production. Breeder seed was produced in 2000. ABI will maintain sufficient stocks for the projected life of the variety.
- 6. Certified seed will be available in 2005
- 7. Plant variety protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

9.	Variety Name:		Date submitted	November 19, 2004	
Exp	perimental designations:	ZS 0300			

ZS 0301 November 19, 2004

1. ZS 0301 is a synthetic variety with 250 parent clones. Parent clones trace to one population selected for increased germination and forage yield under saline (NaCl) stress; and resistance to Phytophthora root rot, anthracnose (race1), bacterial wilt, Fusarium wilt, Verticillium wilt, blue alfalfa aphid, spotted alfalfa aphid, pea aphid, stem nematode, and southern root-knot nematode.

Phenotypic recurrent selection was used. Final selections were made from salinity trials in California, and Arizona.

Approximate germplasm source contributions are:

M. Falcata (0%), Ladak (0%), M. varia (0%), Turkistan (0%), Flemish (0%), Chilean (0%), Peruvian (0%), Indian (50%), African (0%), Arabian (0%) and unknown (50%). Breeder seed (Syn 1) was produced under field isolation near Nampa, Idaho in 2000.

- 2. Area of intended use is Central and Southern California, and the lower elevations of Arizona and New Mexico. Area of adaptation is Southwest Regions of U.S. ZS 0301 has been tested for yield in California.
- 3. ZS 0301 is a fall dormancy 10, similar to the FD of UC 1887. Flower color is approximately 99% purple, and a trace of variegated, cream, yellow, and white.
- 4. ZS 0301 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid, blue alfalfa aphid; and resistance to pea aphid, southern root-knot nematode; and moderate resistance to bacterial wilt, Verticillium wilt, Aphanomyces (race 1), and stem nematode.
- 5. Seed increase is limited to one generation each of breeder (Syn 1), foundation (Syn 2) and certified (Syn 3) seed classes. Certified may be produced from either breeder or foundation classes. A 1, 3 and 5 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Foundation seed production, outside the area of adaptation is limited to single-season production (non-over wintering). Second year of production may be allowed with inspection and approval by breeder prior to second year production. Breeder seed was produced in 2000. ABI will maintain sufficient stocks for the projected life of the variety.
- 6. Certified seed will be available in 2005.
- 7. Plant variety protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

9.	Variety Name:		 _ Date submitted	November 19, 2004	
Evr	perimental decignations:	75 0301			,

Saltine (November 19, 2004)

1. Saltine is a synthetic variety with 300 parent clones. Parent clones trace to one population selected for increased germination and forage yield under saline (NaCl) stress; and resistance to Phytophthora root rot, anthracnose (race1), bacterial wilt, Fusarium wilt, Verticillium wilt, blue alfalfa aphid, spotted alfalfa aphid, pea aphid, stem nematode, and southern root-knot nematode.

Phenotypic recurrent selection was used. Final selections were made from salinity trials in California, and Arizona.

Approximate germplasm source contributions are:

M. Falcata (0%), Ladak (0%), M. varia (0%), Turkistan (0%), Flemish (0%), Chilean (0%), Peruvian (0%), Indian (50%), African (0%), Arabian (0%) and unknown (50%). Breeder seed (Syn 1) was produced under field isolation near Kingsburg, CA in 1997.

- 2. Area of intended use is Central and Southern California, and the lower elevations of Arizona and New Mexico. Area of adaptation is Southwest Regions of U.S. Saltine has been tested for yield in California.
- 3. Saltine is a fall dormancy 9, similar to the FD of CUF 101. Flower color is approximately 99% purple, and a trace of variegated, cream, yellow, and white.
- 4. Saltine has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, blue alfalfa aphid, spotted alfalfa aphid; and southern root-knot nematode; and resistance to anthracnose (race 1) and pea aphid; and moderate resistance to Verticillium wilt, and stem nematode. Aphanomyces root rot resistance was not evaluated.
- 5. Seed increase is limited to one generation each of breeder (Syn 1), foundation (Syn 2) and certified (Syn 3) seed classes. Certified may be produced from either breeder or foundation classes. A 1, 3 and 5 year stand life is permitted on fields producing breeder, foundation and certified classes, respectively. Foundation seed production, outside the area of adaptation is limited to single-season production (non-over wintering). Second year of production may be allowed with inspection and approval by breeder prior to second year production. Breeder seed was produced in 1997. ABI will maintain sufficient stocks for the projected life of the variety.
- 6. Certified seed will be available in 2004
- 7. Plant variety protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

9. Variety Name: Saltine	<u>e</u>	Date submitted	November 19, 2004	
Experimental designations:	ZS 9898			

- 1. CW 05009 is a synthetic variety with 195 parent plants were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). 165 of the parent plants were selected from crosses between selections from five-year old Pennsylvania and Wisconsin yield trials and a three-year old Wisconsin yield trial. 30 of the parent plants were selected from Ascend. Yield trial source varieties were derived from various populations that were developed by phenotypic recurrent selection for high relative feed value (using Near Infrared Reflectance Spectroscopy), high forage yield potential, and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 05009 traces to the following germplasm sources: 512, Ascend, and miscellaneous Cal/West Seeds breeding populations. Breeder seed was produced under cage isolation near Woodland, California in 2000. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (4%), Ladak (5%), M.varia (28%), Turkistan (4%), Flemish (51%), and Chilean (8%).
- 2. CW 05009 is adapted to and intended for use in the North Central, East Central, and Great Plains areas of the U.S.. CW 05009 has been tested in Wisconsin, Iowa, Indiana, Ohio, Pennsylvania, and Nebraska.
- 3. CW 05009 is a moderately dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. CW 05009 has high resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and stem nematode, with resistance to Aphanomyces root rot (race 1), pea aphid, spotted alfalfa aphid, and northern root knot nematode (*Meloidogyne hapla*). Reaction to the blue alfalfa aphid has not been tested.
- 5. Seed increase of CW 05009 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2000. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 05009 will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

9.	Variety Name:	Date submitted: November 30, 2004.

Experimental Designation: CW 05009

CW14032

- 1. CW 14032 is a synthetic variety with 165 parent plants that were selected for resistance to Phytophthora root rot or Aphanomyces root rot (race 1). Parent plants were selected from two-year old nursery selection from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, standability, high relative feed value (using Near Infrared Reflectance Spectroscopy), high forage yield potential, and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 14032 traces to the following germplasm sources: 512, Gold Plus, CW 75046, and miscellaneous Cal/West Seeds breeding populations. Breeder seed was produced under cage isolation near Woodland, California in 2001. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (4%), Ladak (4%), M.varia (28%), Turkistan (4%), Flemish (52%), and Chilean (8%).
- 2. CW 14032 is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, Great Plains areas of the U.S.. CW 14032 has been tested in Wisconsin, Minnesota, South Dakota, Iowa, Indiana, Ohio, and Pennsylvania.
- 3. CW 14032 is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. CW 14032 has high resistance to anthracnose (race 1) and Fusarium wilt, resistance to bacterial wilt, Verticillium wilt, Phytophthora root rot and, Aphanomyces root rot (race 1), and moderate resistance to pea aphid and spotted alfalfa aphid. Reaction to the blue alfalfa aphid, stem nematode, and root knot nematode has not been tested.
- 5. Seed increase of CW 14032 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2001. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 14032 will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

9. Variety Name:	Date submitted: November 30, 2004.
Experimental Designation: CW 14032	

CW 15030.doc

- 1. CW 15030 is a synthetic variety with 210 parent plants that were selected for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from three-year old Iowa and Wisconsin yield trials. Yield trial source varieties were derived from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, standability, high relative feed value (using Near Infrared Reflectance Spectroscopy), high forage yield potential, and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 15030 traces to the following germplasm sources: CW 75046, 512, Stallion, Gold Plus, Abound, DK 142, MultiQueen, and miscellaneous Cal/West Seeds breeding populations. Breeder seed was produced under cage isolation near Woodland, California in 2001. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (4%), Ladak (4%), M.varia (27%), Turkistan (4%), Flemish (53%), and Chilean (8%).
- 2. CW 15030 is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, Great Plains areas of the U.S.. CW 15030 has been tested in Wisconsin, Minnesota, South Dakota, Iowa, Indiana, Ohio, and Pennsylvania.
- 3. CW 15030 is a moderately dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. CW 15030 has high resistance to bacterial wilt and Phytophthora root rot, resistance to anthracnose (race 1), Fusarium wilt, Verticillium wilt, Aphanomyces root rot (race 1), and pea aphid, and moderate resistance to spotted alfalfa aphid. Reaction to the blue alfalfa aphid, stem nematode, and root knot nematode has not been tested.
- 5. Seed increase of CW 15030 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2001. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 15030 will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

9.	Variety Name:	Date submitted: November 30, 2004.
	Experimental Designation: CW 15030	

CW 15041.doc

- 1. CW 15041 is a synthetic variety with 235 parent plants that were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from three-year old Iowa and Wisconsin yield trials and two-year old nursery selection from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, standability, high relative feed value (using Near Infrared Reflectance Spectroscopy), high forage yield potential, and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 15041 traces to the following germplasm sources: Ascend, CW 75046, 512, Stallion, Gold Plus, Abound, DK 142, MultiQueen, and miscellaneous Cal/West Seeds breeding populations. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (4%), Ladak (4%), M.varia (28%), Turkistan (4%), Flemish (52%), and Chilean (8%).
- 2. CW 15041 is adapted to the North Central area of the U.S. and is intended for use in the North Central, East Central, Great Plains areas of the U.S. CW 15041 has been tested in Wisconsin, South Dakota, and Iowa.
- 3. CW 15041 is a moderately dormant variety with fall dormancy similar to FD class 5 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. CW 15041 has high resistance to Verticillium wilt, Phytophthora root rot, and pea aphid, with resistance to anthracnose (race 1), bacterial wilt, Fusarium wilt, Aphanomyces root rot (race 1), and spotted alfalfa aphid. Reaction to the blue alfalfa aphid, stem nematode, and root knot nematode has not been tested.
- 5. Seed increase of CW 15041 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 2001. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 15041 will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

Experimental Designation: CW 15041

9.	Variety Name:	Date submitted: November 30, 2004.
- '		Dute subfillited. 140vember 30, 2004.

- 1. **CW 907** is a synthetic variety with 470 parent plants which were selected sequentially for resistance to Phytophthora root rot and Anthracnose (race 1). Parent plants were selected from crosses between selections from four year old California yield trials and various populations developed by a combination of phenotypic recurrent selection and strain crossing with selection for one or more of the following pests: Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot, blue alfalfa aphid, and spotted alfalfa aphid. Parentage of **CW 907** traces to the following germplasm sources: Altiva, CW 2820, DK 189, Mecca, CW 2817, UC 332, and CW 2818. Approximate germplasm source contributions are as follows: M.varia (2%), Turkistan (6%), Flemish (2%), Chilean (4%), Peruvian (2%), Indian (23%), African (52%), and Unknown (9%).
- 2. CW 907 is adapted to the Soutwestern U.S. and is intended for use in the southwestern U.S., Mexico, and Argentina. CW 3957 has been tested in California and Mexico.
- 3. **CW 907** is a very non-dormant variety with fall dormancy similar to CUF 101. Flower color observed in the Syn.2 generation is approximately 100% purple.
- 4. **CW 907** has high resistance to Fusarium wilt, stem nematode, spotted alfalfa aphid, blue alfalfa aphid, and pea aphid, resistance to anthracnose (race 1) and Phytophthora root rot, and moderate resistance to Verticillium wilt. Reaction to bacterial wilt, Aphanomyces root rot (race 1), and root knot nematode has not been adequately tested.
- 5. Seed increase of **CW 907** is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1993. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 907 will be available in 1997.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

Variety Name: CW 907
Experimental Designation: <u>CW 3957.</u>
Date NA&MLVRB first accepted this variety: <u>January 1997.</u>
Date previous amendments were accepted:
Date this amendment submitted: November 30, 2004.

CW 52044.doc

- 1. CW 52044 is a synthetic variety with 200 parent plants. Parent plants were selected from crosses between selections from an indigenous spreador type population growing along a Wisconsin river bank and three-year old nursery selection from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, high relative feed value (using Near Infrared Reflectance Spectroscopy), and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of CW 52044 traces to the following germplasm sources: 329 (2%), miscellaneous Cal/West Seeds breeding populations (48%), and spreador-type of unknown origin (50%). Breeder seed was produced under cage isolation near Woodland, California in 1995. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (9%), Ladak (7%), M.varia (34%), Turkistan (7%), Flemish (37%), and Chilean (6%).
- 2. CW 52044 is adapted to the North Central U.S. and Western Canada and is intended for use in Western Canada. CW 52044 has been tested in Wisconsin and British Columbia, Canada.
- 3. CW 52044 is a dormant variety with fall dormancy similar to FD class 2 check varieties. Flower color observed in the Syn.2 generation is approximately 89% purple, 7% variegated, 3% yellow and 1% cream with a trace of white.
- 4. CW 52044 has high resistance to bacterial wilt and Fusarium wilt, resistance to anthracnose (race 1), Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), and pea aphid, and moderate resistance to spotted alfalfa aphid. Reaction to blue alfalfa aphid, stem nematode, and root knot nematode has not been tested.
- 5. Seed increase of CW 52044 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 52044 will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.

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9.	Variety Name:	Date submitted:	November 30, 2004.
	Experimental Designation: CW_52044		

CW55067

- 1. Del Rio is a synthetic variety with 95 parent plants that were selected for phytophthora root rot and anthracnose from crosses between selections from 4 year old California yield trials and selections from 3-year old California selection nurseries. Nursery plants were selected for high forage quality (using Near Infrared Spectroscopy) 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 Del Rio traces to DK 169, Mede, DK 166, Express, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcate (1%), Ladak (2%), M.varia (9%), Turkistan (16%), Flemish (31%), Chilean (12%), Peruvian (2%), Indian (8%), African (15%), and Unknown (4%).
- 2. Del Rio is adapted to and intended for use in the Southwest and Moderately Winterhardy Intermountain areas of the U.S. and Argentina.
- 3. Del Rio is a moderately dormant variety with fall dormancy similar to FD class 6 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. Del Rio has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, and southern root knot nematode (<u>Meloidogyne incognita</u>), with resistance to bacterial wilt, Verticillium wilt, blue alfalfa aphid and stem nematode. Reaction to Aphanomyces root rot (race 1) has not been adequately tested.
- 5. Seed increase of Del Rio is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of Del Rio will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

9.	. Variety Name: <u>Del Rio</u>	Date submitted: November 30, 2004.	
	Experimental Designation: CW 55067.		

CW57104

- 1. CW 704 is a synthetic variety with 110 parent plants that were selected for phytophthora root rot and anthracnose from crosses between selections from 3-year old California selection nurseries. Nursery plants were selected for high forage quality (using Near Infrared Spectroscopy) from various populations which were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, blue alfalfa aphid, and stem nematode. Parentage of CW 57104 traces to Doblone, Activa, DK 187, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcate (1%), Ladak (2%), M.varia (7%), Turkistan (15%), Flemish (14%), Chilean (14%), Peruvian (2%), Indian (15%), African (23%), and Unknown (7%).
- 2. CW 704 is adapted to and intended for use in the Southwest area of the U.S. and Argentina. CW 704 has been tested in California and Argentina.
- 3. CW 704 is a nondormant variety with fall dormancy similar to FD class 7 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. CW 704 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and southern root knot nematode (<u>Meloidogyne incognita</u>), with resistance to bacterial wilt, Verticillium wilt, and northern root knot nematode (<u>Meloidogyne hapla</u>). Reaction to Aphanomyces root rot (race 1) has not been adequately tested.
- 5. Seed increase of CW 704 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 704 will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

9. Variety Name: <u>CW 704</u>	Date submitted: November 30, 2004.
Experimental Designation: CW 57104.	

18

- 1. **CW 801** is a synthetic variety with 209 parent that were selected for phytophthora root rot and anthracnose from crosses between selections from 4 year old California yield trials and selections from 3-year old California selection nurseries. Nursery plants were selected from various populations which were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, blue alfalfa aphid, and stem nematode. Parentage of **CW 801** traces to DK 189, WestStar, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.varia (5%), Turkistan (18%), Flemish (7%), Chilean (8%), Peruvian (4%), Indian (21%), African (33%), and Unknown (4%).
- 2. CW 801 is adapted to and intended for use in the Southwest area of the U.S. and Argentina. CW 801 has been tested in California and Argentina.
- 3. CW 801 is a nondormant variety with fall dormancy similar to FD class 8 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. **CW 801** has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, northern root knot nematode (<u>Meloidogyne hapla</u>), and southern root knot nematode (<u>Meloidogyne incognita</u>), with resistance to Verticillium wilt, and moderate resistance to bacterial wilt. Reaction to Aphanomyces root rot (race 1) has not been adequately tested.
- 5. Seed increase of **CW 801** is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 801 will be available in 2003.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

- 1. Concept is a synthetic variety with 225 parent plants which were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from three year old Minnesota, Iowa, and Wisconsin yield trials and various populations that were developed by phenotypic recurrent selection for high relative feed value (using Near Infrared Reflectance Spectroscopy), and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Concept traces to the following germplasm sources: TMF 421, GH 767, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.falcata (8%), Ladak (6%), M.varia (25%), Turkistan (4%), Flemish (48%), and Chilean (9%).
- 2. Concept is adapted to and intended for use in the North Central, East Central, and Great Plains areas of the U.S.. Concept has been tested in Wisconsin, Minnesota, Iowa, Michigan, Pennsylvania, and Nebraska.
- 3. Concept is a dormant variety with fall dormancy similar to FD class 3 check varieties. Flower color observed in the Syn.2 generation is approximately 97% purple, 3% variegated, with a trace of white, cream, and yellow.
- 4. Concept 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 spotted alfalfa aphid, pea aphid, and stem nematode. Reaction to blue alfalfa aphid and root knot nematode has not been adequately tested.
- 5. Seed increase of **Concept** is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1996. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of Concept will be available in 2002.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

Variety Name: Concept.		
Experimental Designation: CW 63002.		
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Date NA&MLVRB first accepted this variety: <u>January 2002.</u>		
Date previous amendments were accepted:		
Date this amendment submitted: November 30, 2004.		

- 1. Bobwhite is a synthetic variety with 225 parent plants that were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from three-year old Minnesota and Wisconsin yield trials and three-year old nursery selection from various populations that were developed by phenotypic recurrent selection for winter hardiness, leaf disease resistance, high leaf to stem ratio, high relative feed value (using Near Infrared Reflectance Spectroscopy), high forage yield potential, and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Bobwhite traces to the following germplasm sources: DK 142, Gold Plus, Stallion, Abound, MultiQueen, and miscellaneous Cal/West Seeds breeding populations (66%). Breeder seed was produced under cage isolation near Woodland, California in 1997. Seed was bulk harvested from all parent plants. Approximate germplasm source contributions are as follows: M. falcata (6%), Ladak (5%), M.varia (27%), Turkistan (4%), Flemish (50%), and Chilean (8%).
- 2. Bobwhite is adapted to and intended for use in the North Central, East Central, and Great Plains areas of the U.S.. Bobwhite has been tested in Wisconsin, Iowa, Michigan, Pennsylvania, Kansas, and Nebraska.
- 3. Bobwhite is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is approximately 99% purple and 1% variegated, with a trace of white, cream, and yellow.
- 4. Bobwhite 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, stem nematode, and northern root knot nematode (<u>Meloidogyne hapla</u>). Reaction to the blue alfalfa aphid has not been tested.
- 5. Seed increase of Bobwhite is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1997. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of Bobwhite will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

9.	Variety Name:	Bobwhite	Date submitted: No	vember 30, 2004.
	Experimental Designat	tion: CW 74034		

- 1. Harmony is a synthetic variety with 225 parent plants that were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from three-year old Minnesota and Wisconsin yield trials and selections from three-year old Wisconsin nurseries. Yield trial source varieties and nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for high relative feed value (using Near Infrared Reflectance Spectroscopy), and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of Harmony traces to the following germplasm sources: Abound, Sprint, Legend Gold, Pointer, 512, Gold Plus, DK 142, FQ 315, Nemesis, UltraLac and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcata (9%), Ladak (4%), M.varia (27%), Turkistan (4%), Flemish (47%), and Chilean (9%).
- 2. **Harmony** is adapted to the North Central and East Central areas of the U.S. and is intended for use in the North Central, East Central, and Great Plains areas of the U.S. **Harmony** has been tested in Wisconsin, Illinois, Minnesota, Nebraska, Pennsylvania, and New York.
- 3. **Harmony** is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. **Harmony** has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1), with resistance to bacterial wilt, pea aphid, and spotted alfalfa aphid. Reaction to Verticillium wilt, blue alfalfa aphid, stem nematode, and northern root knot nematode (*Meloidogyne hapla*) has not been tested.
- 5. Seed increase of **Harmony** is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1998. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of Harmony will be available in 2003.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

Variety Name: Harmony.		
Experimental Designation: <u>CW 83019.</u>		
Date NA&MLVRB first accepted this variety: <u>January 2004</u> .		
Date previous amendments were accepted:		
Date this amendment submitted: November 30, 2004.		

- 1. CW 87129 is a synthetic variety with 269 parent plants which were selected for aphid resistance, drought tolerance, frost tolerance, persistence and agronomic characteristics from space planted nurseries and yield trials in Argentina. Parent plants were selected from various populations which were developed by a combination of phenotypic recurrent selection and strain crossing with selection for resistance to one or more of the following pests: Fusarium wilt, Verticillium wilt, Phytophthora root rot, anthracnose (race 1), spotted alfalfa aphid, blue alfalfa aphid, and stem nematode. Parentage of CW 87129 traces to DK 187, Z-771, GAPP810+, Medallion, Tahoe, Mesa, Prestige, Pecos, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M.varia (6%), Turkistan (16%), Flemish (15%), Chilean (14%), Peruvian (2%), Indian (17%), African (24%), and Unknown (6%).
- 2. CW 87129 is adapted to and intended for use in the Southwest area of the U.S. and Argentina. CW 87129 has been tested in California and Argentina.
- 3. CW 87129 is a nondormant variety with fall dormancy similar to FD class 7 check varieties. Flower color observed in the Syn.2 generation is 98% purple and 2% variegated, with a trace of white, cream, and yellow.
- 4. CW 87129 has high resistance to anthracnose (race 1), Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and northern root knot nematode (<u>Meloidogyne hapla</u>), with resistance to stem nematode. Reaction to bacterial wilt, Verticillium wilt, and Aphanomyces root rot (race 1) has not been adequately tested.
- 5. Seed increase of CW 87129 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Mendoza, Argentina in 1998. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 87129 will be available in 2005.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

9.	Variety Name:	Date submitted: November 30, 2004.
	Experimental Designation: <u>CW 87129.</u>	

CW 89064.doc

- 1. CW 1010 is a synthetic variety with 200 parent plants that were selected sequentially for resistance to Phytophthora root rot, Anthracnose (race 1), and seed yield. Parent plants were selected from crosses between selections from 4-year old California yield trials from various populations that were developed by a combination of phenotypic recurrent selection and strain crossing with selection for one or more of the following pests: Fusarium wilt, Verticillium wilt, anthracnose (race 1), Phytophthora root rot, blue alfalfa aphid, and spotted alfalfa aphid. Parentage of CW 1010 traces to the following germplasm sources: Mecca, Grasis, ACA 900, Super Supreme, CW 907, DK 191, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: Turkistan (7%), Chilean (8%), Indian (25%), African (55%), and Unknown (5%).
- 2. CW 1010 is adapted to the Southwestern area of the U.S., Mexico, and Argentina and is intended for use in the Southwestern U.S., Mexico, and Argentina. CW 1010 has been tested in California, Arizona, Mexico, and Argentina.
- 3. CW 1010 is a very nondormant variety with fall dormancy similar to the FD 10 check UC 1887. Flower color observed in the Syn.2 generation is 99% purple, and 1% variegated, with a trace of cream, white, and yellow.
- 4. CW 1010 has high resistance to Fusarium wilt, Phytophthora root rot, stem nematode, pea aphid, spotted alfalfa aphid, blue alfalfa aphid, and northern root knot nematode with resistance to anthracnose (race 1), southern root knot nematode and Verticillium wilt, and moderate resistance to bacterial wilt. Reaction to Aphanomyces root rot (race 1) has not been adequately tested.
- 5. Seed increase of CW 1010 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under open isolation near Woodland, California in 1998. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of CW 1010 will be available in 2004.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

9. Variety Name: <u>CW 1010</u>	Date submitted: November 30, 2004.
Experimental Designation: CW 89064.	

- 1. SummerGold is a synthetic variety with 200 parent plants that were selected sequentially for multifoliolate leaf expression and for resistance to Phytophthora root rot and Aphanomyces root rot (race 1). Parent plants were selected from crosses between selections from three-year old Minnesota and Wisconsin yield trials and selections from three-year old Wisconsin nurseries. Yield trial source varieties and nursery source plants were selected from various populations that were developed by phenotypic recurrent selection for high relative feed value (using Near Infrared Reflectance Spectroscopy), and for resistance to one or more of the following pests: bacterial wilt, Fusarium Wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (race 1), anthracnose (race 1), and Leptosphaerulina leafspot. Parentage of SummerGold traces to the following germplasm sources: WinterGold, 9429, Alliant, DK 142, FQ 315, Trialfalon, BigHorn, 9326, Stallion, DK 133, and miscellaneous Cal/West Seeds breeding populations. Approximate germplasm source contributions are as follows: M. falcata (8%), Ladak (5%), M.varia (24%), Turkistan (6%), Flemish (50%), and Chilean (7%).
- 2. SummerGold is adapted to the North Central area of the U.S. and is intended for use in the North Central, East Central, and Great Plains areas of the U.S.. SummerGold has been tested in Wisconsin, Iowa, and Minnesota.
- 3. SummerGold is a moderately dormant variety with fall dormancy similar to FD class 4 check varieties. Flower color observed in the Syn.2 generation is greater than 99% purple with a trace of variegated, white, cream, and yellow.
- 4. SummerGold has **high resistance to** anthracnose (race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, **Verticillium wilt**, Aphanomyces root rot (race 1), and stem nematode, with resistance to pea aphid and northern root knot nematode (<u>Meloidogyne hapla</u>). Reaction to spotted alfalfa aphid and blue alfalfa aphid has not been tested
- 5. Seed increase of SummerGold is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under cage isolation near Woodland, California in 1999. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed of SummerGold will be available in 2003.
- 7. No decision has been made regarding Plant Variety Protection.
- 8. This information can be forwarded to the PVP office.

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Variety Name: Summer Gold	
Experimental Designation: <u>CW 94023.</u>	
Date NA&MLVRB first accepted this varie	ety: January 2004.
Date previous amendments were accepted:	
Date this amendment submitted: Novembe	r 30, 2004.

Cimarron VL400

- 1. The selection criteria used in the development of this variety include increased resistance to three aphid species and anthracnose disease, and increased forage yield.
- 2. This variety was tested in the East Central and Great Plains regions of the United States. The area of intended use is the East Central and Great Plains regions.
- 3. This variety is moderately fall dormant, similar to FD4 check. Flower color (Syn 2) is 72% purple and 28% variegated.
- 4. This variety has high resistance to Anthracnose (race 1), Fusarium Wilt, Phytophthora Root Rot, and Spring Blackstem diseases, the Pea Aphid, and the Spotted Alfalfa Aphid; with resistance to Bacterial Wilt, Verticillium Wilt, and Aphanomyces Root Rot (race 1) diseases, the Blue Alfalfa Aphid, and the Stem Nematode; with susceptibility to the southern root knot nematode and untested for reaction to the northern root knot nematode.
- 5. Seed increase is on a limited generation basis: Breeder (Syn 1), Foundation (Syn 2), Certified (Syn 3). Breeder and Foundation seed will be maintained by Cimarron USA. Sufficient Breeder and Foundation seed are available for the foreseeable need. Breeder seed (Syn 1 generation) was harvested in mass from a replicated crossing block in isolation from other alfalfa in the year 2001.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. Information in this application may be forwarded to PVP office.

9. Variety Name: Cimarron VL400 Date Submitted: November 25, 2004

Experimental Designations: VL02

- 1. Guardsman II is a 29 clone synthetic originating from Iroquois-type germplasm sources labeled at Cornell as B x A, crossed onto Oneida VR. This population went through several cycles of phenotypic recurrent selection for multiple disease resistances (Anthracnose (Race 1), Bacterial Wilt, Fusarium Wilt, Verticillium Wilt, and Phytophthora Root Rot), followed by one cycle of phenotypic selection in the field for plant vigor, freedom of diseases, resistance to lodging, and a higher ratio of hemicellulose and cellulose to lignin concentration in the forage. Seed of the Syn 1 generation was bulked in equal weight per clone. Syn 2 generation (breeder seed) was produced in 1996 and then again in 2003.
- 2. Guardsman II is adapted and intended for use in the North Central and East Central areas for hay, haylage, greenchop, and dehydration. It has been tested throughout New York.
- 3. Guardsman II is a moderately dormant variety with fall dormancy similar to the FD4 check. Its flower color is 97% purple and 3% variegated with trace amounts of cream, yellow and white, and pod shape is 98% tightly coiled and 2% loosely coiled in the syn 2 generation.
- 4. Guardsman II has high resistance to anthrocnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, and Phytophthora root rot; and is susceptible to Aphanomyces root rot (Race 1). It has not been tested for resistance to nematodes.
- 5. In 1996 and 2003, breeder seed (Syn 2) was produced under cage isolation in Caldwell, ID. in sufficient quantity to last the lifetime of the variety. This seed is maintained under controlled environmental conditions by the Department of Plant Breeding and Genetics at Cornell University. Foundation seed (Syn 3) may be produced from breeder seed in northern USA on stands no more than 3 years old unless by consent of the breeder. Certified seed (Syn 3 or 4) may be produced from breeder or foundation seed on stands no more than 6 years old.
- 6. Pending official certification, certified seed of Guardsman II will first be marketed in 2005.
- 7. Application for Plant Variety Protection will not be made.
- 8. This information may be forwarded to the PVP office.

9. Variety Name: Guardsman II

Date submitted: December 1, 2004

Experimental designations: NY9627

GoldLeaf

- 1. GoldLeaf is a 10 clone synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1), and spotted alfalfa aphid. The percent of germplasm sources are: Ladak(15), M. varia(12), Turkistan(15), Flemish(35), Chilean(8), and Unknown(15).
- 2. GoldLeaf is adapted to and intended for use in the North Central, Great Plains and East Central Region of the United States. The states where it has been tested are Minnesota, Iowa, Nebraska and Wisconsin.
- 3. GoldLeaf is a dormant variety similar to the fall dormancy 3 check. GoldLeaf is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.
- 4. GoldLeaf has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot and northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), pea aphid, stem nematode, Verticillium wilt and anthracnose(Race 1). It has not been tested for spotted alfalfa aphid and blue alfalfa aphid.
- 5. Breeder seed(Syn. 1) was produced from bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1993-94. Seed from parental clones were equally bulked and seed lots were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 20r3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research International.
- 6. Certified Seed will be available fall of 2000.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: GoldLeaf

Experimental designations: BPR378

Date NA&MLVRB first accepted this variety: November 25, 1998

Date previous amendments were accepted: November 29, 1999, November 28, 2000

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Date this amendment was submitted: November 24, 2004

FSG 408DP

- 1. FSG 408DP is a 40 clone synthetic. Parent clones were selected out of forage yield plots for deep crown placement and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: M. varia(20), Turkistan(10), Flemish(36), Chilean(12) and Unknown(22).
- 2. FSG 408DP is adapted to the North Central, Great Plains and East Central Region of the United States and intended for use in the Northern half of the United States. The states where it has been tested are Minnesota, Iowa, Pennsylvania, Nebraska and Wisconsin.
- 3. FSG 408DP is a moderately dormant variety similar to the fall dormancy 4 check. **FSG** 408DP is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.
- 4. FSG 408DP has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), stem nematode, Verticillium wilt and pea aphid. FSG 408DP has not been tested against spotted alfalfa aphid and blue alfalfa aphid.
- 5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1995. Seed from parental clones were equally bulked. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 2073) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.
- 6. Certified Seed will be available fall of 2001.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name <u>FSG 408DP</u>			
Experiment designation <u>BPR379</u>			
Date NA&MLVRB first accepted this variety <u>January</u> , 2000			
Dates previous amendments were accepted November 25, 2003			
Date amendment submitted November 24, 2004			

FSG 351

- 1. FSG 351 is a 24 clone synthetic. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: M. varia(15), Turkistan(25), Flemish(40) and Unknown(20).
- 2. FSG 351 is adapted to and intended for use in the North Central and East Central Region of the United States. The states where it has been tested are Minnesota, Iowa, Pennsylvania and Wisconsin.
- 3. FSG 351 is a dormant variety similar to the fall dormancy 3 check. **FSG 351 is very winter hardy similar to the winter survival 2 checks.** Flower color in the Syn. 2 generation is 88% purple, 12% variegated with trace amounts of cream, white and yellow.
- 4. FSG 351 has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, pea aphid, and northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), stem nematode, Verticillium wilt, anthracnose (Race 1), spotted alfalfa aphid and blue alfalfa aphid.
- 5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1992-93. Seed from parental clones were equally bulked and seed lots from each year were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 20r3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research will maintain sufficient Breeder seed for the projected life of the variety.
- 6. Certified Seed will be available fall of 2000.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name <u>FSG 351</u>		
Experiment designation <u>BPR380</u>		
Date NA&MLVRB first accepted this variety January, 2000		
Dates previous amendments were accepted November 25, 2003		
Date amendment submitted November 24,	2004	

Persist

- 1. Persist is a twelve clone synthetic variety. Parent plants were out of forage yield plots and/or disease nurseries. The parent plants were progeny tested for one or more of the following traits: Forage yield, stand persistence, forage quality, seed yield resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose, Verticillium wilt, Aphanomyces, spotted alfalfa aphid, and pea aphid. Parent plants trace back through several intermediate steps to: MNP--B1(Syn.2), Tewels Multistrain, and Dairyland experimentals. Dairyland experimentals trace back to Vernal and Ranger. The percent of germplasm sources are M. falcata (2), Ladak (18), Turkistan (4), Flemish (70), and Chilean (6).
- 2. Persist is adapted to the North Central United States and is intended for use in the Northern half of the United States for hay, haylage, greenchop and dehydration. The states where it has been tested are Wisconsin, Minnesota, Iowa, and Illinois.
- 3. Persist is moderately dormant and similar to the variety Saranac. **Persist is very winter hardy similar to the winter survival 2 checks.** Flower color in the Syn. 2 generation is 80% purple, 20% variegated, with trace amounts of cream, yellow, and white.
- 4. Persist has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, resistance to anthracnose (Race 1), Verticillium wilt, spotted alfalfa aphid, pea aphid and moderate resistance to Aphanomyces (Race 1), stem nematode, and blue alfalfa aphid.
- 5. Breeder seed has been produced from cuttings of the parental plants in an isolation block as Syn. 1. Seed lots will be kept separate. Foundation seed (Syn. 2) will be produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation and two generations of Certified seed (Syn. 2 or 3) classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Foundation seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed will be available spring of 1993.
- 7. Application for the Plant Variety Protection is undecided.
- 8. As a means of additional varietal protection, information included with this application may be provided to the PVP office.
- 9. Variety name: Persist

Experimental designations: BPR359

Date NA&MLVRB first accepted this variety: <u>November</u>, 1991
Dates previous amendments were accepted: <u>November 1992</u>
Date this amendment was submitted: November 24, 2004

Milestone

- 1. Milestone is a 60 clone synthetic variety. Parent plants were selected out of disease plots near Marshfield, WI. These parent plants were selected for resistance to Phytophthora root rot, Aphanomyces root rot; crowns free of crown rot and expression of branch roots. Selected plants were screened for Verticillium wilt resistance.
- 2. Milestone is adapted to the North Central, East Central and Great Plains Region of the United States and intended for use across the North Central, East Central and Great Plains Regions of the United States. The states where it has been tested is Iowa, Minnesota, Nebraska, Pennsylvania and Wisconsin.
- 3. Milestone is a dormant variety similar to the fall dormancy 3 check. Milestone is very winter hardy similar to the winter survival 2 check. Flower color in the Syn. 2 generation is 85% purple, 15% variegated with trace amounts of cream, white and yellow.
- 4. Milestone has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, northern root-knot nematode; resistance to anthracnose (Race 1), Verticillium wilt, pea aphid, stem nematode and Aphanomyces root rot (Race1). Milestone has not been tested for resistance to blue alfalfa aphid and spotted alfalfa aphid,
- 5. Breeder seed (Syn. 1) was produced from bulking seed of field isolated parent plants near Sloughhouse, California in 1998. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research International.
- 6. Certified Seed will be available spring of 2005.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Milestone Date Submitted November 28, 2004
Experimental designations: BPR 381

Jade III

- 1. Jade III is a strain crossed synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race1), Verticillium wilt, Aphanomyces root rot (Race1), and stem nematode.
- 2. Jade III is adapted and intended for use in the North Central, East Central and Great Plain regions of the United States. The states in which it has been tested are: Minnesota, Nebraska, Pennsylvania and Minnesota Washington, Wisconsin,
- 3. Jade III is moderately dormant, fall dormancy 4 variety similar to the fall dormancy checks. **Jade III is very winter hardy similar to the winter survival 2 checks.** Flower color in the Syn.2 generation is 90% purple, 7% variegated, 1% cream, 1% white, and 1% yellow.
- 4. Jade III has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, northern root-knot nematode, anthracnose (Racel); resistance to Aphanomyces root rot (Racel), Verticillium wilt, pea aphid, blue alfalfa aphid, spotted alfalfa aphid and stem nematode.
- 5. Breeder seed (Syn. 1) was produced from cuttings of the parent plants that were grown in isolation at Sloughhouse, CA in 1996-97. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn. 2) was produced from Breeder seed and Certified seed (Syn. 3) from Foundation seed. One generation each of Breeder, Foundation, and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland will maintain sufficient Breeder seed for the projected life of the variety
- 6. Certified seed was available spring of 2003.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9.	variety name <u>Jade III</u>
	Experiment designation DS013
	Date NA&MLVRB first accepted this variety January, 2003
	Dates previous amendments were accepted November 25, 2003
	Date amendment submitted November 24, 2004

Hybri + 421

- 1. Hybri + 421 a 75-95% hybrid alfalfa variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1).
- 2. Hybri + 421 is adapted to the North Central, East Central and Great Plains Region of the United States and intended for use across the North Central, East Central and Great Plains Regions of the United States. The states where it has been tested is Iowa, Michigan, Minnesota, Nebraska, Pennsylvania and Wisconsin.
- 3. Hybri + 421 is a moderately dormant variety similar to the fall dormancy 4 check. Hybri+ 421 is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow. Flower color of the female line in the F1 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.
- 4. Hybri + 421 has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), northern root-knot nematode; resistance to Verticillium wilt, spotted alfalfa aphid, pea aphid, stem nematode and Aphanomyces root rot (Race1). Hybri + 421 has not been tested for resistance to blue alfalfa aphid.
- 5. Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 1998-2000. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 1997. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient seed for the projected life of the variety.
- 6. Certified Seed will be available spring of 2004.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name:_	Hybri + 421	Date Submitted November 28, 2004
Experimental des	ignations: DS024Hvb	

DryLand

- 1. DryLand is a 150 clone synthetic variety. Parent plants were selected out of a 27-year-old stand of Ladak in eastern Washington. These plants were selected for visual herbage yield, seed yield, drought tolerance and root and crown health. Fifty plants were selected out of AC Minto for Phytophthora root rot resistance. Selected plants were hand pollinated in greenhouse near Sloughhouse, CA. Seed from hand crosses were bulked to produce Syn.1 as Breeder Seed in1998.
- 2. DryLand is adapted in the North Central region of the United States. It is intended for use in the North Central and Winterhardy Intermountain regions of the United States. The state in which it has been tested is Wisconsin.
- 3. DryLand is a dormant, fall dormancy 3 variety, similar to the fall dormancy 3 checks. **DryLand is very winter hardy similar to the winter survival 2 checks**. Flower color in the Syn.2 generation is 90% purple, 7% variegated, 1% cream, 1% white, and 1% yellow.
- 4. DryLand has high resistance to bacterial wilt, Fusarium wilt; resistance to Phytophthora root rot; moderate resistance to stem nematode, anthracnose (Race1), northern root knot nematode; low resistance to Verticillium wilt and susceptible to Aphanomyces root rot (Race1). Its reaction to spotted alfalfa aphid, blue alfalfa aphid and pea aphid has not been tested.
- 5. Breeder seed (Syn. 1) was produced from hand-pollinated crosses made in greenhouse near Sloughhouse, CA in 1998. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.
- 6. Certified seed will be available spring of 1999.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: <u>DryLand</u>

Experimental designations: DS061

Date NA&MLVRB first accepted this variety: November 25, 2003

Dates previous amendments were accepted:

Date this amendment was submitted: November 24, 2004

Ladak+

- 1. Ladak+ is a 100 clone synthetic variety. Parent plants were selected out of a 27-year-old stand of Ladak in eastern Washington. These plants were selected for visual herbage yield, seed yield, drought tolerance and root and crown health. Selected plants were hand pollinated in greenhouse near Sloughhouse, CA. Seed from hand crosses were bulked to produce Syn.1 as Breeder Seed in1998.
- 2. Ladak+ is adapted in the North Central region of the United States. It is intended for use in the North Central and Winterhardy Intermountain regions of the United States. The state in which it has been tested is Wisconsin.
- 3. Ladak+ is a dormant, fall dormancy 3 variety. Ladak+ is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn.2 generation is 88% purple, 9% variegated, 1% cream, 1% white, and 1% yellow.
- 4. Ladak+ has high resistance to bacterial wilt, Fusarium wilt and northern root-knot nematode (M. hapla); resistance to Phytophthora root rot and stem nematode; moderate resistance to pea aphid, Verticillium wilt and Aphanomyces root rot (Race1) and low resistance to anthracnose (Race1); Its reaction to spotted alfalfa aphid and blue alfalfa aphid have not been tested.
- 5. Breeder seed (Syn. 1) was produced from hand-pollinated crosses made in greenhouse near Sloughhouse, CA in 1998. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.
- 6. Certified seed will be available spring of 1999.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: <u>Ladak+</u>

Experimental designations: DS9875

Date NA&MLVRB first accepted this variety: November 27, 2002

Dates previous amendments were accepted:

Date this amendment was submitted: November 24, 2004

362HY

- 1. 362HY a 75-95% hybrid alfalfa variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1).
- 2. 362HYis adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The states where it has been tested is Iowa, Minnesota, New York, Pennsylvania and Wisconsin.
- 3. 361HY is a moderately dormant variety similar to the fall dormancy 4 check. 361HY is very winter hardy similar to the winter survival 2 checks. Flower color of the male line in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow. Flower color of the female line in the F1 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.
- 4. 361HY has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, northern root-knot nematode, pea aphid; resistance to anthracnose (Race 1), Aphanomyces root rot (Race1), Verticillium wilt and stem nematode. 361HY has not been tested for resistance to spotted alfalfa aphid and blue alfalfa aphid.
- 5. Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 1998-2000. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 1998. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient seed for the projected life of the variety.
- 6. Certified Seed was available spring of 2004.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: <u>362HY</u>	Date Submitted November 28, 2004
Experimental designations: DS107Hvb	

361HY

- 1. 361HY a 75-95% hybrid alfalfa variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1).
- 2. 361HYis adapted to the North Central and East Central Regions of the United States and intended for use across the North Central and East Central Regions of the United States. The state where it has been tested is Iowa, Minnesota, New York, Pennsylvania and Wisconsin.
- 3. 361HY is a moderately dormant variety similar to the fall dormancy 4 check. 361HY is very winter hardy similar to the winter survival 2 checks. Flower color of the male line in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow. Flower color of the female line in the F1 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.
- 4. 361HY has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, northern root-knot nematode, pea aphid; resistance to anthracnose (Race 1), Aphanomyces root rot (Race1), Verticillium wilt and stem nematode. 361HY has not been tested for resistance to spotted alfalfa aphid and blue alfalfa aphid.
- 5. Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 1998-2000. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 1998. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient seed for the projected life of the variety.
- 6. Certified Seed was available spring of 2004.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: <u>361HY</u> Date Submitted November 28, 2004 Experimental designations: DS108Hyb

4S419

- 1. 4S419 a 75-95% hybrid alfalfa variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1).
- 2. 4S419 is adapted to the North Central Region of the United States and intended for use across North Central, East Central and Great Plains Regions of the United States. The states where it has been tested is Iowa, Minnesota and Wisconsin.
- 3. 4S419 is a moderately dormant variety similar to the fall dormancy 4 check. 4S419 is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow. Flower color of the female line in the F1 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.
- 4. 4S419 has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt, northern root-knot nematode; resistance to spotted alfalfa aphid, pea aphid, stem nematode and Aphanomyces root rot (Race1). 4S419 has not been tested for resistance to blue alfalfa aphid.
- 5. Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 1998-2000. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 1999. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient seed for the projected life of the variety.
- 6. Certified Seed will be available spring of 2006.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: <u>4S419</u>	Date Submitted November 28, 2004
Experimental designations: DS208Hyb	

HybriForce®-600

- 1. HybriForce®-600 is a 75-95% hybrid alfalfa variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1).
- 2. HybriForce®-600 is adapted to the Southwest, Great Plains and North Central Region of the United States and intended for use across the Central half of the United States. The states where it has been tested is California, Kansas and Wisconsin.
- 3. HybriForce®-600 is a moderately dormant variety similar to the fall dormancy 6 check. HybriForce®-600 is moderately winter hardy similar to the winter survival 3 check. Flower color of the male line in the Syn. 2 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow. Flower color of the female line in the F1 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.
- 4. HybriForce®-600 has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, northern root-knot nematode and pea aphid; resistance to anthracnose (Race 1) and stem nematode. HybriForce®-600 has not been tested for resistance to blue alfalfa aphid, spotted alfalfa aphid, Verticillium wilt and Aphanomyces root rot (Race1).
- 5. Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 1998-2000. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 1999. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed is recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient seed for the projected life of the variety.
- 6. Certified Seed will be available spring of 2005.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: <u>HybriForce®-600</u> Date Submitted <u>November 28, 2004</u> Experimental designations: DS218Hyb

DS221Hyb

- 1. DS221Hyb a 75-95% hybrid alfalfa variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were tested for male sterility, maintaining and restoration ability. The parent plants were also progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1).
- 2. DS221Hyb is adapted to the North Central Region of the United States and intended for use across the North central, East Central and Great Plains Regions of the United States. The states where it has been tested is Iowa, Minnesota and Wisconsin.
- 3. DS221Hyb is a moderately dormant variety similar to the fall dormancy 4 check. DS221Hyb is very winter hardy similar to the winter survival 2 check. Flower color of the male line in the Syn. 2 generation is 85% purple, 15% variegated with trace amounts of cream, white and yellow. Flower color of the female line in the F1 generation is 90% purple, 10% variegated with trace amounts of cream, white and yellow.
- 4. DS221Hyb has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt, northern root-knot nematode, pea aphid; resistance to stem nematode and Aphanomyces root rot (Race1). DS221Hyb has not been tested for resistance to blue alfalfa aphid and spotted alfalfa aphid.
- 5. Female Breeder seed was produced by crossing the cytoplasmic male sterile line (A) by the maintainer line (B) in field isolation near Sloughhouse, CA in 1998-2000. Female seed was kept separate across production years. Male Breeder seed (Syn. 1) was produced in field isolation near Sloughhouse in 2000. Male Foundation seed (Syn. 2) was produced from Breeder seed. Hybrid seed (F1) was produced from crossing female seed by either Breeder or Foundation male seed. Two generations of male seed are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient seed for the projected life of the variety.
- 6. Certified Seed will be available spring of 2006.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name:	Date Submitted November 28, 2004
Experimental designations: DS221Hyb	

Magnum III

- 1. Magnum III is a synthetic variety developed by Dairyland Research International, Clinton, WI. The percent of germplasm sources are M. falcata (5), Ladak (4), M. varia (27), Turkistan (31), Flemish (26), and Chilean (7). Parental clones trace back to Iroquois (9), MSB--CW5AN3 (8), Cherokee (2), Lahontan (2), PI206452 (2), Glory (1), Thor (1), Vernal (1), Everest (1), MNB1 (4), MNP--D1 (4), MNP42 (6), California Line (M. falcata, E. H. Stanford) (4), and Teweles Multi--strain (origin unknown) (8). Parental clones were selected based on progeny tests for one or more of the following traits: forage yield, stand persistence, winterhardiness, seed yield, and resistance to bacterial wilt, Phytophthora root rot, Fusarium wilt, anthracnose, and Verticillium wilt.
- 2. Magnum III has been tested in Wisconsin, Iowa, Minnesota, and South Dakota. It will be marketed in the Midwest states (WI, MI, MN, IA, IL, etc.). The primary purpose will be for hay, greenchop, and dehydration.
- 3. Flower color is 82% purple, 17% variegated and less than 1% yellow, cream, and white. Fall dormancy is moderately dormant similar to Saranac. **Magnum III is very winter hardy similar to the winter survival 2 checks.**
- 4. This variety has resistance to bacterial wilt, Phytophthora root rot, Fusarium wilt, and pea aphid. It has moderate resistance to anthracnose (Race 1), Verticillium wilt, stem nematode, blue alfalfa aphid, and spotted alfalfa aphid and low resistance to Aphanomyces root rot (Race 1).
- 5. Breeder seed has been produced from cuttings of the parental clones in a cage as Syn. 1. Breeder seed (Syn. 1) was grown for the expected life of the variety and will be kept separate from year to year. Foundation seed will be produced from Breeder seed and Certified seed either from Breeder or Foundation seed. One generation each of Breeder, Foundation, and Certified seed class is recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed.
- 6. Certified seed was available spring of 1988.
- 7. Application for the Plant Variety Protection is undecided.
- 8. As a means of additional varietal protection, information included with this application may be provided to the PVP office.

9. Variety name: <u>Magnum III</u> Experimental designations: DS503

Date NA&MLVRB first accepted this variety: November 23, 1988

Dates previous amendments were accepted:

Date this amendment was submitted: November 24, 2004

Enhancer

- 1. Enhancer is a 22 clone synthetic variety. Parent plants were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for the following traits: forage yield, stand persistence, forage quality, and resistance to Bacterial Wilt, Fusarium Wilt, Phytophthora root rot, Anthracnose(Race 1), Verticillium Wilt, Aphanomyces root rot(Race 1), and Spotted Alfalfa Aphid. Parent plants trace back to Tempo, Thor, Answer, Apollo, MNP-D1, MNP-B1(Syn.2), NCMP-2, Teweles Multistrain, and Dairyland experiments which trace back to Vernal, Ranger, and Iroquois. Percent of germplasm sources trace to M.varia(15), Turkistan(25), Flemish(40), and Chilean(20).
- 2. Enhancer is adapted to the North Central, East Central, and Great Plains regions of the United States. It is intended for use in Central and Northern United States. The states in which it has been tested are: Wisconsin, Iowa, Nebraska, Kansas, and New York.
- 3. Enhancer is similar to Saranac in fall dormancy. Enhancer is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn.2 generation is 91% purple, 9% variegated, with trace amounts of cream, white, and yellow.
- 4. Enhancer has high resistance to bacterial Wilt, Fusarium Wilt, Phytophthora root rot, resistance to anthracnose(Race 1), Verticillium Wilt, spotted alfalfa aphid and moderate resistance to Aphanomyces root rot(Race 1). Its reaction to stem nematode, northern root knot nematode, pea aphid, and blue alfalfa aphid has not been tested.
- 5. Breeder seed was produced from cuttings of the parental plants in an isolation block as Syn.1 in Sloughhouse, CA in 1988-1990. Seed was bulked in equal proportions each year, and lots were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.2 or 3) from either Breeder seed or Foundation seed. One generation each of Breeder and Foundation and two generations of Certified seed (Syn. 2 or 3) classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed will be available spring of 1995.
- 7. Application for the Plant Variety Protection is undecided.
- 8. As a means of additional protection, information included with this application may be provided to the PVP office.
- 9. Variety name: <u>Enhancer</u>

Experimental designations: DS906

Date NA&MLVRB first accepted this variety: November 23, 1994

Dates previous amendments were accepted:

Date this amendment was submitted: November 24, 2004

Magnum V

- 1. Magnum V is a 12 clone synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race1), Verticillium wilt, Aphanomyces root rot (Race1), and spotted alfalfa aphid. Parent plants trace back to Apollo, Tempo, Thor, Answer, Teweles Multistrain, and Dairyland Experimentals which trace back to Vernal, Ranger and Iroquois. Percentage of germplasm sources are: M. falcata(8), Ladak(8), M.varia(10), Turkistan(20), Flemish(30) and Chilean(24).
- 2. Magnum V is adapted to the North Central, East Central and Great Plains regions of the United States. It is intended for use in the Central and Northern half of the United States. The states in which it has been tested are: Wisconsin, Minnesota, Iowa, Michigan, and Kansas.
- 3. Magnum V is moderate dormant, fall dormancy 4 variety. Magnum V is very winter hardy similar to the winter survival 2 checks. It expresses high forage quality similar to the high forage quality check variety. Flower color in the Syn.2 generation is 92% purple, 8% variegated, and trace amounts of cream, white, and yellow.
- 4. Magnum V has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, resistance to anthracnose(Race1), Verticillium wilt, pea aphid, spotted alfalfa aphid, stem nematode; moderate resistance to Aphanomyces root rot(Race1), blue alfalfa aphid, and northern root-knot nematode.
- 5. Breeder seed was produced from cuttings of the parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA in 1988-90. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed(Syn.2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation, and two generations of Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed will be available spring of 1997.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: Magnum V

Experimental designations: DS907

Date NA&MLVRB first accepted this variety: January, 1996

Dates previous amendments were accepted: November 25, 1998

Date this amendment was submitted: November 24, 2004

MagnaGraze

- 1. MagnaGraze is a synthetic variety with 224 parent clones. One half of the parent clones were selected out of three-year-old forage yield plots for the deep-set crown trait. This source material traces back to Answer, Apollo, and Dairyland experimentals. Dairyland experimentals trace back to Ranger and Vernal. The other half of parental plants were selected out of disease nurseries in Clinton and Marshfield, Wisconsin. This source material traces back to RamRod, ProCut II, Aggressor, Legacy, Precedent, Blazer XL, Starmaster, Zenith, and DK122. Parent plants from each germplasm group were interplanted to produce Breeder seed.
- 2. MagnaGraze is adapted to the North Central, East Central, and Great Plains regions of the United States. It is intended for use in the Central and Northern half of the United States. The states in which it has been tested are: Wisconsin, Michigan, and Kansas.
- 3. MagnaGraze is similar to Ranger in fall dormancy. MagnaGraze is very winter hardy similar to the winter survival 2 checks. MagnaGraze has a deeper set crown than Magnum III, Alfagraze, and Vernal. Flower color in the Syn.2 generation is 88% purple, 12% variegated, and trace amounts of cream, white, and yellow.
- 4. MagnaGraze has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, resistance to anthracnose (Race1), Verticillium wilt, Aphanomyces root rot (Race 1), spotted alfalfa aphid, moderate resistance to stem nematode, blue alfalfa aphid, and low resistance to northern root-knot nematode. Its reaction to pea aphid has not been tested.
- 5. Breeder seed was produced from bulking seed of parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA in 1991. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation, and two generations of Certified seed (Syn.2 or 3) classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed was available spring of 1994.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: <u>MagnaGraze</u> Date submitted: <u>11/23/94</u>
 Date this amendment was submitted: November 24, 2004

- 1. 631 is a twelve clone synthetic variety. Parent plants were selected out of forage yield plots and/or disease nurseries. The parent plants were progeny tested for one or more of the following traits: Forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt, Aphanomyces root rot (Race 1), spotted alfalfa aphid and pea aphid. Parent plants trace back through several intermediate steps to: Tempo, Apollo, Iroquois, Answer, WL312, ~O~P-Bl (Syn. 2), ~P-D1, MSB-CW5AN3, MSB and Dairyland Experimentals. Dairyland experimentals trace back to Vernal, Lahontan, and Ranger. The percent of germplasm sources are M. falcata (11), Ladak (12), M. varia (2), Turkistan (15), Flemish (40) and Chilean (20).
- 2. 631 is adapted to the North Central United States and is intended for use in the Northern half of the United States. The states where it has been tested are Wisconsin, Minnesota, Iowa, and Michigan.
- 3. 631 is moderately dormant and similar to the variety Saranac. 631 is very winter hardy similar to winter survival 2 checks. Flower color in the Syn. 2 generation is 85% purple, 15% variegated, with trace amounts of cream, yellow and white.
- 4. 631 has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, pea aphid, resistance to anthracnose (Race 1), Verticillium wilt, spotted alfalfa aphid, stem nematode and moderate resistance to blue alfalfa aphid and Aphanomyces root rot (Race 1). Its reaction to root knot nematode has not been tested.
- 5. Breeder seed was produced from cuttings of the parental plants in an isolation block as Syn. 1 in Sloughhouse, CA in 1988-90. Seed lots were kept separate. Foundation seed (Syn. 2) was produced from Breeder seed and Certified seed (Syn. 2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation and two generations of Certified seed (Syn. 2 or 3) classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed will be available spring of 1993.
- 7. Application for the Plant Variety Protection is undecided.
- 8. As a means of additional varietal protection, information included with this application may be provided to the PVP office.
- 9. Variety name: 631

Experimental designations: DS931

Date NA&MLVRB first accepted this variety: <u>November</u>, 1986 Dates previous amendments were accepted: <u>November</u> 23, 1993

Date this amendment was submitted: November 24, 2004

Stampede

- 1. Stampede is a synthetic variety with 228 parent clones. One hundred twelve parents were selected out of three year old forage yield plots for the deep set crown trait. This source material traces back to Answer, Apollo, and Dairyland experimentals. Dairyland experimentals trace back to Ranger and Vernal. One hundred sixteen parents were selected out of disease nurseries in Clinton and Marshfield, Wisconsin. This source material traces back to RamRod, ProCut II, Aggressor, Legacy, Precedent, Blazer XL, Starmaster, Zenith, DK122, Answer, MNP-D1, and Webfoot. Parent plants of the two germplasms were interplanted in cage isolation to produce Breeder seed. The percent of germplasm sources are Ladak(25), M.varia(15), Turkistan(25), and Flemish(40).
- 2. Stampede is adapted to the North Central, East Central, and Great Plains regions of the United States. It is intended for use in the Central and Northern half of the United States. The states in which it has been tested are: Wisconsin, Kansas, New York, and Pennsylvania.
- 3. Stampede similar to Ranger in fall dormancy. **Stampede is very winter hardy similar to the winter survival 2 checks.** Flower color in the Syn.2 generation is 88% purple, 12% variegated, and trace amounts of cream, white, and yellow. Stampede has a deeper set crown than Magnum III, Alfagraze, and Vernal.
- 4. Stampede has high resistance to Phytophthora root rot, bacterial wilt, spotted alfalfa aphid, resistance to Fusarium wilt, Verticillium wilt, anthracnose (Race 1), pea aphid, Aphanomyces root rot (Race 1) and stem nematode. Its reaction to northern root-knot nematode and blue alfalfa aphid have not been tested.
- 5. Breeder seed was produced from bulking seed of parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA in 1991. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation, and two generations of Certified seed (Syn.2 or 3) classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed will be available spring of 1995.
- 7. Application for Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: Stampede
 Experimental designations: DS9311
 Date NA and MLVRB first accepted this variety November 23, 1994
 Dates previous amendments were accepted November 28, 2000 November 25, 2003
 Date amendment submitted November 24, 2004

Abundance

- 1. Abundance is a strain crossed synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1), and spotted alfalfa aphid. Parent plants trace back to Thor and Teweles Multistrain. Percentage of germplasm sources are: Turkistan(50) and Flemish(50).
- 2. Abundance is adapted to the North Central and East Central regions of the United States. It is intended for use in the Central and Northern half of the United States. The states in which it has been tested are: Wisconsin and Illinois.
- 3. Abundance is moderately dormant, fall dormancy 4 variety. **Abundance is very winter hardy similar to the winter survival 2 checks.** Flower color in the Syn.2 generation is 94% purple, 6% variegated, and trace amounts of cream, white, and yellow.
- 4. Abundance has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, northern root-knot nematode(M. halva), resistance to anthracnose(Race1), Aphanomyces root rot(Race1), pea aphid, spotted alfalfa aphid, stem nematode; moderate resistance to Verticillium wilt, and blue alfalfa aphid.
- 5. Breeder seed was produced from cuttings of the parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA in 1990-92. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn. 2) was produced from Breeder seed and Certified seed(Syn. 3) from Foundation seed. One generation each of Breeder Foundation, and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed was available spring of 1997.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: <u>Abundance</u>
 Experimental designations: <u>DS9410</u>
 Date NA&MLVRB first accepted this variety: <u>January</u>, <u>1996</u>
 Dates previous amendments were accepted: <u>November 25</u>, <u>1998</u>, <u>November 29</u>, <u>1999</u>
 Date this amendment was submitted: November 24, 2004

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Arapaho

- 1. Arapaho is a strain crossed synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1), and spotted alfalfa aphid. Percentage of germplasm sources are: Ladak(25), M.varia(13), Turkistan(30), Flemish(15), and Unknown(17).
- 2. Arapaho is adapted to and intended for use in the North Central and East Central regions of the United States. The states in which it has been tested are: Wisconsin and Indiana.
- 3. Arapaho is a dormant variety similar to the fall dormancy 3 check. **Arapaho is very winter** hardy similar to the winter survival 2 checks. Flower color in the Syn. 2 generation is 88% purple, 12% variegated with trace amounts of cream, white and yellow.
- 4. Arapaho has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt and northern root-knot nematode; resistance to Aphanomyces root rot(Race 1), Verticillium wilt, anthracnose(Race 1) and stem nematode and moderate resistance to pea aphid. It has not been tested for blue alfalfa aphid and spotted alfalfa aphid.
- 5. Breeder seed was produced from cuttings of the parent plants planted in cage isolation to produce Syn.1 at Sloughhouse, CA in 1991-92. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn. 2) was produced from Breeder seed and Certified seed(Syn. 3) from Foundation seed. One generation each of Breeder Foundation, and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed will be available spring of 2000.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: <u>Arapaho</u> Date submitted: <u>November 29, 1999</u>
 Experimental designations: <u>DS9412</u>
 Date this amendment was submitted: <u>November 24, 2004</u>

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- 1. 6420 is a strain crossed synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1), and spotted alfalfa aphid. Parent plants trace back to Thor and Answer. Percentage of germplasm sources are: Turkistan(50) and Flemish(50).
- 2. 6420 is adapted to the North Central and East Central regions of the United States. It is intended for use in the Central and Northern half of the United States. The states in which it has been tested are: Wisconsin, Minnesota and Michigan.
- 3. 6420 is moderately dormant, fall dormancy 4 variety. 6420 is moderately winter hardy similar to the winter survival 3 checks. Flower color in the Syn.2 generation is 90% purple, 10% variegated, and trace amounts of cream, white, and yellow.
- 4. 6420 has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, northern root-knot nematode, resistance to Aphanomyces root rot(Race1), Verticillium wilt, pea aphid, spotted alfalfa aphid, stem nematode and anthracnose(Race1). It has not been tested for blue alfalfa aphid.
- 5. Breeder seed was produced from cuttings of the parent plants planted in cage isolation to produce Syn.1 seed at Sloughhouse, CA in 1990-92. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn. 2) was produced from Breeder seed and Certified seed(Syn. 3) from Foundation seed. One generation each of Breeder Foundation, and Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed was available spring of 1999.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: 6420

 $Experimental\ designations: \underline{DS9612}$

Date NA&MLVRB first accepted this variety: <u>November 25, 1998</u> Dates previous amendments were accepted: November 29, 1999

Date this amendment was submitted: November 24, 2004

Magnum V-Wet

- 1. Magnum V-Wet is a 72 clone synthetic variety. One half of the parent plants were selected out of forage yield plots near Marshfield, Wisconsin for resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, Aphanomyces root rot; crowns free of crown rot and expression of branch roots. The other half of the plants were selected out of forage yield trials near Clinton, Wisconsin. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1), and spotted alfalfa aphid. The percent of germplasm sources are: Ladak(10), M. varia(25), Turkistan(12), Flemish(32), and Unknown(21).
- 2. Magnum V-Wet is adapted to and intended for use in the North Central and East Central Region of the United States. The states where it has been tested are Minnesota, Indiana and Wisconsin.
- 3. Magnum V-Wet is a dormant variety similar to the fall dormancy 3 check. **Magnum V-Wet** is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn. 2 generation is 85% purple, 15% variegated with trace amounts of cream, white and yellow.
- 4. Magnum V-Wet has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, and northern root-knot nematode; resistance to Aphanomyces root rot (Race1), pea aphid, stem nematode, Verticillium wilt and anthracnose(Race 1). It has not been tested for spotted alfalfa aphid and blue alfalfa aphid.
- 5. Breeder seed(Syn. 1) was produced from bulking seed of field isolated parent plants near Sloughhouse, California in 1993. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research International.
- 6. Certified Seed was available fall of 1999.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Magnum V-Wet Date Submitted November 29, 1999
Experimental designations: DS9801

Date this amendment was submitted: November 24, 2004

Mariner II

- 1. Mariner II is a 94 clone synthetic variety. Parent plants were selected out of forage yield plots near Marshfield, Wisconsin for resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, Aphanomyces root rot; crowns free of crown rot and expression of branch roots. The percent of germplasm sources are: Ladak (13), M. varia (18), Turkistan (10), Flemish (41), and Unknown (18).
- 2. Mariner II is adapted to and intended for use in the North Central and East Central Region of the United States. The states where it has been tested are Minnesota, Indiana and Wisconsin.
- 3. Mariner II is a dormant variety similar to the fall dormancy 2 check. Mariner II is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn. 2 generation is 87% purple, 13% variegated with trace amounts of cream, white and yellow.
- 4. Mariner II has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot and northern root-knot nematode; resistance to Aphanomyces root rot (Race1), pea aphid, stem nematode, Verticillium wilt and anthracnose (Race 1). It has not been tested for spotted alfalfa aphid and blue alfalfa aphid.
- 5. Breeder seed (Syn. 1) was produced from bulking seed of greenhouse hand crossing parent plants near Clinton, Wisconsin in 1994. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.

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- 6. Certified Seed was available fall of 1999.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: Mariner II

Experimental designations: <u>DS9803</u>

Date NA and MLVRB first accepted this variety November 28, 1999

Date previous amendments were accepted November 29, 1999

Date this amendment was submitted November 24, 2004

Arrowhead

- 1. Arrowhead is a 58 clone synthetic variety. One half of the parent plants were selected from the variety MagnaGraze out of forage yield plots near Clinton, WI. Plants were selected for deep set crowns, resistance to bacterial wilt, Fusarium wilt, crown health and herbage growth. The other half of the parent plants were selected out of saturated soils near Marshfield, WI. Plants were selected for resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, Aphanomyces root rot(Race 1or2) and leaf disease. This source material trace back to Evolution and Defiant. The percent of germplasm sources are: Ladak(28), M. varia(12), Turkistan(35), Flemish(25).
- 2. Arrowhead is adapted in the North Central Region of the United States and intended for use in the Northern half of the United States. The state where it has been tested is Wisconsin.
- 3. Arrowhead is a dormant, fall dormancy 2 variety. **Arrowhead is very winter hardy similar to the winter survival 2 checks.** Flower color in the Syn. 2 generation is 85% purple, 15% variegated, trace amounts of cream, white and yellow.
- 4. Arrowhead has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot; resistance to anthracnose(Race 1), Aphanomyces root rot(Race 1), Verticillium wilt and moderate resistance to northern root-knot nematode(M. halpa) and stem nematode. It has not been tested for pea aphid, blue alfalfa aphid and spotted alfalfa aphid.
- 5. Breeder seed was produced from bulking seed of parent plants planted in field isolation to produce Syn. 1 seed near Sloughhouse, CA in 1994. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research International.
- 6. Certified Seed was available fall of 1998.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: <u>Arrowhead</u>	Date submitted: November 25, 1998
Experimental designations: DS9852	

Date this amendment was submitted: November 24, 2004

Magna 601

- 1. Magna 601 is a 48 clone synthetic variety. Parent plants were selected out of forage yield plots near Clinton, WI. Parent plants were selected from Sutter. These parent plants were evaluated for bacterial wilt, Fusarium wilt, leaf disease, crown health and herbage growth. The percent of germplasm sources are: Turkistan(12), Chilean(4), Peruvian(1) and Unknown(83).
- 2. Magna 601 is adapted in the Southwestern and North central Region of the United States and intended for use in the Southern and Central regions of the United States. The states where it has been tested are California and Wisconsin.
- 3. Magna 601 is a moderately dormant, fall dormancy 6 variety. Magna 601 is moderately winter hardy similar to the winter survival 3 checks. Flower color in the Syn. 2 generation is 95% purple, 5% variegated with trace amounts of cream, white and yellow. Magna 601's forage yield production under saline soils is similar to the tolerant checks.
- 4. Magna 601 has high resistance to Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid; resistance to northern root-knot nematode(M. hapla), stem nematode, southern root-knot nematode(M. incognita), bacterial wilt, pea aphid, anthracnose(Race 1); moderate resistance to Aphanomyces root rot(Race 1) and Verticillium wilt. It has not been tested for blue alfalfa aphid.
- 5. Breeder seed was produced from bulking seed of parent plants planted in field isolation to produce Syn.1 seed near Sloughhouse, CA in 1991. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research International.
- 6. Certified Seed was available fall of 1999.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: <u>Magna 601</u> Experimental designations: <u>DS9855</u>

Date NA&MLVRB first accepted this variety: <u>November 25, 1998</u> Dates previous amendments were accepted: <u>November 29, 1999</u> Date this amendment was submitted: November 24, 2004

Good as Gold II

- 1. Good as Gold II is a 16 clone synthetic variety. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, maturity, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1), and spotted alfalfa aphid. Parent plants trace back to Tempo, Apollo Supreme, Thor, WL312, Answer, Teweles Multistrain, and Dairyland Experimentals which trace back to Ranger and Iroquois. Percentage of germplasm sources are: Turkistan(32), Flemish(40) and Chilean(28).
- 2. Good as Gold II is adapted in the North Central and Great Plains regions of the United States. It is intended for use in the North and Central region of the United States. The states in which it has been tested are: Wisconsin, Nebraska, Kansas and Oklahoma.
- 3. Good as Gold II is moderately dormant, fall dormancy 4 variety. Good as Gold II is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn.2 generation is 90% purple, 10% variegated, and trace amounts of cream, white, and yellow.
- 4. Good as Gold II has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, northern root-knot nematode(M. hapla); resistance to Verticillium wilt, pea aphid, anthracnose(Race1); moderate resistance to stem nematode and Aphanomyces root rot(Race1). Its reaction to spotted alfalfa aphid and blue alfalfa aphid have not been tested.
- 5. Breeder seed was produced from cuttings of the parent plants planted in cage isolation to produce Syn.1 seed at Sloughhouse, CA in 1988-90. Seed was bulked in equal proportions each year and lots were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed(Syn.2 or 3) from either Breeder or Foundation seed. One generation each of Breeder and Foundation, and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research.
- 6. Certified seed will be available spring of 1999.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9.	Variety name: Good as Gold II
	Experimental designations: DSS5106
	Date NA&MLVRB first accepted this variety: November 25, 1998
	Dates previous amendments were accepted: November 29, 1999, January 16, 2001
	Date this amendment was submitted: November 24, 2004

Reward II

- 1. Reward II is an 18 clone synthetic. Parent clones were selected out of forage yield plots and/or disease nurseries. These parent plants were progeny tested for one or more of the following traits: forage yield, stand persistence, forage quality, resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, anthracnose (Race 1), Verticillium wilt and Aphanomyces root rot (Race 1). The percent of germplasm sources are: M. varia(15), Turkistan(15), Flemish(40) and Unknown(30).
- 2. Reward II is adapted to the North Central, Great Plains and East Central Region of the United States and intended for use in the Northern half of the United States. The states where it has been tested are Michigan, Kansas, Nebraska, Iowa and Wisconsin.
- 3. Reward II is a moderate dormant variety similar to the fall dormancy 4 check. **Reward II is very winter hardy similar to the winter survival 2 checks.** Flower color in the Syn. 2 generation is 85% purple, 15% variegated with trace amounts of cream, white and yellow.
- 4. Reward II has high resistance to bacterial wilt, Fusarium wilt, Phytophthora root rot, and northern root-knot nematode (M. hapla); resistance to Aphanomyces root rot (Race1), stem nematode, Verticillium wilt, anthracnose (Race 1), pea aphid, spotted alfalfa aphid and blue alfalfa aphid.
- 5. Breeder seed (Syn. 1) was produced by bulking seed of parent plants which were grown in field isolation near Sloughhouse, CA in 1992-93. Seed from parental clones were equally bulked and seed lots from each year were kept separate. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn. 20r3) from either Breeder or Foundation seed. One generation each of Breeder, Foundation and two generations of Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research will maintain sufficient Breeder seed for the projected life of the variety.
- 6. Certified Seed will be available fall of 2000.
- 7. Application for the Plant Variety Protection is undecided.
- 8. Information in the NAVRB application can be forwarded to the PVP office.

9. Variety name: Reward II

Experimental designations: PGI4372

Date NA&MLVRB first accepted this variety: November 28, 2000

Dates previous amendments were accepted:

Date this amendment was submitted: November 24, 2004

Forecast 3001

- 1. Forecast 3001 is a 75 clone synthetic variety. Parent plants were selected for four cycles for late maturity in space planted clonal nurseries. Parent plants were concurrently selected for persistence, spring vigor, forage yield along with resistance to bacterial wilt, Fusarium wilt and Phytophthora root rot, Aphanomyces root rot(Race 1or2) and Verticillium wilt. Parent plants trace back to Majestic, Magnum III, WAPH-1, 5373, 5246, 5444, ABI700, Quantum, Olds3452ML and Dairyland experimentals. Percentage of germplasm sources are: Ladak(3), M. varia(8), Turkistan(15), Flemish(22) and Unknown(52).
- 2. Forecast 3001 is adapted to the North Central region of the United States. It is intended for use in the North and Central regions of the United States. The state and province in which it has been tested are: Wisconsin and Ontario, Canada.
- 3. Forecast 3001 is dormant, fall dormancy 3 variety. Forecast 3001 is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn.2 generation is 86% purple, 14% variegated, and trace amounts of cream, white, and yellow.
- 4. Forecast 3001 has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt; resistance to anthracnose(Race1), Verticillium wilt, Aphanomyces root rot(Race1) northern root-knot nematode, stem nematode and pea aphid. Its reaction to spotted alfalfa aphid and blue alfalfa aphid have not been tested.
- 5. Breeder seed was produced from bulking seed of parent plants hand-crossed in greenhouse near Clinton, WI to produce Syn.1 in 1994. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Sufficient Breeder seed for the projected life of the variety will be maintained by Dairyland Research International.
- 6. Certified seed will be available spring of 2000.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: <u>Forecast 3001</u> Experimental designations: <u>SMA9565</u>

Date NA&MLVRB first accepted this variety: November 25, 1998

Dates previous amendments were accepted: November 29, 1999

Date this amendment was submitted: November 24, 2004

Forecast 1001

- 1. Forecast 1001 is a 16 clone synthetic variety. Parent plants were selected from Forecast 1000 for three cycles for the early maturity trait in space planted clonal nurseries. Parent plants were concurrently selected for persistence, spring vigor and forage yield along with resistance to bacterial wilt, Fusarium wilt and Phytophthora root rot, Aphanomyces root rot (Race 1or2) and Verticillium wilt. Percentage of germplasm sources are: Turkistan(25), Flemish(40) and Unknown(35).
- 2. Forecast 1001 is adapted to the North Central region of the United States. It is intended for use in the North and Central regions of the United States. The state and province in which it has been tested are: Wisconsin and Ontario, Canada.
- 3. Forecast 1001 is moderately dormant, fall dormancy 4 variety. Forecast 1001 is very winter hardy similar to the winter survival 2 checks. Flower color in the Syn.2 generation is 85% purple, 15% variegated, and trace amounts of cream, white, and yellow.
- 4. Forecast 1001 has high resistance to Phytophthora root rot, bacterial wilt, Fusarium wilt, northern root-knot nematode (M. halpa), resistance to anthracnose (Race1), Verticillium wilt, Aphanomyces root rot (Race1), pea aphid and stem nematode. Its reaction to spotted alfalfa aphid and blue alfalfa aphid has not been tested.
- 5. Breeder seed was produced from bulking seed of parent plants hand-crossed in greenhouse near Clinton, WI to produce Syn.1 in 1994. Foundation seed (Syn.2) was produced from Breeder seed and Certified seed (Syn.3) from Foundation seed. One generation each of Breeder, Foundation and Certified seed classes are recognized. A maximum of three harvest years each is permitted on stands producing Breeder and Foundation seed with five years for Certified seed. Dairyland Research International will maintain sufficient Breeder seed for the projected life of the variety.
- 6. Certified seed will be available spring of 2000.
- 7. Application for Plant Variety Protection is anticipated.
- 8. Information in the NAVRB application can be forwarded to the PVP office.
- 9. Variety name: Forecast 1001
 Experimental designations: SMA9579
 Date NA&MLVRB first accepted this variety: November 25, 1998
 Dates previous amendments were accepted: November 29,1999, November 28, 2000
 Date this amendment was submitted: November 24, 2004

Sequoia

- Sequoia is a 235-plant synthetic variety resulting from phenotypic recurrent selection for stem nematode. Source material traces to elite WL germplasm selected for yield and persistence from field yield trials at Bakersfield, California. Parental germplasm traces to WL 457, WL 514 and Cuf 101. Approximate germplasm source contributions are Arabian – 50%, Chilean – 10%, Indian – 10%, African – 20% and Peruvian – 10%.
- 2. Sequoia is adapted to and intended for use in the Southwestern United States. Sequoia has been yield tested in California.
- 3. Flower color of Sequoia at Syn 2 approximates 100% purple with traces of cream, white and variegated. The fall dormancy of Sequoia is most similar to the fall dormancy group 8 check.
- 4. Sequoia has high resistance to Fusarium wilt, stem nematode, spotted alfalfa aphid, blue alfalfa aphid and southern root knot nematode; and resistance to bacterial wilt, Phytophthora root rot, pea aphid and northern root knot nematode. Reaction to anthracnose, Verticillium wilt and Aphanomyces root rot (Race 1) has not been adequately tested.
- 5. Breeder seed (Syn 1) was produced in 1992 on 235 plants under cage isolation at Bakersfield, California. Sufficient foundation (Syn 2) seed will be produced for the expected life of the variety and will be maintained by W-L Research. One generation of Breeder (Syn 1) and two generations each of Foundation (Syn 2 or 3) and Certified (Syn 3 or 4) seed are recognized. The maximum permitted length of stand for Foundation and Certified seed fields are three and five years, respectively. Production of Syn 3 Foundation seed requires consent of the breeder.
- 6. Certified seed will be marketed in 1999.
- 7. It is undecided whether application will be made for Plant Variety Protection.
- 8. The information in this application can be turned over to the PVP office.

Variety name Sequoia
Experimental designations 92-296
Date NA&MLVRB first accepted this variety
Dates previous amendments were accepted
Date this amendment submitted November 1, 2004

FG 101T014

- 1. The selection criteria used in the development of this variety include winter-active growth, high forage yield and persistence from older trials and/or nurseries.
- 2. This variety is adapted to the Southwest U.S. region. This variety has been tested in California is intended for use in the Southwest U.S. region.
- 3. Test variety Very Non-Dormant, similar to FD10 checks. Flower color (Syn2) is 100% purple with a trace of variegated, yellow, cream and white.
- 4. This variety has high resistance to anthracnose (Race 1), Fusarium wilt, pea aphid and spotted alfalfa aphid; with resistance to Phytophthora root rot, stem nematode and blue alfalfa aphid. Reaction to Aphanomyces root rot (Race 1), bacterial wilt, root-knot nematode (*M. hapla*) and Verticillium wilt has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name:		_Date Submitted:	November 1, 2004	
	Experimental designations:	FG 101T014			

Goliath

- 1. Goliath is a synthetic variety with 100 parent plants. Parent plants were selected for multifoliolate expression and resistance to one or more the following pests: stem nematode, Verticillium wilt, Phytophthora root rot and anthracnose. Germplasm sources used in developing FG 3B6l were Dividend (25%), LegenDairy (25%), Excalibur 11(25%) and Prism 2 (25%). Breeder seed (Syn 1) was produced in Nampa, Idaho in 1992. Seed was harvested in total on all parents and bulked to form breeder seed. Approximate germplasm source contributions are: M.falcata (4%), Ladak (5%), M.varia (26%), Turkistan (4%), Flemish (58%) and Chilean (3%).
- 2. This variety is adapted to the Winterhardy Intermountain U. S. This variety has been tested in Idaho and Washington. It will be used in the Intermountain U. S.
- 3. This variety has fall dormancy similar to FD3. Flower color (SYN2) is 82% purple, 18% variegated with a trace of yellow, white and cream. FG 3B6 I has high multifoliolate leaf expression.
- 4. This variety has high resistance to bacterial wilt, Fusarium wilt, anthracnose (Race I), Phytophthora root rot, spotted alfalfa aphid and stem nematode; and resistance to Verticillium wilt, pea aphid and root knot nematode (M. hapla). Reaction to blue alfalfa aphid and Aphanomyces root rot has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1992. Sufficient foundation seed for the projected life of the variety will be maintained by Forage Genetics. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 1998.

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- 7. No decision has been made concerning Plant Variety Protection Act
- 8. The information in this application may be forwarded to the PVP office.

Variety name Goliath
Experimental designations FG 3B61
Date NA&MLVRB first accepted this variety January 1998
Dates previous amendments were accepted None
Date this amendment submitted November 1, 2004

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Genoa

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1).
- 2. This variety is adapted to North Central, East Central and Winterhardy Intermountain regions. This variety has been tested in Wisconsin, Pennsylvania, and Idaho and is intended for use in the North Central, East Central and Winterhardy Intermountain regions.
- 3. Test variety is Moderately Fall Dormant, similar to FD4 checks. Test variety is Extremely Winterhardy, similar to WS1 checks. Flower color (Syn2) is 92% purple, 8% variegated with a trace of yellow, white and cream.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt and Aphanomyces root rot (Race 1); with resistance to stem nematode and pea aphid. Reaction to root-knot nematode, spotted alfalfa aphid, blue alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2003.

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

Variety name Genoa
Experimental designationsFG 40M157
Date NA&MLVRB first accepted this variety
Dates previous amendments were accepted <u>none</u>
Date this amendment submitted November 1, 2004

4R429

- 1. The selection criteria used in the development of this variety include forage yield, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race1 and Race2).
- 2. This variety is adapted to North Central and East Central regions. This variety has been tested in Iowa, New York, Wisconsin and Pennsylvania, and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Fall Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 92% purple, 8% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, Aphanomyces root rot (Race 1), and Aphanomyces root rot (Race 2); resistance to pea aphid and spotted alfalfa aphid; with moderate resistance to stem nematode. Reaction to blue alfalfa aphid and root-knot nematode (*M. hapla*) has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the greenhouse in 1999 and in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2004.

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

Variety name 4R429
Experimental designationsFG 40M180
Date NA&MLVRB first accepted this variety
Dates previous amendments were acceptedNone
Date this amendment submittedNovember 1, 2004

FG 40W201

- 1. The selection criteria used in the development of this variety include forage yield, fall dormancy reaction, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and stem nematode.
- 2. This variety is adapted to the Winterhardy Intermountain U.S. region. This variety has been tested in Idaho and Colorado and is intended for use in Winterhardy Intermountain U.S. region.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Moderately Winterhardy, similar to WS3 check. Flower color (Syn2) is 89% purple, 9% variegated, 2% cream with a trace of white and yellow. This variety has moderate multifoliolate leaf expression.
- 4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode and pea aphid; with resistance to spotted alfalfa aphid and root knot nematode (*M. hapla*). Reaction to blue alfalfa aphid and Aphanomyces root rot (Race 1) has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name:		Submitted:	November 1, 2004	
	Experimental designations:	FG 40W201			

FG 40W203

- 1. The selection criteria used in the development of this variety include forage yield, fall dormancy reaction, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, stem nematode and Phytophthora root rot.
- 2. This variety is adapted to the Winterhardy Intermountain U.S. region. This variety has been tested in Idaho and Colorado, and is intended for use in Winterhardy Intermountain U.S. region.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Moderately Winterhardy, similar to WS3 check. Flower color (Syn2) is 90% purple, 6% variegated, 2% cream, 1% white and 1% yellow. This variety has high multifoliolate leaf expression.
- 4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, stem nematode, pea aphid and root knot nematode (*M. hapla*); with resistance to spotted alfalfa aphid. Reaction to blue alfalfa aphid and Aphanomyces root rot (Race 1) has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.

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

9.	Variety Name:		Submitted: November 1, 2004	
	Experimental designations:	FG 40W203		

Ameristand 404LH

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, Aphanomyces root rot (Race1) and potato leafhopper.
- 2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Wisconsin, Pennsylvania, Indiana, and Iowa and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 84% purple, 16% variegated with a trace of yellow, white and cream.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, Aphanomyces root rot (Race 1) and potato leafhopper; resistance to pea aphid; with moderate resistance to spotted alfalfa aphid, stem nematode and root-knot nematode (*M. hapla*). Reaction to blue alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name:	Ameristand 404LH	Date Submitted:	November 1, 2004	
	Experimental designations:	FG 41H155			

Enforcer

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, Aphanomyces root rot (Race1) and potato leafhopper.
- 2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Wisconsin, Pennsylvania, Indiana and Iowa, and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 87% purple, 13% variegated with a trace of yellow, white and cream.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, Aphanomyces root rot (Race 1) and potato leafhopper; resistance to pea aphid, stem nematode and root-knot nematode (*M. hapla*); with moderate resistance to spotted alfalfa aphid. Reaction to blue alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may be forwarded to the PVP office.

9.	Variety Name: Enforcer		Date Submitted:	November 1, 2004
	Experimental designations:	FG 41H158		

FSG 400LH

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, Aphanomyces root rot (Race1) and potato leafhopper.
- 2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Wisconsin, Pennsylvania, Indiana and Iowa, and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 85% purple, 14% variegated, 1% yellow with a trace of white and cream.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, Aphanomyces root rot (Race 1) and potato leafhopper; resistance to pea aphid and stem nematode; with moderate resistance to spotted alfalfa aphid and root-knot nematode (*M. hapla*). Reaction to blue alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may be forwarded to the PVP office.

9.	9. Variety Name: FSG 400LH		Date Submitted: November 1, 2004		
	Experimental designations:	FG 41H159			

FG 41H160

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, Aphanomyces root rot (Race1) and potato leafhopper.
- 2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Wisconsin, Pennsylvania, Indiana and Iowa, and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 85% purple, 15% variegated with a trace of yellow, white and cream.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, Aphanomyces root rot (Race 1) and potato leafhopper; resistance to pea aphid; with moderate resistance to stem nematode and root-knot nematode (*M. hapla*). Reaction to blue alfalfa aphid and spotted alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name:		Date Submitted:	November 1, 2004
	Experimental designations:	FG 41H160		

Marvel

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1).
- 2. This variety is adapted to the North Central, East Central and Great Plains regions. This variety has been tested in Wisconsin, New York, Minnesota and Nebraska, and is intended for use in the North Central, East Central and Great Plains regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 91% purple, 9% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, pea aphid and Aphanomyces root rot (Race 1); resistance to spotted alfalfa aphid and stem nematode; with moderate resistance to root-knot nematode (*M. hapla*). Reaction to blue alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may be forwarded to the PVP office.

9.	Variety Name: Marvel		Date Submitted:	November 1, 2004	
	Experimental designations:	FG 41M117			

Rebound 5.0

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1).
- 2. This variety is adapted to the North Central, East Central and Great Plains regions. This variety has been tested in Wisconsin, New York, Minnesota and Nebraska, and is intended for use in the North Central, East Central and Great Plains regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 94% purple, 6% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, pea aphid and Aphanomyces root rot (Race 1); with resistance to spotted alfalfa aphid, root-knot nematode (*M. hapla*) and stem nematode. Reaction to blue alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

E : (11 : C FO AIMII)	9.	Variety Name: Rel	oound 5.0	Date Submitted:	November 1, 2004	
Experimental designations: FC(41M118		Experimental designations:	FG 41M118			

FG 41W206

- 1. The selection criteria used in the development of this variety include forage yield, fall dormancy reaction, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, stem nematode and Phytophthora root rot.
- 2. This variety is adapted to the Winterhardy Intermountain U.S. region. This variety has been tested in Idaho and Colorado, and is intended for use in Moderately Winterhardy and Winterhardy Intermountain U.S. regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Flower color (Syn2) is 92% purple, 4% variegated, 2% white, 1% yellow, and 1% cream. This variety has moderate multifoliolate leaf expression.
- 4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, spotted alfalfa aphid, stem nematode and root knot nematode (*M. hapla*); with resistance to pea aphid and Aphanomyces root rot (Race 1). Reaction to blue alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name:	Submitted: November 1, 2	004
	Experimental designations:	FG 41W206	

FG 42A114

- 1. The selection criteria used in the development of this variety include forage yield, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1 and Race 2).
- 2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Wisconsin, Indiana, Ohio and Iowa, and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 95% purple, 5% variegated with a trace of yellow, white and cream. This variety has high multifoliolate leaf expression.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, pea aphid, Aphanomyces root rot (Race 1) and Aphanomyces root rot (Race 2). Reaction to blue alfalfa aphid, spotted alfalfa aphid, root-knot nematode (*M. hapla*) and stem nematode has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2002. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	O. Variety Name:		_Date Submitted:_	November 1, 2004
	Experimental designations:	FG 42A114		

WL 347LH

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, Aphanomyces root rot (Race1) and potato leafhopper.
- 2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Indiana, Pennsylvania, Ohio and Iowa, and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 87% purple, 13% variegated with a trace of yellow, white and cream.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, Aphanomyces root rot (Race 1), pea aphid and potato leafhopper; resistance to stem nematode; with moderate resistance to root-knot nematode (*M. hapla*). Reaction to blue alfalfa aphid and spotted alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2002. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name:	WL 347	LH	_Date Submitted:_	November 1, 2004
	Experimental designa	ations:	FG 42H153		

WL 345LH

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, Aphanomyces root rot (Race1) and potato leafhopper.
- 2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Indiana, Pennsylvania, Ohio and Iowa, and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 87% purple, 13% variegated with a trace of yellow, white and cream.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Phytophthora root rot, Verticillium wilt, Aphanomyces root rot (Race 1) and potato leafhopper; resistance to pea aphid and root-knot nematode (*M. hapla*); with moderate resistance to stem nematode. Reaction to blue alfalfa aphid and spotted alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2002. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name: WL 34	15LH	_Date Submitted:_	November 1, 2004
	Experimental designations:	FG 42H167		

FG 42H169

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, Aphanomyces root rot (Racel) and potato leafhopper.
- This variety is adapted to the North Central and East Central regions. This variety has been tested in Indiana, Pennsylvania, Ohio and Iowa, and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Dormant, similar to FD4 check. Test variety is Very Winterhardy, similar to WS2 check. Flower color (Syn2) is 88% purple, 12% variegated with a trace of yellow, white and cream.
- 4. Test variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Verticillium wilt, Fusarium wilt, Aphanomyces root rot (Race 1), pea aphid and potato leafhopper; resistance to stem nematode; with moderate resistance to root-knot nematode (*M. hapla*). Reaction to blue alfalfa aphid and spotted alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 2002. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name:		Date Submitted:	November 1, 2004	
	Experimental designations:	FG 42H169			

FG 4S42

- 1. The selection criteria used in the development of this variety include forage yield, forage quality, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, anthracnose, Phytophthora root rot, and Aphanomyces root rot (Race 1).
- 2. This variety is adapted to the North Central and East Central regions. This variety has been tested in Wisconsin, Michigan and Kentucky and is intended for use in the North Central and East Central regions.
- 3. Test variety is Moderately Fall Dormant, similar to FD4 checks. Test variety is Very Winterhardy, similar to WS2 checks. Flower color (Syn2) is 92% purple, 8% variegated with a trace of yellow, white and cream.
- 4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, spotted alfalfa aphid, pea aphid, Aphanomyces root rot (Race 1) and stem nematode, with moderate resistance to root-knot nematode (*M. hapla*). Reaction to blue alfalfa aphid has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the greenhouse in 1998 and in the field near Nampa, ID in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2003.

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

Variety name
Experimental designations FG 4S42
Date NA&MLVRB first accepted this variety
Dates previous amendments were acceptedNone
Date this amendment submitted November 1, 2004

FG 50W207

- 1. The selection criteria used in the development of this variety include forage yield, fall dormancy reaction, persistence and resistance to one or more of the following pests: bacterial wilt, Fusarium wilt, Verticillium wilt, stem nematode and Phytophthora root rot.
- 2. This variety is adapted to the Winterhardy Intermountain U.S. region. This variety has been tested in Idaho and Colorado and is intended for use in the Winterhardy and Moderately Winterhardy Intermountain U.S. regions.
- 3. Test variety is Moderately Dormant, similar to FD5 check. Test variety is Moderately Winterhardy, similar to WS3 check. Flower color (Syn2) is 91% purple, 6% variegated, 2% cream, 1% white with a trace of yellow. This variety has moderate multifoliolate leaf expression.
- 4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, spotted alfalfa aphid, stem nematode and root knot nematode (*M. hapla*); with resistance to pea aphid and blue alfalfa aphid. Reaction to Aphanomyces root rot (Race 1) has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2000. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	9. Variety Name:		Date Submitted: November 1, 2004		
	44444				
	Experimental designations:	FG 50W207			

FG 81M401

- 1. The selection criteria used in the development of this variety include winter-active growth, multifoliate expression, high forage yield and persistence from older trials and/or nurseries.
- 2. This variety is adapted to the Southwest U.S. region. This variety has been tested in California and is intended for use in the Southwest U.S. region.
- 3. Test variety is Non-Dormant, similar to FD8 checks. Flower color (Syn2) is 100% purple with a trace of variegated, yellow, cream and white. This variety has high multifoliolate leaf expression.
- 4. This variety has high resistance to anthracnose, bacterial wilt, Fusarium wilt, Phytophthora root rot, stem nematode, pea aphid, spotted alfalfa aphid and root knot nematode (*M. hapla*); with resistance to blue alfalfa aphid. Reaction to Verticillium wilt and Aphanomyces root rot has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	O. Variety Name:		_Date Submitted:_	November 1, 2004
	Experimental designations:	FG 81M401; FG 91M401		

Conquistador

- 1. The selection criteria used in the development of this variety include winter-active growth, multifoliolate leaf expression, high forage yield and persistence from older trials and/or nurseries.
- 2. This variety is adapted to the Southwest U.S. region. This variety has been tested in California and is intended for use in the Southwest.
- 3. Test variety is Non-Dormant, similar to FD8 checks. Flower color (Syn2) is 100% purple with a trace of variegated, yellow, cream and white. This variety has moderate multifoliolate leaf expression.
- 4. This variety has high resistance to Fusarium wilt, Phytophthora root rot, pea aphid, spotted alfalfa aphid and blue alfalfa aphid; with resistance to anthracnose (Race 1), Verticillium wilt, root knot nematode (*M. hapla*) and stem nematode; and low resistance to bacterial wilt. Reaction to Aphanomyces root rot has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	Variety Name: Conquistac	lor	Date Submitted:	November 1, 2004
	Experimental designations:	FG 8S906; FG 03-01		

Pacifico

- 1. The selection criteria used in the development of this variety include winter-active growth, high forage yield and persistence from older trials and/or nurseries.
- 2. This variety is adapted to the Southwest U.S. region. This variety has been tested in California and is intended for use in the Southwest U.S. region.
- 3. Test variety is Non Dormant, similar to FD8 checks. Flower color (Syn2) is 100% purple with a trace of variegated, yellow, cream and white.
- 4. This variety has high resistance to Fusarium wilt, pea aphid, spotted alfalfa aphid, blue alfalfa aphid and Phytophthora root rot; resistance to bacterial wilt, stem nematode, anthracnose (Race 1) and root knot nematode (*M. hapla*); with moderate resistance to Verticillium wilt. Reaction to Aphanomyces root rot has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office..

9.	Variety Name: Pacifico		Date Submitted:	November 1, 2004
	Experimental designations:	FG 8S917		

Yosemite

- 1. The selection criteria used in the development of this variety include selection for multifoliolate expression, winter active growth and high forage yield and persistence from older trials and/or nurseries.
- 2. This variety is adapted to California and the low desert areas of the west. This variety has been tested in California. It will be used in the Southwest.
- 3. Test variety is Non-Dormant, similar to FD8 check. Flower color (Syn2) is 100% purple with a trace of cream, yellow, variegated and white. Test variety has high multifoliolate leaf expression.
- 4. This variety has high resistance to anthracnose (race 1), Phytophthora root rot, pea aphid, spotted alfalfa aphid, blue alfalfa aphid and root knot nematode (*M. hapla*) and resistance to bacterial wilt, Fusarium wilt, Verticillium wilt and stem nematode. Reaction to Aphanomyces root rot has not been tested
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced near Nampa, Idaho in 1999. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 yeasr, respectively.
- 6. Certified seed will be marketed in 2004.

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

Variety name Yosemite
Experimental designations FG 8S920
Date NA&MLVRB first accepted this variety
Dates previous amendments were accepted None
1
Date this amendment submitted November 1, 2004

FG 91T013

- 1. The selection criteria used in the development of this variety include winter-active growth, high forage yield and persistence from older trials and/or nurseries.
- 2. This variety is adapted to the Southwest U.S. region. This variety has been tested in California and is intended for use in the Southwest U.S. region.
- 3. Test variety is Very Non-Dormant, similar to FD9 checks. Flower color (Syn2) is 100% purple with a trace of variegated, yellow, cream and white.
- 4. This variety has high resistance to Fusarium wilt, Phytophthora root rot, spotted alfalfa aphid, blue alfalfa aphid and stem nematode; with resistance to anthracnose (Race 1), bacterial wilt, pea aphid and root knot nematode (*M. hapla*). Reaction to Aphanomyces root rot (race 1) and Verticillium wilt have not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	. Variety Name:		_Date Submitted:_	November 1, 2004
	Experimental designations:	FG 91T013; FG 101T013		

FG 91T017

- 1. The selection criteria used in the development of this variety include winter-active growth, high forage yield and persistence from older trials and/or nurseries.
- 2. This variety is adapted to the Southwest U.S. region. This variety has been tested in California and is intended for use in the Southwest U.S. region.
- 3. Test variety is Very Non-Dormant, similar to FD9 checks. Flower color (Syn2) is 100% purple with a trace of variegated, cream, yellow and white.
- 4. This variety has high resistance to anthracnose (Race 1), bacterial wilt, Phytophthora root rot, Fusarium wilt, stem nematode, spotted alfalfa aphid, blue alfalfa aphid and pea aphid; with resistance to root knot nematode (*M. hapla*). Reaction to Aphanomyces root rot (race 1) and Verticillium wilt has not been tested.
- 5. Seed increase is on a limited generation basis with one generation of breeder and two generations of foundation and certified seed classes. Breeder (Syn 1), foundation (Syn 2 or Syn 3), and certified (Syn 3 or Syn 4) classes will be recognized. Production of Syn 3 foundation seed requires consent of the breeder. Breeder seed was produced in the field near Nampa, ID in 2001. Forage Genetics will maintain sufficient foundation seed for the projected life of the variety. Stands of foundation and certified seed fields are limited to 3 and 6 years, respectively.
- 6. Certified seed will be marketed in 2005.
- 7. No decision has been made concerning Plant Variety Protection Act.
- 8. The information in this application may not be forwarded to the PVP office.

9.	O. Variety Name:		_Date Submitted:_	November 1, 2004
	Experimental designations:	FG 91T017; FG 81T017		

Everlast

- 1. The selection criteria used in the development of Everlast were plant vigor, fall re-growth, and freedom from root and crown diseases. The 103 selected plants were intercrossed to form the base population of Everlast.
- 2. Everlast is adapted to the North Central and East Central regions of the United States. It has been tested in Iowa and Wisconsin. Everlast is intended for use in the North Central and East Central regions of the U.S.
- 3. Everlast is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 3 generation is approximately 96% purple and 4% variegated with traces of yellow, cream and white.
- 4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, **Fusarium wilt**, Verticillium wilt, and Phytophthora root rot. It is resistant to Aphanomyces root rot (race 1) and stem nematode. It is moderately resistant to Pea aphid. Resistance to spotted alfalfa aphid, blue alfalfa aphid and root-knot nematode has not been determined.
- 5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 2, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2001 and 2002. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.
- 6. Seed will be marketed in 2004.
- 7. Plant Variety Protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

Variety name Everlast (Amended)
Experiment designationLS 101
Date NA&MLVRB first accepted this variety13 April 2004
Dates previous amendments were accepted
Date amendment submitted 18 November 2004

- 1. The selection criteria used in the development of this variety were overall plant vigor, fall re-growth, and freedom from root and crown diseases. The 102 selected plants were intercrossed to form the base population of 420.
- 2. This variety is adapted to the North Central and East Central regions of the United States. It has been tested in Iowa and Wisconsin. This variety is intended for use in the North Central and East Central regions of the U.S.
- 3. 420 is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 3 generation is approximately 95% purple and 5% variegated with traces of cream, yellow and white.
- 4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, **Fusarium wilt**, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). It is moderately resistant to pea aphid. Resistance to spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and root-knot nematode has not been determined.
- 5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2001. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.
- 6. Seed will be marketed in 2004.
- 7. Plant Variety Protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

Variety name 420 (Amended)
Experiment designation <u>LS 102</u>
Date NA&MLVRB first accepted this variety13 April 2004
Dates previous amendments were accepted
Date amendment submitted 18 November 2004

L-411HD

- 1. The selection criteria used in the development of L-411HD were overall plant vigor, fall re-growth, and freedom from root and crown diseases. The 98 selected plants were intercrossed to form the base population of L-411HD.
- 2. This variety is adapted to the North Central and East Central regions of the United States. It has been tested in Iowa and Wisconsin. This variety is intended for use in the North Central and East Central regions of the U.S.
- 3. L-411HD is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 3 generation is approximately 96% purple and 4% variegated with traces of cream, yellow and white.
- 4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, **Fusarium wilt**, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). It has moderate resistance to pea aphid and stem nematode. Resistance to spotted alfalfa aphid, blue alfalfa aphid and root-knot nematode has not been determined.
- 5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2001. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.
- 6. Seed will be marketed in 2004.
- 7. Plant Variety Protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

Variety name <u>L-411HD (Amended)</u>			
Experiment designation <u>LS 103</u>			
Date NA&MLVRB first accepted this variety13 April 2004			
Dates previous amendments were accepted			
Date amendment submitted 18 November 2004			

L-311

- 1. The selection criteria used in the development of L-311 were overall plant vigor, fall re-growth, and freedom from root and crown diseases. The 108 selected plants were intercrossed to form the base population of L-311.
- 2. This variety is adapted to the North Central and East Central regions of the United States. It has been tested in Iowa and Wisconsin. This variety is intended for use in the North Central and East Central regions of the U.S.
- 3. L-311 is a dormant cultivar with a fall dormancy similar to the FD 3 check. Flower color in the Syn 3 generation is approximately 98% purple and 2% variegated with traces of cream, yellow and white.
- 4. L-311 is highly resistant to anthracnose (race 1), bacterial wilt, **Fusarium wilt**, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). It has low resistance to pea aphid. Resistance to spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and root-knot nematode has not been determined.
- 5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Moses Lake, WA in 2001. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.
- 6. Seed will be marketed in 2004.
- 7. Plant Variety Protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

Variety name L-311 (Amended)			
Experiment designation <u>LS 104</u>			
Date NA&MLVRB first accepted this variety 13 April 2004			
Dates previous amendments were accepted			
Date amendment submitted <u>18 November 2004</u>			

LS 201

- 1. LS 201 is a 98 plant synthetic variety. The selection criteria used in the development of this variety were high forage yield, rapid regrowth after harvest, fall regrowth, and freedom from root and crown diseases. The 98 selected plants were intercrossed to form the base population of LS 201.
- 2. LS 201 is adapted to the North Central region of the United States. It has been tested in Wisconsin. This variety is intended for use in the North Central and East Central regions of the U.S.
- 3. LS 201 is a dormant cultivar with a fall dormancy similar to the FD 3 check. Flower color in the Syn 3 generation is approximately 96% purple and 4% variegated with traces of yellow, cream and white.
- 4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). Resistance to pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and root-knot nematode has not been determined.
- 5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2002. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.
- 6. Seed will be marketed in 2005.
- 7. Plant Variety Protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

9.	Variety Name:	Date submitted _	18 November 2004
	Experimental designations:	LS 201	

LS 202

- 1. LS 202 is a 104 plant synthetic variety. The selection criteria used in the development of this variety were high forage yield, rapid re-growth after harvest, fall re-growth, and freedom from root and crown diseases. The 104 selected plants were intercrossed to form the base population of LS 202.
- 2. LS 202 is adapted to the North Central region of the United States. It has been tested in Wisconsin. This variety is intended for use in the North Central region of the U.S.
- 3. LS 202 is a dormant cultivar with a fall dormancy similar to the FD 3 check. Flower color in the Syn 3 generation is approximately 94% purple and 6% variegated with traces of yellow, cream and white.
- 4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). Resistance to pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and root-knot nematode has not been determined.
- 5. Seed classes will be breeder (Syn 2), foundation (Syn 3), and certified (Syn 3 or Syn 4). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2002. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.
- 6. Seed will be marketed in 2005.
- 7. Plant Variety Protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

9.	variety Name:	Date submitted _	19 November 2004
	Experimental designations:	LS 202	

Viking 357

- 1. Viking 357 is a 110 plant synthetic variety. The selection criteria used in the development of this variety were high forage yield, rapid re-growth after harvest, winter survival, and freedom from crown and root diseases.
- 2. Viking 357 is adapted to the North Central region of the United States. It has been tested in Wisconsin. This variety is intended for use in the North Central region of the U.S.
- 3. Viking 357 is a moderately fall dormant cultivar with a fall dormancy similar to the FD 4 check. Flower color in the Syn 2 generation is approximately 94% purple and 6% variegated with traces of yellow, cream and white.
- 4. This variety is highly resistant to anthracnose (race 1), bacterial wilt, Fusarium wilt, Verticillium wilt, Phytophthora root rot, and Aphanomyces root rot (race 1). It is resistant to Aphanomyces root rot (race 2). Resistance to pea aphid, spotted alfalfa aphid, blue alfalfa aphid, stem nematode, and root-knot nematode has not been determined.
- 5. Seed classes will be breeder (Syn 1), foundation (Syn 2), and certified (Syn 2 or Syn 3). Stand life will be limited to 1, 3, and 6 years on fields producing breeder, foundation, and certified seed classes, respectively. Breeder seed was produced near Nampa, ID in 2002. Legacy Seeds will maintain sufficient seed stocks for the life of the variety.
- 6. Seed will be marketed in 2005.
- 7. Plant Variety Protection will not be applied for.
- 8. This information can be forwarded to the PVP office.

9. Variety Name: Viking 357 Date submitted 18 November 2004

Experimental designations: LS 205

59N59

- 1. 59N59 is a synthetic cultivar with 174 parent plants intercrossed in cage isolation in 2000. Parent plants trace to Pioneer nondormant experimentals with that have good forage yield, persistence, and multiple pest resistance. Parent plants of 59N59 were selected phenotypically for one or more of the following pests: *Phytophthora* root rot, anthracnose (race 1), stem nematode, and *Fusarium* wilt. Parent plants were also phenotypically selected for improved crowns.
- 2. 59N59 is adapted to Australia. 59N59 is intended for use in the Great Plains and southwest region of the United States. It also is intended for use in Argentina, Australia, Mexico and southern Europe.
- 3. 59N59 is a nondormant cultivar with a fall dormancy similar to FD-9 check. Flower color of the Syn 2 generation is 96% purple, 4% variegated, with a trace of yellow, cream, and white.
- 4. 59N59 is highly resistant to anthracnose (race 1), stem nematode, Northern root-knot nematode, Southern root-knot nematode, *Fusarium* wilt, bacterial wilt, *Phytophthora* root rot, pea aphid and spotted alfalfa aphid; resistant to blue alfalfa aphid; and moderately resistant to *Aphanomyces* root rot (race 1) and *Verticillium* wilt.
- 5. Breeder seed (Syn 1) was produced on 174 plants in 2000 in Connell, WA, and all seed harvested was bulked. Seed classes will be breeder, foundation (Syn 2 or 3), and certified (Syn 2,3 or 4). Foundation seed may be produced from breeder or foundation. The second-generation foundation seed may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations of age of stand will be one, three and five years, respectively, for breeder, foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.
- 6. Seed will be marketed in the spring of 2006.
- 7. Application for Plant Variety Protection may be made and the certification option will not be requested.
- 8. As a means of added varietal protection, information included with the Application for Review of Alfalfa Varieties for Certification may be provided to the PVP office.
- 9. Variety name: 59N59 Date submitted: November 30, 2004 Experimental designation: X59N59, Y59N59, 00I10PN1

53Q30

- 1. 53Q30 is a synthetic variety with 15 parent clones. Each parent was selected for forage yield, forage quality, and persistence. Parental sources trace to populations selected phenotypically for resistance to one or more of the following pests using: bacterial wilt, *Verticillium* wilt, *Fusarium* wilt, anthracnose (Race 1), *Phytophthora* root rot and *Aphanomyces* root rot (Race 1).
- 2. 53Q30 is adapted to the North Central, and moderately winterhardy intermountain regions of the United States and Ontario, Canada. This variety has been tested in Wisconsin, Washington, Oregon, Iowa, Minnesota, and Ontario Canada. 53Q30 is intended for use in the North Central, East Central, Moderately Winterhardy Intermountain, Winterhardy Intermountain, Great Plains regions of the United States and Canada.
- 3. 53Q30 is moderately dormant cultivar with fall dormancy similar to FD-3 check. Flower color of the Syn 2 generation is approximately 89% purple, 9% variegated, 1% cream, 1% white, with a trace of yellow.
- 4. 53Q30 is highly resistant to *Aphanomyces* root rot (Race 1), bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, *Verticillium* wilt, Northern root-knot nematode, and anthracnose (Race 1); resistant to pea aphid insect, stem nematode, and spotted alfalfa aphid. Blue alfalfa aphid has not been tested.
- 5. Breeder seed was produced in the Pacific Northwest in 1997 and all seed harvested was bulked. Seed classes will be breeder (Syn 1), foundation (Syn 2 or 3), and certified (Syn 3, 4, or 5). Foundation seed may be produced from breeder or foundation classes. The second-generation foundation seed may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations of age of stand will be one, three and five years, respectively, for breeder, foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.
- 6. Seed will be marketed in the spring of 2005.
- 7. Application for Plant Variety Protection may be made and the certification option will not be requested.
- 8. As a means of added protection, information included with this Application for Review of Alfalfa Varieties for Certification may be provided to the PVP office.
- 9. Variety Name: 53Q30 Date submitted: November 30, 2004 Experimental designations: X53Q30, Y53Q30, and 00FQEXP2

54H11

- 1. 54H11 is a synthetic cultivar with 109 parent plants intercrossed in the greenhouse. Parent plants trace to Pioneer experimentals with winterhardiness, forage yield, persistence, and resistance to lodging. Parent plants of 54H11 were selected phenotypically for winterhardiness, general appearance, resistance to lodging and to one or more of the following pests: bacterial wilt, *Verticillium* wilt, *Phytophthora* root rot, *Aphanomyces* root rot, and *Phoma* crown and leaf spot.
- 2. 54H11 is adapted to the North Central and moderately winterhardy intermountain regions of the United States. 54H11 is intended for use in the North Central, East Central, moderately winterhardy intermountain, Great Plains, and winterhardy intermountain region of the United States. It also is intended for use in Canada.
- 3. 54H11 is a moderately dormant cultivar with fall dormancy similar to FD-4 check. Flower color of the Syn 2 generation is approximately 99% purple, 1% variegated, with a trace of cream, yellow and white.
- 4. 54H11 is highly resistant to anthracnose (race 1), *Aphanomyces* root rot (race 1), *Verticillium* wilt, and *Fusarium* wilt; resistant to *Phytophthora* root rot, spotted alfalfa aphid, pea aphid, Northern root-knot nematode, stem nematode, and bacterial wilt; and low resistance to *Aphanomyces* root rot (race 2). Reactions to blue alfalfa aphid have not been tested.
- 5. Breeder seed (Syn 1) was produced on 140 plants in 2001 in Connell, WA, and bulked. Seed classes will be breeder, foundation (Syn 2 or 3), and certified (Syn 3, 4, or 5). Foundation seed may be produced from breeder or foundation. The second-generation foundation seed may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations of age of stand will be one, three and five years, respectively, for breeder, foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.
- 6. Seed will be marketed in the spring of 2004.
- 7. Application for Plant Variety Protection may be made and the certification option will not be requested.
- 8. As a means of added varietal protection, information included with the Application for Review of Alfalfa Varieties for Certification may be provided to the PVP office.
- 9. Variety name: 54H11 Date submitted: November 26, 2003 Experimental designation: X54H11, Y54H11, 01W09PM2, W00PM72

54V46

- 1. 54V46 is a synthetic cultivar with 186 parent plants, which were screened phenotypically for resistance to *Aphanomycyes* (races 1 and 2) and *Phytophthora* root rot. 54V46 was selected from a synthetic cultivar tracing to 12 half-sib families. The families were selected for forage yield, and field appearance and the parents were selected phenotypically for resistance to one or more of the following pests: anthracnose race 1, *Phytophthora* root rot, *Aphanomycyes* root rot (races 1 and 2), bacterial wilt, *Fusarium* wilt, *Verticillium* wilt, and spotted alfalfa aphid.
- 2. 54V46 is adapted to the North Central, East Central and moderately winterhardy intermountain regions of the United States and Ontario, Canada. 54V46 is intended for use in the North Central, East Central, winterhardy intermountain, moderately winterhardy intermountain, and Great Plains regions of the United States, as well as Canada.
- 3. 54V46 is a moderately dormant cultivar with fall dormancy similar to FD-4 check. Flower color of the Syn 2 generation is approximately 85% purple, 14% variegated, 1% cream with a trace of yellow and white.
- 4. 54V46 is highly resistant to anthracnose (race 1), *Phytophthora* root rot, *Aphanomyces* root rot (race 1), *Fusarium* wilt, *Verticillium* wilt, and Northern Root Knot Nematode; resistant to spotted alfalfa aphid, pea aphid, *Aphanomyces* root rot (race 2) and Bacterial wilt; moderately resistant to stem nematode, and has a low resistance to blue alfalfa aphid.
- 5. Breeder seed (Syn 1) was produced on 186 plants under cage isolation during the summer of 1999 in Connell, WA, and bulked. Seed classes will be breeder, foundation (Syn 2 or 3), and certified (Syn 2, 3, or 4). Foundation seed may be produced from breeder or foundation. The second-generation foundation seed may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations of age of stand will be three and five years, respectively, for foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.
- 6. Seed will be marketed in the spring of 2003.
- 7. Application for Plant Variety Protection may be made and the certification option will not be requested.
- 8. As a means of added varietal protection, information included with the Application for Review of Alfalfa Varieties for Certification may be provided to the PVP office.
- 9. Variety name: 54V46 Date submitted: November 29, 2002 Experimental designation: X54V46, X54H46, Y54H46, 99W23PM1

56S82

- 1. 56S82 is a synthetic cultivar with 220 parent plants intercrossed in cage isolation. Parent plants trace to Pioneer experimentals with winterhardiness, forage yield, and persistence. Parent plants of 56S82 were selected phenotypically for one or more of the following pests: bacterial wilt, *Verticillium* wilt, *Phytophthora* root rot, stem nematode, northern root knot nematode, and *Aphanomyces* root rot (race 1). Parent plants were also phenotypically selected for improved crown type.
- 2. 56S82 is adapted to the North Central and moderately winterhardy intermountain regions of the United States and is also adapted to Argentina and Australia. 56S82 is intended for use in the North Central, East Central, moderately winterhardy intermountain, Great Plains, and southwest region of the United States. It also is intended for use in Argentina, Australia, Mexico, North Africa and southern Europe.
- 3. 56S82 is a semidormant cultivar with a fall dormancy similar to FD-6 check. Flower color of the Syn 2 generation is 93% purple, 3% variegated, 2% yellow, 1 % cream, and 1% white.
- 4. 56S82 is highly resistant to anthracnose (race 1), stem nematode, northern root-knot nematode, southern root-knot nematode, bacterial wilt, *Fusarium* wilt, *Phytophthora* root rot, spotted alfalfa aphid, blue alfalfa aphid, and pea aphid; and resistant to *Aphanomyces* root rot (race 1): and moderate resistance to *Verticillium* wilt.
- 5. Breeder seed (Syn 1) was produced on 220 plants in 1998 in Connell, WA, and bulked. Seed classes will be breeder, foundation (Syn 2 or 3), and certified (Syn 2,3 or 4). Foundation seed may be produced from breeder or foundation. The second-generation foundation seed may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations of age of stand will be one, three and five years, respectively, for breeder, foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.
- 6. Seed will be marketed in the spring of 2005.
- 7. Application for Plant Variety Protection may be made and the certification option will not be requested.
- 8. As a means of added varietal protection, information included with the Application for Review of Alfalfa Varieties for Certification may be provided to the PVP office.
- 9. Variety name: 56S82 Date submitted: December 1, 2003 Experimental designation: X56S82, Y56S82, 98N12PS1

57Q53

- 1. 57Q53 is a synthetic cultivar with 226 parent plants intercrossed in cage isolation. Parent plants trace to Pioneer experimentals with improved forage yield and persistence. Parent plants of 57Q53 were selected phenotypically for one or more of the following pests: *Verticillium* wilt, *Phytophthora* root rot, stem nematode, and pea aphid.
- 2. 57Q53 is adapted to Argentina, Italy and Australia. 57Q53 is intended for use in the Southwest, Moderately Winterhardy Intermountain and Great Plains regions of the United States. It also is intended for use in Argentina, Australia, Spain, and Italy.
- 3. 57Q53 is a nondormant cultivar with a fall dormancy similar to FD-7 check. Flower color of the Syn 2 generation is 98% purple, 1% variegated, 1% white with a trace of yellow and cream
- 4. 57Q53 is highly resistant to anthracnose (race 1), *Fusarium* wilt, *Verticillium* wilt, pea aphid, and northern root-knot nematode; resistant to *Phytophthora* root rot, and stem nematode; moderately resistant to bacterial wilt, spotted alfalfa aphid, blue alfalfa aphid, and southern root-knot nematode; and has low resistance to *Aphanomyces* root rot (race 1).
- 5. Breeder seed (Syn 1) was produced on 226 plants in 1996 in Connell, WA, and all seed harvested was bulked. Seed classes will be breeder, foundation (Syn 2 or 3), and certified (Syn 3, 4 or 5). Foundation seed may be produced from breeder or foundation. The second-generation foundation seed may be produced at the discretion of Pioneer Hi-Bred International, Inc. Limitations of age of stand will be one, three and five years, respectively, for breeder, foundation and certified seed. Breeder seed must be grown in the Pacific Northwest region of the United States.
- 6. Seed will be marketed in the spring of 2006.
- 7. Application for Plant Variety Protection may be made and the certification option will not be requested.
- 8. As a means of added varietal protection, information included with the Application for Review of Alfalfa Varieties for Certification may be provided to the PVP office.
- 9. Variety name: 57Q53 Date submitted: November 30, 2004 Experimental designation: Y57Q53, 96P53PS1

Dominion Red Clover

- 1. Dominion is adapted to east central United States. It has been tested in Indiana, Illinois, Kentucky, Ohio, and Tennessee.
- 2. Dominion is a diploid medium red clover. Its flower color is 13% red, 30% dark pink, 42% medium pink, 13% light pink, and 2% white. Approximately 68% of the plants exhibit leaf markings, and 96% have hairs on the stems. Dominion is resistant to southern anthracnose, moderately resistant to powdery mildew, and has low resistance to northern anthracnose. Approximately 70% of the plants flower in the seedling year. Dominion reaches 50% bloom approximately the same time as Kenland, and 3 days earlier than Arlington in the spring growth of the first year after seeding.
- 3. Seed increase of Dominion is limited to one generation of breeder (syn-1), two generations of foundation (syn-2 or 3), and three generations of certified (syn-2, 3, or 4) classes. Breeder seed was produced in 1998 and 1999 and is maintained in cold storage by FFR Cooperative. Length of stand allowed is 2 years each for foundation and certified classes. Production of foundation seed is limited to the northwest United States.
- 4. Certified seed will first be offered for sale in 2005.
- 5. Application will not be made for Plant Variety Protection.
- 6. Information in this application may be forwarded to the PVP office.

7. Variety name: Dominion Date submitted: December 1, 2004

Experimental designation: RC9804G

Raven Red Clover

- 1. Raven is adapted to the north central and east central United States. It has been tested in Indiana, Illinois, Kentucky, Michigan, Ohio, Oklahoma, and Pennsylvania.
- 2. Raven is a diploid medium red clover. Its flower color is 1% red, 14% dark pink, 45% medium pink, 38% light pink, and 2% white. Approximately 62% of the plants exhibit leaf markings, and 96% have hairs on the stems. Raven is resistant to northern and southern anthracnose and powdery mildew. Approximately 72% of the plants flower in the seeding year. Raven reaches 50% bloom approximately the same time as Kenland and 5 days earlier than Arlington in the spring growth of the first year after seeding.
- 3. Seed increase of Raven is limited to one generation of breeder (syn-1), two generations of foundation (syn-2 or 3), and three generations of certified (syn-2, 3, or 4) classes. Breeder seed was produced in 1998 and is maintained in cold storage by FFR Cooperative. Length of stand allowed is 2 years each for foundation and certified classes. Production of foundation seed is limited to the northwest United States.
- 4. Certified seed will first be offered for sale in 2005.
- 5. Application will not be made for Plant Variety Protection.
- 6. Information in this application may be forwarded to the PVP office.

7. Variety name: Raven Date submitted: December 1, 2004

Experimental designation: RC9402

Rocket Red Clover

- 1. Rocket is adapted to and intended for use in the east central and north central United States. It has been tested in Indiana, Illinois, Kentucky, Michigan, Pennsylvania, and Tennessee.
- 2. Rocket is a diploid medium red clover. Its flower color is 7% red, 27% dark pink, 45% medium pink, 19% light pink, and 2% white. Approximately 68% of the plants exhibit leaf markings, and 98% have hairs on the stems. Rocket is resistant to northern and southern anthracnose and powdery mildew. Approximately 75% of the plants flower in the seeding year. Rocket reaches 50% bloom approximately the same time as Arlington, 1 day earlier than Marathon, and 3 days later than Kenland in the spring growth of the first year after the seeding year.
- 3. Seed increase of Rocket is limited to one generation of breeder (syn-1), two generations of foundation (syn 2 or 3), and three generations of certified (syn 2, 3, or 4) classes. Breeder seed was produced in 1998 and is maintained in cold storage by FFR Cooperative. Length of stand allowed is 2 years each for foundation and certified classes. Production of foundation seed is limited to the northwest United States.
- 4. Certified seed will first be offered for sale in 2004.
- 5. Application will not be made for Plant Variety Protection.
- 6. Information in this application may be forwarded to the PVP office.

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

Experimental designation: RC9301 Date accepted: January 2004

- 1. CW 9801 is a synthetic variety of Ladino type white clover with 200 parent plants that were selected sequentially for winter hardiness, stolon density, high leaf to stem ratio, vigor, freedom from leaf disease and virus, and frost resistance. Parent plants were selected from three-year old Wisconsin nursery selections from various populations that were developed by phenotypic recurrent selection for leaf disease resistance, stolon density, and vigor. Parentage of CW 9801 traces to the following germplasm sources: Crescendo, California, Canopy, CW 9300, SRVR, Titan, and miscellaneous Cal/West Seeds breeding populations. Seed was bulk harvested from all parent plants.
- 2. CW 9801 is adapted to the North Central, East Central, and Moderately Winterhardy Intermountain areas of the U.S.. It is intended for use in the North Central and East Central areas of the U.S. and Canada. CW 9801 has been tested in Wisconsin, California, and Kentucky. The intended use of CW 9801 is for hay, haylage, greenchop, or pasture, primarily in mixtures with forage grasses.
- 3. CW 9801 is earlier in maturity and has a higher frequency of plants with leaf markings compared to California.
- 4. Seed increase of CW 9801 is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under field isolation near Woodland, California in 1998. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 2 and 4 years, respectively.
- 5. Certified seed of CW 9801 will be available in 2005.
- 6. No decision has been made regarding Plant Variety Protection.
- 7. This information can be forwarded to the PVP office.

8.	Variety Name:	 Date Submitted:	November 30, 2004

Experimental Designation: CW 9801

CW 190 (Crescendo) Amendment.doc

- 1. **Crescendo** is an advanced generation synthetic variety of Ladino type white clover with 205 parent plants. Parent plants were selected following two cycles of phenotypic recurrent selection at Woodland, California for vegetative vigor following frequent cutting, flowering intensity, and freedom from leaf disease and virus in large spaced-plant nurseries. Selection was entirely within the Brown Loam Synthetic No.2 germplasm (PI 512040). Each cycle of selection, approximately 3000 seedlings were established as spaced plants on a 3-foot x 3-foot grid spacing. Selection intensities of 5 and 7% were imposed in the first and second cycles of selection, respectively. Breeder seed (Syn.1) was produced under open isolation near Woodland, California in 1991. Seed was bulk harvested from all parent plants.
- 2. **Crescendo** is adpated to the Southwestern, Southeastern, and East Central regions of the U.S. and Japan and is intended for use in the Southeastern U.S., Europe, and Japan. **Crescendo** has been tested in California, Mississippi, Kansas, and Japan. The intended use of **Crescendo** is for hay, haylage, greenchop, or pasture, primarily in mixtures with forage grasses.
- 3. Crescendo is later in maturity and has a higher frequency of plants without leaf markings compared to Regal.
- 4. Seed increase of **Crescendo** is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under field isolation near Woodland, California in 1991. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 2 and 4 years, respectively.
- 5. Certified seed of Crescendo will be available in 1999.
- 6. No decision has been made regarding Plant Variety Protection.
- 7. This information can be forwarded to the PVP office.

8.

Variety Name: Crescendo.
Experimental Designation: CW 190.
Date NA&MLVRB first accepted this variety: January 1999.
Date previous amendments were accepted:
Date this amendment submitted: November 30, 2004.

CW9502(Pinnacle)Amendment

- 1. **Pinnacle** is an advanced generation synthetic variety of Ladino type white clover with 450 parent plants. Parent plants were selected for vegetative vigor following frequent cutting, flowering intensity, persistence, and freedom from leaf disease and virus in a population of approximately 4500 seedlings that were established as spaced plants on a 3-foot x 3-foot grid spacing in a selection nursery at Woodland, California. Parentage of **Pinnacle** traces to the following varieties: Osceola (20%), Regal (20%), SRVR (20%), CW 190 (20%), and miscellaneous Cal/West Seeds breeding populations (20%). Breeder seed (Syn.1) was produced under field isolation near Woodland, California in 1995. Seed was bulk harvested from all parent plants.
- 2. **Pinnacle** is adapted to the Moderately Winterhardy Intermountain area of the U.S., Japan, South Africa, and Argentina and is intended for use in the southeastern and central U.S., Europe, Japan, South Africa and Argentina. **Pinnacle** has been tested in California, Japan, South Africa, and Argentina. The intended use of CW 9502 is for hay, haylage, greenchop, or pasture, primarily in mixtures with forage grasses.
- 3. Pinnacle is later in maturity and has a higher frequency of plants without leaf markings compared to Regal.
- 4. Seed increase of **Pinnacle** is on a limited generation basis with one generation of breeder and two generations of the foundation and certified seed classes. Breeder (Syn.1), foundation (Syn.2 or Syn.3), and certified (Syn.3 or Syn.4) classes will be recognized. Production of Syn.3 foundation seed requires consent of the breeder. Breeder seed was produced under field isolation near Woodland, California in 1995. Sufficient foundation seed for the projected life of the variety will be maintained by Cal/West Seeds. Stands of foundation and certified seed fields are limited to 2 and 4 years, respectively.
- 5. Certified seed of Pinnacle will be available in 2003.
- 6. No decision has been made regarding Plant Variety Protection.
- 7. This information can be forwarded to the PVP office.

8.

Variety Name: Pinnacle.	
Experimental Designation: <u>CW 9502.</u>	
Date NA&MLVRB first accepted this variety: <u>January 2003</u> .	
Date previous amendments were accepted:	
Date this amendment submitted: November 30, 2004.	