

# **NEW YORK FORAGE LEGUME AND GRASS VARIETY YIELD TRIALS -2011**

## **HARVEST AND TOTAL SEASON SUMMARY**

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<http://plbrgen.cals.cornell.edu/cals/pbg/programs/departamental/forage/foragetest.cfm>

Forage yield trials are planted and harvested annually by Cornell University. Each year trials are planted at Ithaca and at another location in New York State. Trials are managed for four years; seeding year and three production years.

The plot size seeded is 3.5 ft. by 20 ft. and the plot size harvested is 3.5 ft. by 13 ft. Soil fertility is maintained at high levels by fertilizing prior to planting with 300 lb/A of 10-20-20 and by fall fertilizing each year with 300 lb/A 0-15-30. Every field area is fenced with 3 strand electric fence to exclude deer from early spring to late fall.

### **Alfalfa (pg. 3-12):**

Below is a table of trial location, year of establishment, soil series, and elevation.

<b>Trial, Seeding Year</b>	<b>Soil series, elevation, # of harvests in 2011</b>
Ithaca, 2008, Page	Erie channery silt loam, 1000 ft., 3 harvests
Chazy, 2008, Page	Raynham variant silt loam, 185 ft., 3 harvests
Ithaca, 2009, Page	Madalin silt loam, 990 ft, 3 harvests
Cobleskill, 2009 Pg.	Barbour Tioga fine sandy loam, 1170 ft., 3 har.
Ithaca, 2010, Page	Williamson silt loam, 1000 ft., 3 harvests
Perry, 2010 Page	Lansing gravelly silt loam, 1390 ft. 4 harvests
Ithaca, 2011, Page	Erie channery silt loam, 1000 ft., 3 harvests
Chazy, 2011, Page	Raynham variant silt loam, 185 ft., 3 harvests

Five or six replications of alfalfa plots are seeded at a rate of 18 lbs/acre. Pesticides are applied as needed. Velpar L (2 – 3 pints/A) is applied in the early spring prior to the first and second production years. For insect control, Warrior is applied as needed (0.2 pints/A). Grassy weeds are controlled with Poast.

### **Red Clover and Birdsfoot Trefoil (pg 13):**

Six replications of red clover plots are seeded at a rate of 15 lb per acre and of birdsfoot trefoil plots are seeded at a rate of 10 lb per acre. Pesticides are applied as needed. Grassy weeds are controlled with Poast (2.5 pints/acre).

### **Forage Grass (pg 14-18):**

For each grass species, entries are planted in a trial with four replicates. All entries within a species

are harvested at the same time, starting in mid-May. The trials are harvested four times per year (except bromegrass which is harvested three times per year). In early spring, and following each harvest except the fourth harvest, the plots are fertilized with 315 lb/A ammonium sulfate (21-0-0). Each fall, plots are sprayed with Banvel (1 pt/A) to control broadleaf weeds.

In addition to the four replicates for yield, an additional replicate is planted in the same field to obtain heading dates (date when five heads are visible) and forage quality data. Four samples for forage quality are taken from each entry in this replicate for the first two production years, two samples at first harvest and two samples at late boot stage. These four samples per entry are dried, ground, and analyzed by NIRS. Data reported includes yield, heading date, percent neutral detergent fiber, and percent digestible neutral detergent fiber (48 hr. incubation time in rumen fluid) at first harvest and at late boot stage (2010 data are on page 16-17, 2011 data available in 2012).

### **2011 Growing Season (pg 2):**

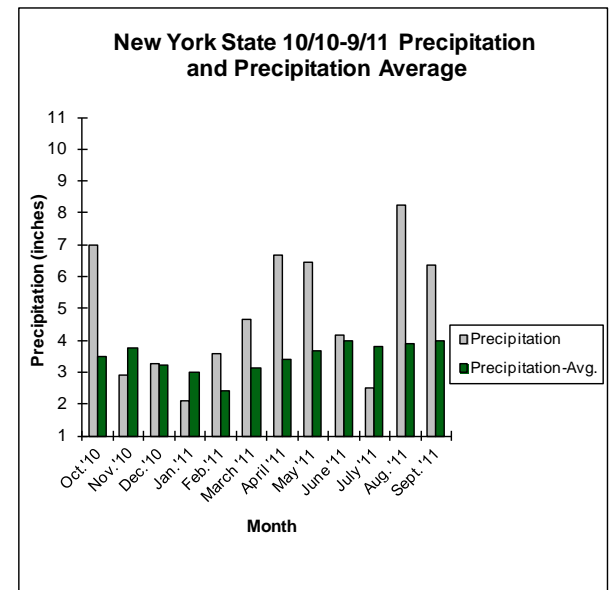
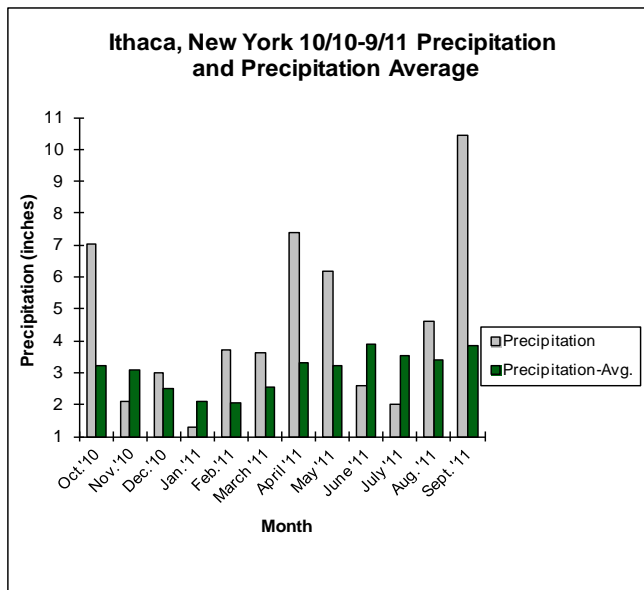
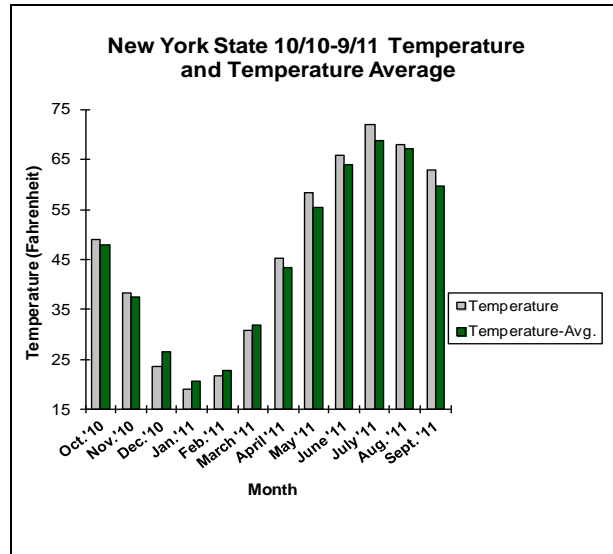
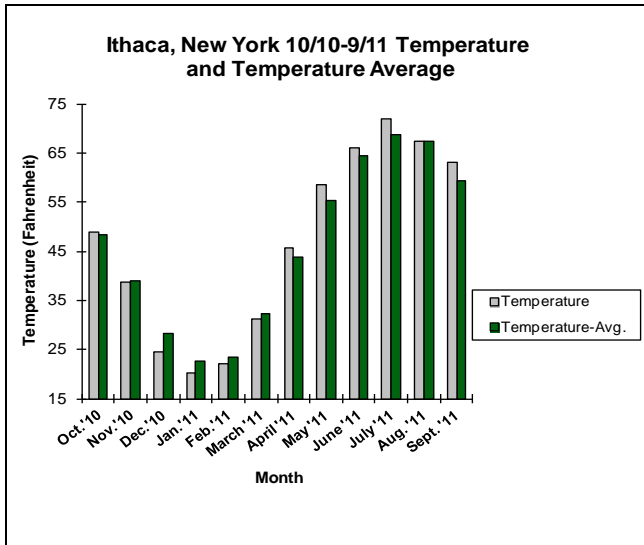
For the state, the spring temperatures were 0.8 degrees above normal and precipitation was 6.01 inches above normal. The summer temperatures were 1.5 degrees above normal and precipitation was 2.02 inches above normal. September had 177% of the normal precipitation and record flooding occurred. The 2011 weather was challenging for NY growers.

Alfalfa yields for 2011 averaged 5.4 tons per acre dry matter (1.0 tons less than in 2010), red clover yields averaged 3.3 tons per acre dry matter (0.4 tons per acre less than in 2010), and perennial forage grass yields averaged 5.6 tons per acre dry matter (0.5 tons per acre less than in 2010).

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Cornell University



From: [www.nrcc.cornell.edu/page\\_summaries.html](http://www.nrcc.cornell.edu/page_summaries.html).

**Many Thanks to our Cooperators:**

Tim Dodge            Cornell University Farm Manager  
 Thomas Edwards    Cornell Univ. Field Technician  
 Steve Lis            Cornell Univ. Field Technician  
 John Conklin        Cornell Univ. Mechanic  
 Dr. Jerry Cherney    Cornell Univ. Forage Agronomist, Professor  
 Dr. Mike Davis       Cornell Univ. Farm Manager at Chazy  
 Del Meseck          Cornell Univ. Field Assistant at Chazy  
 Dr. Rick Grant       Miner Institute at Chazy, NY, President

J. Keith Waldron    NYES Integrated Pest Management  
 Ken Wise            Area IPM Educator  
 Dr. Doug Goodale   SUNY Cobleskill, Professor  
 Tom Poltynski       SUNY Cobleskill, Farm Coordinator  
 Tim Pajda            SUNY Cobleskill, Farm Manager  
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Questions or comments? Please contact Julie Hansen, [jlh17@cornell.edu](mailto:jlh17@cornell.edu), 607-255-5043

Table number where Alfalfa Cultivars/Experimental populations are listed.

Alfalfa Cultivar/ Experimental Pop.	Table Number							
	1	2	3	4	5	6	7	8
6417	X	X						
375HY/BR					X			
4010BR					X	X		
4030		X			X	X		
4A415		X				X		
4S417		X	X	X	X			
5312	X	X	X	X	X	X	X	X
53H92						X		X
54Q32			X	X				
55H94								X
55V12			X	X				
55V48	X	X	X	X	X	X		
55V50							X	
6305Q						X		
6422Q			X	X				
6475H								X
A 4330		X						
A 4440		X						
AMERISTAND 403T PLUS			X	X				
AMERISTAND 407TQ	X	X	X	X			X	
ARCHER III							X	
BARALFA X42						X		
CORNERSTONE					X	X		
CW 02001					X	X		
CW 053015					X	X		
CW 0550055							X	
DG 3210					X	X		
DG 4210					X	X	X	
DKA43-13	X	X	X			X		
DS704-M							X	
DS911-M				X				
DSA01-T						X	X	
DSA03-T						X		
DSA04-M						X		
DSA05-BR						X		
DSA06-BR						X		
DSA07-BR						X		
DSA08-M						X		
DSA09-L						X		
DSB01-T							X	
DSB02-T							X	
DSB03-T							X	
DSB04-BR							X	
DSB05-BR							X	
DSB06-BR							X	
DSB07-L							X	
DSB09-M							X	
ESCALADE		X						
LANCER						X		X
EZRA	X	X	X	X	X	X	X	
FG 45A119							X	
FSG 329			X	X				

Alfalfa Cultivar/ Experimental Pop.	Table Number							
	1	2	3	4	5	6	7	8
FSG 408DP			X	X				
FSG 420 LH			X					X
GENOA		X						
GUARDSMAN II	X	X	X	X		X		
Gunner								X
HYBRIFORCE-2400		X	X	X	X	X		
HYBRIFORCE-2420/WET		X	X	X	X	X		
KF401B				X				
L 333 HD	X	X		X				
L 447 HD	X	X						
LEGENDAIRY 5.0			X					
MAGNUM 7				X				
MARVEL		X						
MILESTONE II		X						
MSSUNSTRA-803								X
MSSUNSTRA-903			X					
MSSUNSTRA-901			X					
MSSUNSTRA-A10					X			
MSSUNSTRA-B12								X
N-R-GEE	X	X	X	X	X	X	X	X
NSF-7011ML				X				
ONEIDA VR	X	X	X	X	X	X	X	X
PERSIST II	X	X						X
PGI 215								X
PGI 557					X	X	X	
PHIRST EXTRA					X		X	
PILLAR					X	X		
PLUSS II					X	X		
POUNCE			X					X
PROFUSION-HX					X			
PROLIFIC II		X	X	X				X
RADIANCE HD				X				
REBOUND 5.0	X	X	X	X				
REBOUND 6.0								X
RED FALCON BR							X	
REGEN	X	X	X	X	X	X	X	
RENEW				X				
RUGGED					X	X		
SEEDWAY 9558	X	X						
SENECA						X	X	
SONIC				X				
SYNGENTA 6305Q				X				
SYNGENTA 6475H								X
TJA 901			X	X				
TJA 902			X	X				
TJA 903			X	X				
TJA 904			X	X				
VERNAL	X	X	X	X	X	X	X	X
WL 343HQ	X		X		X	X		
WL 353LH						X		X
WL 354HQ							X	
WL 363HQ	X	X	X		X	X		

Table 1:

**2011 New York Alfalfa Trials**

William H. Miner Agricultural Institute, Clinton County, Chazy

Sown May 2008

Cornell University-Department Plant Breeding and Genetics

Released And Experimental Varieties	2011 Harvest (yields reported in tons/acre)			2011 Total <sup>^</sup>	2010 Total <sup>^</sup>	2009 Total <sup>^</sup>	3-yr Total <sup>^</sup>	% of Checks Mean	
	20-Jun	3-Aug	14-Sep					2011 Total	3-yr Total
55V48	2.72	1.64	1.20	5.56	6.79	5.47	17.80	118	119
PERSIST II*	2.59	1.62	1.25	5.45	6.61	5.74	17.78	115	119
DKA43-13	2.62	1.72	1.15	5.50	6.86	5.38	17.77	117	119
WL 343HQ	2.64	1.64	1.14	5.41	6.75	5.38	17.55	115	117
REBOUND 5.0	2.53	1.64	1.18	5.35	6.68	5.09	17.10	113	114
L 447 HD	2.44	1.55	1.21	5.20	6.52	5.39	17.10	110	114
6417	2.39	1.41	1.11	4.93	6.50	5.19	16.65	104	111
AMERISTAND 407TQ	2.33	1.41	1.17	4.92	6.42	5.26	16.60	104	111
GUARDSMAN II	2.38	1.57	1.13	5.08	6.27	5.24	16.60	108	111
WL 363HQ	2.45	1.56	1.16	5.17	6.34	4.98	16.49	109	110
EZRA*	2.46	1.47	1.10	5.03	6.28	4.96	16.31	107	109
REGEN	2.34	1.44	1.11	4.89	6.07	5.20	16.14	104	108
ONEIDA VR (check)	2.26	1.44	1.21	4.93	5.93	4.98	15.87	104	106
L 333 HD	2.39	1.38	1.07	4.85	6.02	4.93	15.81	103	106
N-R-GEE*	2.38	1.47	1.09	4.95	6.04	4.72	15.69	105	105
SEEDWAY 9558	2.19	1.50	1.07	4.76	5.75	4.96	15.47	101	103
5312 (check)	2.28	1.38	1.10	4.75	5.83	4.54	15.13	101	101
VERNAL (check)	2.16	1.39	0.94	4.48	5.06	4.35	13.92	95	93
								Ck. Mean	Ck. Mean
Mean	2.36	1.47	1.10	4.93	6.15	4.96	16.04	4.72	14.97
5% LSD	0.29	0.25	0.13	0.60	0.68	0.57	1.60		
CV (%)	8.7	11.9	8.4	8.6	7.8	8.2	7.0		

<sup>^</sup>Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively. Overall means are for 28 trial entries.

\*EXPERIMENTAL ENTRIES

Soil type is Raynham; potential corn yield on this soil type is 115 bu/A.

Table 2:  
2011 New York Alfalfa Trials

Cornell University Agricultural Experiment Station, Tompkins Co., Ithaca

Sown May 2008

Cornell University-Department Plant Breeding and Genetics

Released And Experimental Varieties	2011 Harvest (yields reported in tons/acre)			2011 Total	2010 Total	2009 Total	3-yr Total	% of Check Mean		% Stand 9/30/2011	Seeding Year Total <sup>A</sup>
	23-Jun	28-Jul	13-Sep					2011 Total	3-yr Total		
PERSIST II*	2.20	1.06	0.89	4.15	4.87	5.73	14.76	123	121	81	0.86
4030*	2.12	1.01	0.86	3.99	4.87	5.89	14.73	118	120	80	0.84
HYBRIFORCE-2400*	2.18	0.97	0.82	3.97	4.80	5.81	14.58	117	119	80	0.82
PROLIFIC II*	2.14	0.96	0.85	3.96	4.69	5.63	14.28	117	117	81	0.92
4S417*	2.13	0.98	0.85	3.97	4.61	5.66	14.24	117	116	81	0.69
REGEN	2.26	0.97	0.83	4.05	4.74	5.42	14.20	120	116	80	0.65
HYBRIFORCE-2420/WET*	2.09	0.95	0.81	3.84	4.68	5.55	14.07	114	115	80	0.84
4A415*	2.19	0.97	0.77	3.93	4.60	5.41	13.93	116	114	82	0.78
EZRA*	2.23	0.90	0.76	3.90	4.58	5.30	13.78	115	113	80	0.74
GUARDSMAN II	2.16	0.90	0.81	3.86	4.63	5.21	13.71	114	112	81	0.76
MILESTONE II*	2.08	0.93	0.76	3.77	4.57	5.36	13.70	111	112	79	0.74
55V48	1.95	0.95	0.77	3.68	4.64	5.27	13.59	109	111	84	0.76
AMERISTAND 407TQ	2.06	0.97	0.81	3.83	4.42	5.31	13.56	113	111	83	0.60
N-R-GEE*	2.09	0.92	0.77	3.78	4.57	5.16	13.50	112	110	83	0.66
L 447 HD	1.96	0.88	0.82	3.66	4.38	5.37	13.39	108	110	80	0.77
GENOA	1.96	0.94	0.75	3.66	4.51	5.24	13.39	108	109	82	0.62
A 4330*	1.93	0.94	0.77	3.64	4.53	5.10	13.26	108	108	82	0.71
6417	1.94	0.95	0.75	3.64	4.41	5.15	13.22	108	108	82	0.69
REBOUND 5.0	2.06	0.93	0.72	3.73	4.33	5.11	13.17	110	108	82	0.61
WL 363HQ	1.95	0.89	0.77	3.61	4.42	5.12	13.15	107	108	83	0.61
DKA43-13	1.89	0.94	0.74	3.56	4.26	5.10	12.92	105	106	85	0.62
ESCALADE	1.87	0.88	0.71	3.45	4.34	5.11	12.92	102	106	84	0.76
MARVEL	1.99	0.90	0.75	3.64	4.04	5.23	12.91	108	106	82	0.70
SEEDWAY 9558	1.84	0.84	0.74	3.42	4.38	5.03	12.83	101	105	79	0.68
5312 (check)	2.03	0.82	0.77	3.62	4.18	4.92	12.72	107	104	74	0.66
L 333 HD	1.98	0.82	0.75	3.55	4.23	4.92	12.71	105	104	75	0.63
A 4440*	1.93	0.85	0.72	3.50	4.08	5.03	12.60	103	103	78	0.64
ONEIDA VR (check)	1.89	0.79	0.77	3.45	3.95	4.92	12.32	102	101	76	0.79
VERNAL (check)	1.70	0.67	0.69	3.07	3.94	4.63	11.63	91	95	63	0.56
Mean	2.04	0.90	0.77	3.70	4.42	5.20	13.32	3.38	12.23	80	0.69
5% LSD	0.19	0.09	0.07	0.28	0.37	0.28	0.76			4	0.10
CV (%)	7.3	7.6	7.2	6.0	6.7	4.3	4.5			3.6	11.8

<sup>A</sup>Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively. First cut in the seeding year was not weighed for yield. Overall means are for 36 trial entries.

\*EXPERIMENTAL ENTRIES

Soil type is Erie; potential corn yield on this soil type is 108 bu/A.

Table 3:

**2011 New York Alfalfa Trials**

State University of New York, Cobleskill, Schoharie County

Sown July 2009

Cornell University, Dept. of Plant Breeding and Genetics

Released And Experimental Varieties	2011 Harvest (yields reported in tons/acre)			2011 Total	2010 Total	2-yr Total	% of Checks Mean	
	8-Jun	14-Jul	18-Aug				2011 Total	2-yr Total
msSunstra-901*	2.84	2.04	1.65	6.52	9.24	15.79	116	116
msSunstra-903*	2.77	2.01	1.59	6.36	8.89	15.27	113	112
FSG 329	2.53	1.97	1.63	6.10	8.88	14.97	109	110
TJA 901*	2.66	1.88	1.57	6.12	8.85	14.95	109	110
TJA 904*	2.64	1.90	1.53	6.10	8.82	14.89	109	109
TJA 902*	2.58	1.93	1.52	6.04	8.77	14.82	108	109
REGEN	2.66	1.94	1.45	6.06	8.68	14.74	108	108
EZRA*	2.69	1.86	1.50	6.05	8.67	14.73	108	108
HYBRIFORCE-2400	2.64	1.93	1.50	6.08	8.63	14.71	108	108
4S417	2.49	1.92	1.61	6.03	8.68	14.68	108	108
GUARDSMAN II	2.60	1.92	1.47	5.97	8.65	14.64	106	108
PROLIFIC II	2.72	1.85	1.51	6.07	8.54	14.63	108	108
TJA 903*	2.64	1.87	1.57	6.06	8.43	14.50	108	107
55V48	2.67	1.98	1.61	6.26	7.97	14.24	112	105
WL 363HQ	2.50	1.99	1.59	6.11	8.12	14.22	109	105
LEGENDAIRY 5.0	2.64	1.99	1.56	6.19	8.03	14.21	110	104
HYBRIFORCE-2420/WET	2.49	1.81	1.44	5.75	8.41	14.15	103	104
5312 (check)	2.61	1.85	1.42	5.89	8.16	14.05	105	103
54Q32*	2.41	1.95	1.62	5.99	8.03	14.03	107	103
FSG 408DP	2.61	1.84	1.41	5.84	8.15	14.00	104	103
ONEIDA VR (check)	2.63	1.74	1.38	5.77	8.22	13.99	103	103
55V12*	2.79	2.03	1.51	6.32	7.63	13.98	113	103
REBOUND 5.0	2.50	1.91	1.56	5.94	7.98	13.93	106	102
6422Q	2.46	2.05	1.68	6.19	7.71	13.89	110	102
AMERISTAND 407TQ	2.37	1.99	1.52	5.88	7.73	13.60	105	100
POUNCE	2.38	1.68	1.39	5.45	8.14	13.59	97	100
DKA43-13	2.48	1.96	1.55	5.95	7.57	13.50	106	99
AMERISTAND 403T PLUS	2.50	1.77	1.46	5.73	7.77	13.50	102	99
N-R-GEE*	2.40	1.68	1.41	5.50	7.82	13.32	98	98
WL 343HQ	2.42	1.93	1.49	5.81	7.44	13.25	104	97
FSG 420 LH	2.19	1.86	1.51	5.57	7.41	12.97	99	95
VERNAL (check)	2.30	1.59	1.29	5.18	7.60	12.75	92	94
Mean	2.54	1.88	1.49	5.91	8.11	14.01	Ck. Mean 5.61	Ck. Mean 13.60
5% LSD	0.22	0.10	0.08	0.31	0.40	0.58		
CV (%)	7.7	4.6	5.0	4.5	4.3	3.6		

<sup>^</sup>Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively.

First cut in the seeding year was not weighed for yield.

Overall means are for 40 trial entries.

\*EXPERIMENTAL ENTRIES

Soil type is Barbour Tioga; potential corn yield on this soil type is 140 bu/A.

Table 4:

**2011 New York Alfalfa Trials**

Cornell University Agricultural Experiment Station, Tompkins County, Ithaca

Sown May 2009

Cornell University, Department of Plant Breeding and Genetics

Released And Experimental Varieties	2011 Harvest (yields reported in tons/acre)			2011 Total	2010 Total	2-yr Total	% of Checks Mean		
	13-Jun	19-Jul	1-Sep				2011 Total	2-yr Total	% Stand 9/17/2011
MAGNUM 7*	3.05	1.80	1.33	6.19	7.22	13.41	123	120	83
SONIC*	3.04	1.79	1.34	6.17	7.08	13.26	123	119	83
RENEW*	2.99	1.81	1.32	6.12	6.93	13.04	122	117	83
HYBRIFORCE-2400	3.05	1.77	1.30	6.11	6.86	12.97	122	116	83
4S417	2.91	1.79	1.34	6.03	6.91	12.94	120	116	80
PROLIFIC II	2.95	1.69	1.24	5.88	6.99	12.87	117	115	80
KF401B*	3.02	1.77	1.33	6.12	6.73	12.86	122	115	85
TJA 904*	2.98	1.74	1.29	6.01	6.83	12.83	120	115	80
DS911-M*	2.99	1.75	1.29	6.03	6.80	12.82	120	115	82
TJA 903*	2.98	1.74	1.22	5.94	6.80	12.74	118	114	81
TJA 901*	2.94	1.73	1.22	5.89	6.83	12.71	117	114	83
55V48	3.04	1.79	1.33	6.16	6.54	12.70	123	114	83
TJA 902*	3.00	1.73	1.29	6.02	6.64	12.65	120	113	84
AMERISTAND 407TQ	3.02	1.81	1.24	6.08	6.54	12.62	121	113	83
NSF-7011ML*	2.91	1.76	1.28	5.94	6.67	12.61	118	113	82
HYBRIFORCE-2420/WET	2.86	1.71	1.27	5.84	6.71	12.55	116	112	84
GUARDSMAN II	2.87	1.69	1.26	5.82	6.69	12.53	116	112	81
FSG 329	2.86	1.69	1.24	5.80	6.67	12.48	115	112	80
RADIANCE HD	2.84	1.72	1.20	5.76	6.68	12.43	115	111	83
REGEN	2.84	1.65	1.21	5.71	6.57	12.28	114	110	81
EZRA*	2.76	1.66	1.17	5.59	6.54	12.12	111	109	83
55V12*	2.89	1.64	1.14	5.67	6.40	12.07	113	108	86
6422Q	2.77	1.80	1.16	5.73	6.33	12.06	114	108	83
54Q32*	2.82	1.71	1.17	5.69	6.35	12.04	113	108	86
5312 (check)	2.72	1.57	1.17	5.47	6.53	11.99	109	107	81
N-R-GEE*	2.77	1.66	1.19	5.63	6.22	11.85	112	106	86
REBOUND 5.0	2.77	1.58	1.20	5.54	6.29	11.83	110	106	85
AMERISTAND 403T PLUS	2.81	1.63	1.08	5.52	6.28	11.79	110	106	85
FSG 408DP	2.65	1.62	1.17	5.45	6.32	11.77	109	105	78
L333 HD	2.67	1.54	1.11	5.32	6.33	11.65	106	104	79
ONEIDA VR (check)	2.54	1.48	1.13	5.15	6.02	11.17	102	100	79
VERNAL (check)	2.23	1.18	1.05	4.46	5.91	10.36	89	93	81
Mean	2.84	1.67	1.21	5.72	6.52	12.23	Ck. Mean 5.02	Ck. Mean 11.17	83
5% LSD	0.13	0.12	0.09	0.27	0.32	0.52			5
CV (%)	3.7	5.6	6.1	3.8	4.0	3.4			5.3

<sup>A</sup>Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively.

Overall means are for 40 trial entries.

\*EXPERIMENTAL ENTRIES

Soil type is Madalin silt loam; potential corn yield on this soil type is 95 bu/A.

Table 5:

**2011 New York Alfalfa Trials**

True Farms, Perry, Wyoming County

Sown April 2010

Cornell University, Dept. of Plant Breeding and Genetics

Released And Experimental Varieties	2011 Harvest (yields reported in tons/acre)				2011 Total	% of Checks Mean 2011 Total	Seeding Year Total
	1-Jun	29-Jun	26-Jul	31-Aug			
4030*	1.88	1.53	1.14	1.59	6.14	131	2.06
MSSUNSTRA-A10*	1.86	1.48	1.24	1.51	6.10	130	1.92
55V48	1.88	1.51	1.11	1.56	6.05	129	1.82
DG 4210	1.82	1.49	1.14	1.50	5.96	127	1.70
PILLAR	1.81	1.53	1.10	1.51	5.95	127	1.78
PROFUSION-HX*	1.82	1.47	1.03	1.58	5.89	126	1.93
WL363 HQ	1.80	1.48	1.10	1.48	5.87	125	1.65
PLUSS II	1.71	1.49	1.13	1.47	5.81	124	1.64
PHIRST EXTRA	1.72	1.41	1.12	1.50	5.75	123	1.97
HYBRIFORCE-2400	1.76	1.42	1.05	1.49	5.72	122	1.86
375HY/BR*	1.72	1.40	1.07	1.53	5.72	122	1.96
4010BR*	1.65	1.42	1.13	1.51	5.71	122	1.94
WL343 HQ	1.73	1.43	1.09	1.44	5.70	121	1.73
SYNGENTA 6305Q	1.75	1.38	1.11	1.43	5.68	121	1.75
CORNERSTONE	1.66	1.42	1.07	1.49	5.65	120	1.79
CW 053015*	1.68	1.39	1.10	1.48	5.65	120	1.82
PGI 557	1.62	1.40	1.15	1.47	5.65	120	1.89
4S417	1.66	1.41	1.08	1.49	5.64	120	1.91
DG 3210	1.70	1.43	1.05	1.45	5.63	120	1.72
N-R-GEE*	1.71	1.41	0.97	1.39	5.47	117	1.77
EZRA	1.65	1.33	0.98	1.45	5.41	115	1.76
REGEN	1.67	1.37	0.90	1.43	5.36	114	1.82
HYBRIFORCE-2420*	1.58	1.34	0.93	1.48	5.33	114	1.86
PGI 215*	1.55	1.35	0.92	1.41	5.24	112	1.70
5312 (check)	1.66	1.26	0.87	1.38	5.17	110	1.70
RUGGED	1.57	1.24	0.94	1.30	5.05	108	1.71
ONEIDA VR (check)	1.45	1.18	0.84	1.27	4.75	101	1.77
VERNAL (check)	1.38	0.89	0.65	1.22	4.13	88	1.65
Mean	1.69	1.38	1.03	1.44	5.54	Check. Mean	1.79
5% LSD	0.12	0.08	0.10	0.06	0.24	4.69	0.14
CV (%)	6.4	5.0	8.4	3.9	3.8		6.9

^Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively. In seeding year, first cut was not weighed for yield.

\*EXPERIMENTAL ENTRIES Overall means are for 32 trial entries.

Soil type is Lansing; potential corn yield on this soil type is 140 bu/A.



Table 6:  
**2011 New York Alfalfa Trials**

Cornell University Agricultural Experiment Station, Tompkins County, Ithaca

Sown May 2010

Cornell University, Department of Plant Breeding and Genetics

Released And Experimental Varieties	2011 Harvest (yields reported in tons/acre)			% of Checks Mean			Seeding
	9-Jun	15-Jul	26-Aug	2011 Total	2011 Total	% Stand 9/17/2011	Year Total
	DSA08-M*	3.15	2.11	1.76	7.02	116	95
DSA01-T*	3.06	2.13	1.74	6.96	115	95	4.71
DSA03-T*	3.19	2.05	1.71	6.92	114	94	4.54
PILLAR	2.87	2.12	1.80	6.79	112	95	3.62
DKA43-13	2.98	2.06	1.71	6.74	111	95	3.64
4030*	2.91	2.05	1.73	6.70	111	94	4.71
DG 4210	2.83	2.10	1.74	6.67	110	96	3.79
DSA07-BR*	2.94	2.00	1.72	6.66	110	94	4.59
EZRA	3.12	1.91	1.65	6.66	110	94	3.91
DSA06-BR*	3.00	1.97	1.66	6.63	109	95	4.61
DSA05-BR*	2.91	1.99	1.72	6.62	109	95	4.86
55V48	2.92	1.99	1.71	6.62	109	95	4.07
DSA04-M*	2.93	1.99	1.66	6.59	109	94	4.48
REGEN	3.08	1.90	1.58	6.57	108	93	4.01
PLUSS II	2.72	2.09	1.75	6.55	108	95	3.65
WL363 HQ	2.88	2.01	1.63	6.53	108	95	3.93
HYBRIFORCE-2400	2.96	1.92	1.64	6.52	108	94	4.31
6305Q	2.87	2.00	1.62	6.49	107	95	3.57
CW 053015*	2.84	1.98	1.65	6.47	107	95	3.92
BARALFA X42	2.87	1.93	1.67	6.46	107	94	4.23
RED FALCON BR*	2.84	1.93	1.67	6.45	106	95	3.92
4A415	2.93	1.87	1.60	6.41	106	94	3.97
GUARDSMAN II	2.89	1.90	1.62	6.40	106	94	4.06
DSA09-L*	2.83	1.91	1.64	6.38	105	95	4.31
WL343 HQ	2.81	1.95	1.60	6.35	105	95	3.67
HYBRIFORCE-2420*	2.92	1.88	1.53	6.32	104	94	4.17
5312 (check)	2.97	1.81	1.53	6.31	104	93	4.01
N-R-GEE*	2.88	1.83	1.55	6.28	104	95	3.55
SENECA*	2.76	1.91	1.58	6.26	103	94	4.77
PGI 557	2.61	1.91	1.69	6.20	102	95	4.06
53H92	2.77	1.86	1.55	6.18	102	95	3.98
4010BR*	2.69	1.84	1.66	6.17	102	95	4.22
DG 3210	2.60	1.94	1.62	6.15	102	95	3.66
LANCER	2.82	1.82	1.50	6.15	101	93	4.15
PGI 215*	2.70	1.90	1.54	6.12	101	95	3.76
RUGGED	2.85	1.75	1.48	6.10	101	94	4.12
CORNERSTONE	2.54	1.92	1.62	6.08	100	95	4.09
WL 353LH	2.68	1.83	1.53	6.05	100	94	3.59
VERNAL (check)	2.74	1.74	1.54	6.01	99	89	3.99
ONEIDA VR (check)	2.64	1.73	1.51	5.86	97	93	3.87
					Ck. Mean		
Mean	2.86	1.93	1.62	6.41	6.06	94	4.05
5% LSD	0.25	0.11	0.09	0.35		2	0.33
CV (%)	7.0	4.4	4.5	4.4		1.3	6.5

^Variety means are LSMEANS derived from incomplete block statistical analysis. Therefore, season or multiple-year totals will not be the arithmetic sum of individual cuts or years, respectively. Overall means are for 44 trial entries.

\*EXPERIMENTAL ENTRIES

Soil type is Williamson silt loam; potential corn yield on this soil type is 118 bu/A.

Table 7:

**2011 New York Alfalfa Trials**

William H. Miner Agricultural Institute, Clinton County, Chazy

Sown June 2011

Released And  
Experimental  
Varieties

Archer III	
DG 4210	Seeding year yields were
Gunner	not taken in 2011.
Rebound 6.0	
Prolific II	Excellent stands were
Persist II	established for production
Phirst Extra	year harvests 2012-2014.
PGI 557	
PGI 215	
WL 354HQ	
55V50	
FG 45A119*	
Seneca*	
CW 0550055*	
msSunstra-B12*	
msSunstra-803*	

**\*EXPERIMENTAL ENTRIES**

Overall means are for 28 trial entries.

Soil type is Raynham;

potential corn yield on this soil is 115 bu/A.

**2011 New York Alfalfa Trials**

Cornell University Agricultural Experiment Station, Tompkins Co., Ithaca

Sown May 2011

Cornell University-

Department Plant Breeding and Genetics

Released And  
Experimental  
Varieties

Archer III	
DG 4210	Seeding year yields were
Gunner	not taken in 2011.
Rebound 6.0	
Prolific II	Excellent stands were
Persist II	established for production
Phirst Extra	year harvests 2012-2014.
PGI 557	
PGI 215	
WL 354HQ	
55V50	
AmeriStand 407TQ	
ReGen	
Ezra	
N-R-GEE	
FG 45A119*	
Seneca*	
CW 0550055*	
DSB01-T*	
DSB02-T*	
DSB03-T*	
DSB04-BR*	
DSB05-BR*	
DSB06-BR*	
DSB07-L*	
DSB09-M*	
DS704-M*	
DSA01-T*	

**\*EXPERIMENTAL ENTRIES**

Overall means are for 40 trial entries.

Soil type is Williamson;

potential corn yield on this soil is 118 bu/A.

**Table 8:** Alfalfa trials in Ithaca NY where insecticides were not applied to control potato leafhoppers.

Check cultivars are conventional alfalfa cultivars that are planted in all yield trials.

PLH Damage Score: 1=minor to no damage to 5=severe damage.

Cultivar	2011								2010		3-Yr PLH Damage
	17-Jun	23-Jul	27-Sep	Total Season	% of Checks	PLH Damage	% Stand	Total Season	2-Yr Total	2-Yr % of Checks	
						23-Jul	25-Oct				
53H92	2.66	1.29	0.70	4.65	109	2.0	77	5.15	9.80	105	1.6
5312 (PLH Susceptible Ck)	2.65	1.31	0.61	4.57	107	4.3	78	5.11	9.68	104	4.0
Vernal (PLH Susceptible Ck)	2.32	1.20	0.67	4.19	98	3.9	73	5.05	9.25	99	4.2
Pounce	2.29	1.15	0.60	4.04	94	3.8	79	5.12	9.16	99	3.4
Oneida VR (PLH Susceptible Ck)	2.21	1.26	0.61	4.08	95	4.7	82	4.89	8.97	96	4.7
6475H	2.37	1.34	0.64	4.35	102	1.0	77	4.61	8.96	96	1.0
FSG 420 LH	2.31	1.34	0.62	4.28	100	1.3	78	4.63	8.91	96	1.2
					Ck. Mean					Ck. Mean	
Trial Mean (T/A)	2.43	1.23	0.67	4.33	4.28	2.2	77	5.16	9.49	9.3	
LSD(.05)	0.22	0.12	0.05	0.30		0.5	5	0.37	0.58		
CV(%)	7.9	8.5	7.0	5.9		18.8	6.1	6.1	5.3		

Soil type is Langford. Yield potential of corn on this soil type is 120 bu/A.

Entry	2011							2-Yr PLH Damage
	16-Jun	21-Jul	20-Sep	Total Season	% of Checks	PLH Damage	Stand	
						21-Jul	25-Oct	
	-- tons per acre dry matter --							
53H92	3.26	2.04	1.77	7.06	103	1.0	91	1.7
5312 (PLH Susceptible Ck)	3.31	2.10	1.64	7.04	102	2.8	90	3.8
Lancer	3.21	2.06	1.68	6.96	101	1.8	90	2.8
Vernal (PLH Susceptible Ck)	3.28	2.01	1.64	6.94	101	3.2	82	4.0
WL353 LH	2.99	2.03	1.62	6.64	97	1.3	90	1.8
Oneida VR (PLH Susceptible Ck)	2.98	2.04	1.62	6.64	97	3.3	90	4.1
Syngenta 6475H	2.87	2.11	1.55	6.53	95	1.0	90	1.8
					Ck. Mean			
Trial Mean	3.15	2.00	1.66	6.81	6.87	1.7	89	
LSD(.05)	0.27	0.19	0.12	0.44		0.40	2	
CV(%)	7.2	8.1	6.4	5.5		20.2	1.8	

Soil type is Williamson; potential corn yield on this soil is 118 bu/A.

Entry	Harvest 1 July 25, 2011		
	Yield t/a	% of Ck. Mean	PLH damage score
55H94	0.75	164	2.8
Lancer	0.55	120	4.6
5312 (PLH Susceptible Ck)	0.52	113	4.8
WL 353LH	0.48	105	4.6
Vernal (PLH Susceptible Ck)	0.44	97	4.8
Oneida VR (PLH Susceptible Ck)	0.41	90	4.8
		Ck. Mean	
Trial Mean	0.58	0.46	3.9
LSD(0.05)	0.12		0.4
CV(%)	15.7		7.4

Soil type is Williamson; potential corn yield on this soil is 118 bu/A.

**Table 9: Alfalfa Cultivar Features**

For more information log on to the Web:

<http://plbrgen.cals.cornell.edu/cals/pbg/programs/departmental/forage/foragetest.cfm>

Cultivars listed are currently tested in Cornell Alfalfa Trials. Yield data for cultivars in new trial seedings will be available next year.

Alfalfa Cultivar	Marketing Company	FD	Disease Resistance Ratings*					Marketing Co. Phone Number	Web or E-mail Address
			BW	VW	FW	AN	PRR		
AMERISTAND 403T PLUS	America's Alfalfa	4	HR	HR	HR	HR	HR	1-800-873-2532	<a href="http://www.americasalfalfa.com/">http://www.americasalfalfa.com/</a>
AMERISTAND 407TQ	America's Alfalfa	4	HR	HR	HR	HR	HR		
ARCHER III	America's Alfalfa	5	HR	HR	HR	HR	HR		
RADIANCE HD	AMPAC Seed Company	4	HR	R	HR	HR	HR	1-800-547-3230	<a href="http://www.ampacseed.com">www.ampacseed.com</a>
BARALFA X42	Barenbrug USA	4	HR	HR	HR	HR	HR	1-800-547-4101	<a href="http://www.barusa.com">www.barusa.com</a>
RED FALCON BR	Blue River Hybrids	4	HR	HR	HR	HR	HR	1-800-370-7979	<a href="http://www.blueriverorgseed.com/">www.blueriverorgseed.com/</a>
KF401B	Byron Seed	4	HR	HR	HR	HR	HR	1-765-569-3555	
CORNERSTONE	Chemgro Seeds	4	HR	HR	HR	HR	HR	1-800-346-4769	<a href="http://www.chemgro.com">www.chemgro.com</a>
MILESTONE II	Chemgro Seeds	3	HR	HR	HR	HR	HR		
GUNNER	CROPLAN GENETICS	5	HR	HR	HR	HR	HR	1-651-765-5710	<a href="http://www.croplan-genetics.com">www.croplan-genetics.com</a>
LEGENDAIRY 5.0	CROPLAN GENETICS	3	HR	HR	HR	HR	HR		
REBOUND 5.0	CROPLAN GENETICS	4	HR	HR	HR	HR	HR		
REBOUND 6.0	CROPLAN GENETICS	4	HR	HR	HR	HR	HR		
HYBRIFORCE-2400	Dairyland Seed Co.	4	HR	HR	HR	HR	HR	1-800-236-0163	<a href="http://www.dairylandseed.com">http://www.dairylandseed.com</a>
HYBRIFORCE-2420/WET	Dairyland Seed Co.	4	HR	HR	HR	HR	HR		
MAGNUM 7	Dairyland Seed Co.	4	HR	HR	HR	HR	HR		
POUNCE	Doebler's	3	HR	HR	HR	HR	HR	1-800-853-2676	<a href="http://www.doebler.com">www.doebler.com</a>
PERSIST II	Doebler's	4	HR	HR	HR	HR	HR		
PILLAR	Doebler's	4	HR	HR	HR	HR	HR		
PHIRST EXTRA	Doebler's	4	HR	HR	HR	HR	HR		
PLUSS II	Doebler's	4	HR	HR	HR	HR	HR		
PROLIFIC II	Doebler's	4	HR	HR	HR	HR	HR		
ESCALADE	GROWMARK FS	5	HR	R	R	R	HR	1-800-338-4769	<a href="http://www.fsseed.com">www.fsseed.com</a>
LANCER	GROWMARK FS	4	HR	HR	HR	HR	HR		
MARVEL	GROWMARK FS	4	HR	HR	HR	HR	HR		
6417	Garst Seed Co.	4	HR	HR	HR	HR	HR	1-888-464-2778	<a href="http://www.garstseed.com">www.garstseed.com</a>
PROFUSION-HX	King's AgriSeeds	4	HR	HR	HR	HR	HR	1-717-687-6224	<a href="http://www.kingsagriseeds.com/">http://www.kingsagriseeds.com/</a>
L 333HD	Legacy Seeds	3	HR	HR	HR	HR	HR	1-866-791-6390	<a href="http://www.legacyseeds.com">www.legacyseeds.com</a>
L 447HD	Legacy Seeds	4	HR	R	HR	HR	HR		
DKA43-13	Monsanto	4	HR	HR	HR	HR	HR	1-800-335-2676	<a href="http://www.monsanto.com">www.monsanto.com</a>
4A415	Mycogen Seeds	4	HR	HR	HR	HR	HR	1-800-MYCOGEN	<a href="http://www.dowagro.com/mycogen">www.dowagro.com/mycogen</a>
4S417	Mycogen Seeds	4	HR	HR	HR	HR	HR		
NSF-7011ML	NuSource Forage	4	HR	HR	HR	HR	HR	1-800-545-8873	<a href="http://www.twincityseed.com">www.twincityseed.com</a>
SONIC	NuTech Seed	4	HR	HR	HR	HR	HR	1-800-942-6748	<a href="http://www.nutechseed.com">www.nutechseed.com</a>
GENOA	Snygenta	4	HR	HR	HR	HR	HR	1-800-445-0956	<a href="http://www.nk-us.com">www.nk-us.com</a>
6305Q	Snygenta	3	HR	HR	HR	HR	HR		
6422Q	Syngenta	4	HR	HR	HR	HR	HR		
6475H	Syngenta	4	HR	HR	HR	HR	HR		
NSF-7011ML	Twin Cities Seed Company	4	HR	HR	HR	HR	HR	1-800-545-8873	<a href="http://www.twincityseed.com">www.twincityseed.com</a>
53H92	Pioneer Hi-Bred	3	HR	HR	HR	HR	HR	1-800-247-6803	<a href="http://www.pioneer.com">www.pioneer.com</a>
55H94	Pioneer Hi-Bred	5	HR	HR	HR	HR	HR		
54Q32	Pioneer Hi-Bred	4	HR	HR	HR	HR	HR		
55V12	Pioneer Hi-Bred	5	R	HR	HR	HR	HR		
55V48	Pioneer Hi-Bred	5	HR	R	HR	HR	HR		
55V50	Pioneer Hi-Bred	5	HR	HR	R	HR	HR		
4030	Preferred Seed Co.	4	HR	HR	HR	HR	HR	1-716-895-7333	<a href="http://www.preferredseed.com">www.preferredseed.com</a>
A4330	Producer's Choice	4	HR	HR	HR	HR	HR	1-877-560-5181	<a href="http://www.producerschoiceseed.com">www.producerschoiceseed.com</a>
A4440	Producer's Choice	4	HR	HR	HR	HR	HR		
PGI 215	Producer's Choice	2	HR	HR	HR	HR	HR		
PGI 557	Producer's Choice	5	HR	HR	HR	HR	HR		
RUGGED	Producer's Choice	3	HR	HR	HR	HR	HR		
EZRA	Seedway/FSG	3	R	R	HR	HR	R	1-800-836-3710	<a href="http://www.seedway.com">www.seedway.com</a>
GUARDSMAN II	Seedway/FSG	4	HR	HR	HR	HR	HR		
N-R-GEE	Seedway/FSG	4	HR	HR	HR	R	R		
REGEN	Seedway/FSG	3	R	HR	HR	HR	R		
SEEDWAY 9558	Seedway/FSG	3	HR	HR	HR	HR	R		
FSG 329	Seedway/FSG	3	HR	HR	HR	HR	HR		
FSG 408 DP	Seedway/FSG	4	HR	R	HR	HR	HR		
FSG 420 LH	Seedway/FSG	4	HR	HR	HR	HR	HR		
DG3210	Crop Production Services	3	HR	HR	HR	HR	HR	1-585-586-1330	<a href="http://www.cropproductionservices.com">www.cropproductionservices.com</a>
DG4210	Crop Production Services	4	HR	HR	HR	HR	HR		
WL 343HQ	Crop Production Services, HYTEST, AgriCulver	4	HR	HR	HR	HR	HR		
WL 353LH	W-L Research	4	HR	HR	HR	HR	HR	1-717-917-1609	<a href="http://www.wlresearch.com">www.wlresearch.com</a>
WL 354HQ	W-L Research	4	HR	HR	HR	HR	HR		
WL 363HQ	Crop Production Services, HYTEST, AgriCulver	5	HR	HR	HR	HR	HR		
5312	check	3	HR	HR	HR	HR	HR		
ONEIDA VR	check	3	R	HR	HR	MR	MR		
VERNAL	check	2	R	-	MR	-	-		

\*Disease ratings were provided by source companies, and from standard national tests.

Disease ratings code: HR = High resistance ( 50% or more of the plants resistant), R= Resistance (31-50% resistant), MR = Moderate resistance

FD = fall dormancy. Fall Dormancy ratings of 2,3 or 4 are recommended for New York State.

Cultivars rated R or HR to BW, VW, and Prr should have sufficient disease resistances to perform well in New York State.

\*BW - bacterial wilt, VW-Verticillium wilt, FW-Fusarium wilt, An-Anthraxnose, Prr-Phytophthora root rot

**Table 10: Red Clover and Birdsfoot Trefoil Cultivar Yield Trials- 2011 Ithaca, Tompkins Co.**

T/A = tons per acre dry matter; 5%LSD = to claim statistically significant yield differences between two cultivars, the yield difference must be equal to or greater than the LSD.

Sown May 7, 2008		2011		2010	2009	3-Yr	
Cultivar/Experimental	Marketing Company	23-Jun	% of Cks.	Total Season	Total Season	Total	% of Cks.
		T/A		T/A	T/A	T/A	
Emerald	Cal/West Seeds	1.61	175	3.62	7.09	12.32	120
FP 345	Allied Seed, L.L.C.	1.36	148	3.65	6.99	12.00	117
CW202	Cal/West Seeds	1.46	159	3.59	6.86	11.91	116
RC0006 (expt)	Allied Seed, L.L.C.	1.18	128	3.25	6.81	11.24	109
Marathon (check)	WI Check	1.08	118	2.99	6.60	10.67	104
Arlington (check)	WI Check	0.76	83	2.65	6.49	9.90	96
			Ck Mean				Ck Mean
5% LSD		0.28	0.92	0.62	0.58	1.27	10.29

Sown May 12, 2009		2011					2010	2-Yr.	% of Cks.	
Cultivar/Experimental	Marketing Company	16-Jun	22-Jul	26-Sep	Total Season	% of Checks	% Stand 22-Jul	Total Season	Total	
		--- tons per acre dry matter ---						T/A	T/A	
Exp RC 9703	Lewis Seed	2.18	0.46	0.45	3.08	141	55	6.17	9.25	113
StarFire II	AMPAC	1.86	0.55	0.54	2.94	134	55	6.12	9.06	111
C328	WI experimental	1.54	0.36	0.49	2.39	109	52	6.18	8.56	105
Marathon	WI check	1.35	0.37	0.41	2.13	97	30	6.25	8.38	102
Arlington	WI check	1.52	0.44	0.27	2.24	102	23	5.76	8.00	98
						Ck Mean				Ck Mean
	LSD(.05)	0.31	0.19	0.08	0.39	2.19	14	0.41	0.67	8.19

Sown May 11, 2010		2011					% of Cks.	% Stand 24-Oct
Cultivar/Experimentals	Marketing Company	24-Jun	29-Jul	26-Sep	Total Season	% of Cks.	% Stand 24-Oct	
CW 30091	Cal/West Seeds	3.53	0.47	0.79	4.79	111	81	
Arlington	WI check	3.09	0.53	0.71	4.32	100	67	
Cinnamon Plus	Allied Seed, L.L.C.	3.18	0.34	0.80	4.32	100	78	
Marathon	WI check	3.24	0.39	0.67	4.31	100	75	
Freedom!MR	Barenbrug	3.03	0.46	0.69	4.19	97	79	
						Ck Mean		
	LSD(.05)	0.24	0.08	0.07	0.25	4.32	6	

Sown May 13, 2011 Red Clover		Marketing Company
Cultivar/Experimental		
RC0005	Allied Seed, L.L.C.	
Marathon	WI check	^^^^Production Year Data Available in 2012^^^^
Cinnamon Plus	Allied Seed, L.L.C.	

Sown May 12, 2009 Birdsfoot Trefoil		2011					2010	2-Yr Total	2-Yr % of Norcen	
Cultivar	Marketing Company	16-Jun	29-Jul	26-Sep	Total Season	% of Norcen	% Stand 24-Oct	Total Season	Total	
		--- tons per acre dry matter ---						T/A	T/A	
Pardee	Seedway/FSG/GROWMARK FS	2.96	0.48	0.93	4.37	118	50	4.55	8.92	129
Bruce	Semican	2.99	0.42	0.85	4.25	114	48	4.55	8.80	128
AC Langile	Public Check	2.78	0.40	0.98	4.17	112	38	3.81	7.98	116
WITT	Public Check	2.70	0.40	0.74	3.84	103	42	3.91	7.74	112
Norcen	Public Check	2.39	0.51	0.81	3.72	100	40	3.17	6.89	100
	LSD(.05)	0.14	0.17	0.14	0.19		14	0.31	0.45	

Sown May 11, 2011 Birdsfoot Trefoil		Marketing Company
Cultivar/Experimental		
Pardee	Seedway/FSG/GROWMARK FS	
Norcen	Public Check	^^^^Production Year Data Available in 2012^^^^
Bruce	Semican	

**Marketing Company\***

AgriCulver	1-800-836-3701
Allied Seed, L.L.C.	1-208-250-6321
AMPAC Seed	1-541-928-1651
Cal/West	1-800-297-3332
Dairyland Seed Company	1-800-236-0163
Grassland Oregon	1-503-566-9900
Growthmark FS	1-800-338-4769
Lewis Seed	1-541-491-3700
Preferred Seed	1-716-895-7333
Seed Research of Oregon	1-800-253-5766
Seedway/FSG	1-800-836-3710
Semican	1-866-736-4226

**Phone****Web address**

<a href="http://www.alliedseed.com">www.alliedseed.com</a>
<a href="http://www.ampacseed.com">www.ampacseed.com</a>
<a href="http://www.calwestseeds.com">www.calwestseeds.com</a>
<a href="http://www.dairylandseed.com">www.dairylandseed.com</a>
<a href="http://www.fsseed.com">www.fsseed.com</a>
<a href="http://www.lewisseed.com">www.lewisseed.com</a>
<a href="http://www.preferredseed.com">www.preferredseed.com</a>
<a href="http://www.sroseed.com">www.sroseed.com</a>
<a href="http://www.seedway.com">www.seedway.com</a>
<a href="http://www.semican.ca">www.semican.ca</a>

**Table 11: 2011 Perennial Forage Grass Yield Summary**  
(T/A - tons per acre dry matter)  
Heading date is date when 5 heads in a 3.5 x 16 foot plot were visible.

Ithaca, Tompkins Co., Sown 2008, 2009, 2010 Soils  
2008 Williamson very fine sandy silt loam  
2009 Williamson very fine sandy silt loam  
2010 Erie-Elery channery silt loam

Timothy		2011						2010			3 or 2-Yr.	
Sown August 7, 2009		26-May	27-Jun	17-Aug	12-Oct	Total Season	% Stand	Heading Date	Total Season	% Stand	Heading Date	Total
Variety	Marketer	---- tons per acre dry matter ----										
Richmond	check	2.65	0.85	0.45	1.24	5.19	75	27-May	T/A	80	24-May	T/A
Climax	check	2.42	0.84	0.45	1.11	4.82	79	2-Jun	5.93	80	1-Jun	12.20
Tuukka	AMPAC	2.25	0.91	0.42	1.08	4.66	74	7-Jun	5.98	83	3-Jun	10.75
	Trial Mean	2.44	0.87	0.44	1.14	4.89	76		6.31	81		10.64
	LSD(.05)	0.12	0.23	0.14	0.17	0.36	6		0.47	5		
	CV(%)	2.9	15.6	17.8	8.4	4.3	4.8		4.3	3.6		

Timothy		2011				Total Season	% Stand	Heading Date
Sown May 11, 2010		3-Jun	2-Sep	10-Oct	Total Season	% Stand	Heading Date	
Variety	Marketer	---- tons per acre dry matter ----						
Richmond	check	3.53	1.98	0.87	6.37	81	27-May	
Climax	check	3.13	1.82	0.58	5.53	74	2-Jun	
Dainiai	Allied Seed, L.L.C.	2.74	1.36	0.43	4.53	65	7-Jun	
	Trial Mean	3.13	1.72	0.62	5.48	73		
	LSD(.05)	0.36	0.18	0.08	0.29	5		
	CV(%)	6.7	6.1	7.8	3.1	4.1		

Orchardgrass		2011						2010			Leaf Tip Disease 10/19	3 or 2-Yr.	
Sown August 7, 2009		26-May	27-Jun	17-Aug	12-Oct	Total Season	% Stand	Heading Date	Total Season	% Stand	Heading Date	1=low incidence 3=high incidence	Total
Variety	Marketer	---- tons per acre dry matter ----											
IS-OG 52	DLF International Seeds	2.41	1.09	0.91	1.77	6.17	69	17-May	9.09	76	10-May	1.6	15.26
Potomac	check	2.19	1.09	0.70	1.82	5.79	73	13-May	8.78	80	4-May	2.1	14.57
Profit-coated	AMPAC	2.26	0.94	0.87	1.73	5.80	71	17-May	8.55	74	10-May	1.6	14.35
RAD-LCF21	Lewis Seed	2.04	0.98	0.81	1.73	5.55	59	20-May	7.56	76	19-May	1.0	13.12
Profit	AMPAC	2.07	0.92	0.72	1.74	5.46	70	17-May	7.62	76	10-May	1.4	13.08
Tekapo-coated	AMPAC	1.69	0.89	0.72	1.71	5.01	73	17-May	7.94	81	6-May	1.0	12.95
Tekapo	AMPAC	1.62	0.83	0.68	1.59	4.72	68	17-May	7.12	80	6-May	1.3	11.85
Dividend VL	Allied Seed, L.L.C.	2.44	0.86	0.61	1.40	5.31	79	24-May	6.50	81	21-May	2.8	11.81
AMP-1MB (Meadow Brome.)	AMPAC	2.09	0.54	0.47	0.97	4.06	50	17-May	6.17	74	6-May	2.6	10.24
	Trial Mean	2.09	0.90	0.72	1.61	5.32	68		7.70	78		1.7	
	LSD(.05)	0.29	0.17	0.13	0.12	0.52	5		0.75	5		0.5	
	CV(%)	9.5	13.1	12.6	5.2	6.7	5.2		6.7	4.6		21.0	

Orchardgrass		2011				Total Season	% Stand	Heading Date
Sown May 11, 2010		3-Jun	1-Jul	2-Sep	10-Oct	Total Season	% Stand	Heading Date
Variety	Marketer	---- tons per acre dry matter ----						
Dg12R01	Barenbrug	3.12	1.31	1.59	1.08	7.10	80	20-May
Anksta	Allied Seed, L.L.C.	3.53	1.11	1.45	0.81	6.90	81	13-May
Dg83R01	Barenbrug	3.12	1.21	1.55	1.02	6.90	76	27-May
IS-OG 53	DLF Trifolium	3.18	1.17	1.45	0.96	6.76	78	20-May
Persist	Smith Seeds	3.08	1.11	1.44	0.96	6.59	81	17-May
Potomac	check	2.98	1.10	1.50	0.98	6.57	74	17-May
	Trial Mean	3.17	1.17	1.50	0.97	6.80	78	
	LSD(.05)	0.33	0.22	0.23	0.22	0.45	9	
	CV(%)	6.8	12.7	10.4	15.1	4.4	8.0	

Tall Fescue		2011				2010			2009		3 or 2-Yr.			
Sown April 25, 2008		26-May	28-Jun	17-Aug	6-Oct	Total Season	% Stand	Heading Date	Total Season	Heading Date	Total			
Variety	Marketer	---- tons per acre dry matter ----												
KY 31-	check	1.85	1.04	1.33	1.46	5.67	69	20-May	7.86	71	19-May	8.28	24-May	21.80
KY 31+	check	1.78	1.05	1.34	1.45	5.62	69	24-May	7.61	71	21-May	8.18	21-May	21.41
BAR FA BE9301A	Barenbrug USA	1.70	1.01	1.23	1.39	5.33	61	24-May	7.47	63	21-May	7.67	21-May	20.46
Bariane	Barenbrug USA	1.73	0.98	1.09	1.37	5.17	65	27-May	6.78	69	23-May	7.30	27-May	19.25
	Trial Mean	1.77	1.02	1.25	1.42	5.45	66		7.43	68		7.86		
	LSD(.05)	0.12	0.10	0.16	0.08	0.19	4		0.46	6		0.42		
	CV(%)	4.3	5.9	8.2	3.7	2.2	4.0		3.9	5.5		3.3		

Tall Fescue		2011				2010			3 or 2-Yr.			
Sown May 6, 2009		31-May	28-Jun	9-Aug	18-Oct	Total Season	% Stand	Heading Date	Total Season	% Stand	Heading Date	Total
Variety	Marketer	---- tons per acre dry matter ----										
Goliath-coated	AMPAC	2.71	0.98	1.64	1.99	7.32	76	22-May	7.23	79	17-May	14.55
Goliath	AMPAC	2.51	1.01	1.58	1.92	7.02	79	20-May	7.32	79	17-May	14.34
IS-FTF 48	DLF International Seeds	2.77	0.87	1.62	2.06	7.32	73	24-May	7.00	71	21-May	14.33
KY 31 E-	check	2.68	0.97	1.41	1.97	7.04	75	22-May	7.19	78	19-May	14.23
KY 31 E+	check	2.49	0.91	1.44	1.94	6.78	74	24-May	6.99	75	21-May	13.77
Bronson	AMPAC	2.66	0.80	1.39	2.01	6.86	76	20-May	6.89	79	17-May	13.75
Pradel	check	2.58	0.51	0.79	1.39	5.27	65	22-May	5.63	73	19-May	10.90
AMP-1MF	AMPAC	2.66	0.45	0.61	1.30	5.02	68	20-May	5.39	73	19-May	10.41
	Trial Mean	2.63	0.81	1.31	1.82	6.58	73		6.70	76		
	LSD(.05)	0.32	0.15	0.16	0.27	0.53	4		0.64	4		
	CV(%)	8.2	12.2	8.3	10.1	5.5	3.9		7.3	3.7		

Tall Fescue		2011				Total Season	% Stand	Heading Date
Sown May 11, 2010 - New Ketola 10		3-Jun	1-Jul	2-Sep	10-Oct	Total Season	% Stand	Heading Date
Variety	Marketer	---- tons per acre dry matter ----						
KY 31 E-	check	3.59	1.39	1.64	1.03	7.66	81	24-May
KY 31 E+	check	3.57	1.33	1.55	1.08	7.52	78	20-May
Cajun II	Smith Seeds	3.45	1.21	1.44	1.19	7.28	81	24-May
BarElite	Barenbrug	3.33	1.20	1.52	1.08	7.13	75	24-May
	Trial Mean	3.48	1.28	1.54	1.09	7.40	79	
	LSD(.05)	0.10	0.09	0.22	0.08	0.27	5	
	CV(%)	1.8	4.4	9.1	4.5	2.3	4.2	

Table 11: 2011 Perennial Forage Grass Yield Summary  
(T/A - tons per acre dry matter)

Heading date is date when 5 heads in a 3.5 x 16 foot plot were visible.

Ithaca, Tompkins Co., Sown 2008, 2009, 2010 Soils

2008 Williamson very fine sandy silt loam  
2009 Williamson very fine sandy silt loam  
2010 Erie-Elery channery silt loam

Bromegrass		2011						2010			2009		3 or 2-Yr.
Sown April 25, 2008		26-May	17-Aug	6-Oct	Total Season	% Stand	Heading Date	Total Season	% Stand	Heading Date	Total Season	Heading Date	Total
Variety	Marketer	---- tons per acre dry matter ----						19-Oct			T/A		T/A
Peak	Seedway/FSG	2.19	1.36	1.10	4.65	74	20-May	5.47	79	19-May	5.87	16-May	15.99
York	AMPAC	2.28	1.49	1.08	4.85	69	20-May	5.01	78	19-May	5.93	18-May	15.79
GRL	Barenbrug	2.15	1.16	0.89	4.21	75	20-May	4.58	79	19-May	5.88	18-May	14.67
	Trial Mean	2.21	1.34	1.02	4.57	73		5.02	78		5.89		
	LSD(.05)	0.19	0.13	0.13	0.40	5		0.59	8		0.50		
	CV(%)	5.0	5.8	7.5	5.1	3.8		6.8	5.9		4.9		

Bromegrass		2011					
Sown May 11, 2010 - New Ketola 10		3-Jun	2-Sep	10-Oct	Total Season	% Stand	Heading Date
Variety	Marketer	---- tons per acre dry matter ----					
Hakari	Barenbrug	3.70	2.10	0.96	6.76	81	2-Jun
Peak	Check	3.80	2.09	0.78	6.67	84	20-May
BAR Bif1GRL	Barenbrug	3.94	1.93	0.75	6.62	84	20-May
BAR BcF1FRRL	Barenbrug	3.53	2.05	0.57	6.14	81	13-May
AC Knowles	Barenbrug	3.54	1.68	0.38	5.61	74	17-May
BARPAL 16	Barenbrug	1.54	1.46	0.55	3.56	40	-
	Trial Mean	3.34	1.89	0.66	5.89	74	
	LSD(.05)	0.45	0.19	0.18	0.55	8	
	CV(%)	9.0	6.6	17.7	6.2	7.5	

Perennial Ryegrass		2011						2010			2009		3 or 2-Yr.		
Sown April 25, 2008		26-May	28-Jun	17-Aug	6-Oct	Total Season	% Stand	Heading Date	Total Season	% Stand	Heading Date	Rust	Total Season	Heading Date	Total
Variety	Marketer	---- tons per acre dry matter ----						19-Oct			20-Oct		T/A	T/A	
Lato (Kentucky bluegrass)	Allied Seed Co., L.L.C.	1.92	0.67	0.58	1.14	4.31	76	17-May	5.24	76	6-May	2.0	6.52	11-May	16.08
Barderby (Kentucky bluegr.)	Barenbrug	1.89	0.87	0.47	1.34	4.56	85	12-May	5.79	85	6-May	2.8	5.73	7-May	16.07
Troy (Kentucky bluegrass)	check	1.81	0.74	0.66	1.13	4.34	83	12-May	5.48	83	4-May	2.8	5.98	7-May	15.80
KenBlue (Kentucky bluegr.)	check	1.70	0.85	0.54	1.15	4.24	84	12-May	5.24	85	4-May	3.0	5.50	7-May	14.98
Cancan	DLF International Seeds	0.99	1.21	0.69	1.25	4.13	60	7-Jun	4.67	60	3-Jun	1.6	5.59	12-Jun	14.38
PSG 47 MOL	PICKSEED	1.65	1.04	0.54	0.78	4.00	59	27-May	4.61	69	23-May	1.4	5.73	24-May	14.35
Calibra	check	1.21	1.03	0.49	1.05	3.78	59	27-May	4.42	66	24-May	1.5	5.85	24-May	14.04
Foxtrot	DLF International Seeds	1.22	1.06	0.55	1.20	4.04	61	7-Jun	4.61	69	3-Jun	1.6	5.03	2-Jun	13.68
Pastour	DLF International Seeds	1.03	1.05	0.61	1.11	3.80	58	2-Jun	4.73	68	1-Jun	1.4	4.95	2-Jun	13.47
PSG AM 108	PICKSEED	1.29	0.89	0.39	0.91	3.48	63	24-May	4.63	69	21-May	1.5	5.11	24-May	13.22
Linn	check	1.66	0.46	0.36	0.92	3.40	68	20-May	4.48	76	16-May	1.9	4.96	18-May	12.85
PSG 06 B Lh	PICKSEED	1.69	1.18	0.36	0.76	3.99	51	27-May	4.56	68	23-May	1.0	4.13	24-May	12.68
	Trial Mean	1.50	0.92	0.52	1.06	4.01	67		4.87	73		1.9	5.42		
	LSD(.05)	0.32	0.15	0.14	0.17	0.43	6		0.49	5		0.41	0.61		
	CV(%)	14.9	11.4	18.2	11.3	7.4	6.7		7.0	4.5		15.4	7.8		

Tetraploid perennial ryegrass PSG 06 B Lh, PSG 47 MOL, PSG AM 108, Calibra, -; Diploid perennial ryegrass -Cancan, Foxtrot, Pastour, Linn

Perennial Ryegrass		2011						2010			3 or 2-Yr.	
Sown May 6, 2009		31-May	28-Jun	9-Aug	18-Oct	Total Season	% Stand	Heading Date	Total Season	% Stand	Heading Date	Total
Variety	Marketer	---- tons per acre dry matter ----						18-Nov			T/A	
AMP-EDR1 (festulolium)	AMPAC	2.52	0.64	0.99	1.26	5.42	59	24-May	7.13	69	19-May	12.54
AMP-MDR2	AMPAC	2.50	0.54	0.83	1.37	5.24	69	27-May	6.78	70	21-May	12.02
Spring Green (festulolium)	check	2.45	0.59	0.75	1.30	5.08	66	27-May	6.77	74	17-May	11.85
Duo	AMPAC	2.47	0.47	0.83	1.27	5.04	66	24-May	5.99	69	19-May	11.03
Power	AMPAC	1.78	0.65	0.69	1.40	4.52	61	27-May	6.29	73	21-May	10.81
Calibra	check	1.90	0.60	0.61	1.38	4.48	68	27-May	5.99	73	24-May	10.47
Tonga	AMPAC	1.99	0.44	0.74	1.31	4.48	60	22-May	5.95	73	17-May	10.43
Impresario	DLF International Seeds	1.87	0.58	0.57	1.42	4.44	63	24-May	5.82	73	19-May	10.27
Linn	check	2.30	0.32	0.49	1.10	4.22	70	19-May	5.68	81	17-May	9.90
Orantas	DLF International Seeds	1.59	0.52	0.51	1.41	4.04	71	27-May	5.11	78	23-May	9.16
	Trial Mean	2.14	0.54	0.70	1.32	4.70	65		6.15	73		
	LSD(.05)	0.14	0.07	0.19	0.18	0.36	6		0.43	5		
	CV(%)	4.7	8.6	18.4	9.3	5.4	6.1		4.9	4.8		

Tetraploid perennial ryegrass Power, Impresario, Tonga, AMP MDR2, Calibra; Diploid perennial ryegrass -Orantas, Linn

Perennial Ryegrass		2011						
Sown May 11, 2010 - New Ketola 10		3-Jun	1-Jul	2-Sep	10-Oct	Total Season	% Stand	Heading Date
Variety	Marketer	---- tons per acre dry matter ----						
Kentaur	DLF Trifolium	3.24	0.99	0.91	0.90	6.04	70	31-May
Elena DS	Allied Seed, L.L.C.	3.24	1.11	0.81	0.85	6.00	65	27-May
Verseka	Allied Seed, L.L.C.	3.24	0.88	0.86	0.75	5.73	68	27-May
Calibra	check	2.87	1.10	0.75	0.88	5.60	71	27-May
Polim	DLF Trifolium	2.16	1.08	0.91	0.86	5.01	68	2-Jun
Linn	check	2.97	0.63	0.59	0.60	4.80	80	20-May
	Trial Mean	2.95	0.97	0.81	0.81	5.53	70	
	LSD(.05)	0.23	0.11	0.11	0.08	0.33	6	
	CV(%)	5.2	7.2	9.1	6.3	4.0	5.7	

Tetraploid perennial ryegrass Kentaur, Elena DS, Verseka, Polim, Calibra; Diploid perennial ryegrass -Linn

## CORRECTED NDFD 1-18-2012

### Perennial Forage Grass Varieties - 2010 Forage Quality, Maturity and Yield at Spring Growth Boot Stage (See Table 5 below)

For the first two production years of each grass trial sown, samples for forage quality analyses were taken from each grass variety. Two samples were taken at boot stage or when seed heads were first visible. The data from these samples can be used to compare forage quality of varieties at approximately the same stage of maturity, however on different days.

Grasses increase in fiber concentration (%NDF) and decrease in fiber digestibility (%NDFd) by advancing calendar date and by increasing temperatures. Harvest grass at boot stage for optimum forage quality. Choose grass varieties first by species based in species agronomic characteristics, then by date of boot stage based on planned date of harvest, then by yield and forage quality (low fiber, high fiber digestibility). Predictions of milk per acre, milk per ton, and relative feed quality were found to be very highly correlated with %NDF and yield, thus are no longer reported.

The samples taken in 2011 will be analyzed and reported on in 2012.

**Table 5: Spring Forage Quality Data for Grass Varieties**

Trial Sown 2008 Boot Stage in 2010				Trial Sown 2009 Boot Stage in 2010			
	Date at Boot Stage	% NDF	% NDFD		Date at Boot Stage	% NDF	% NDFD
<b>Perennial Ryegrass and Kentucky Bluegrass</b>				<b>Perennial Ryegrass</b>			
KenBlue(Kentucky bluegr.)	4-May	52	75	Tonga	17-May	36	76
Troy(Kentucky bluegr.)	4-May	53	73	Spring Green	17-May	41	79
Lato(Kentucky bluegr.)	6-May	49	76	Linn	17-May	43	73
Barderby(Kentucky bluegr.)	6-May	56	69	Duo	19-May	44	77
Linn	16-May	41	75	AMP-EDR1	19-May	48	77
PSG AM 108	21-May	35	79	Impressario	19-May	41	78
PSG 06 B Lh	23-May	45	71	AMP-MDR2	21-May	46	78
PSG 47 MOL	23-May	44	75	Power	21-May	44	78
Calibra	24-May	40	78	Orantas	23-May	46	77
Pastour	1-Jun	51	73	Calibra	24-May	42	77
Cancan	3-Jun	52	74				
Foxtrot	3-Jun	53	74				
<b>Tall Fescue</b>				<b>Tall and Meadow Fescue</b>			
KY 31-	19-May	47	74	Goliath-coated	17-May	51	67
KY 31+	21-May	50	73	Goliath	17-May	50	66
BAR FA BE9301A	21-May	50	71	Bronson	17-May	51	67
Bariane	23-May	53	72	AMP-1MF (Meadow Fes.)	19-May	53	73
				KY 31 E-	19-May	53	68
				Pradel (Meadow Fes.)	19-May	54	72
				IS-FTF 48	21-May	55	64
				KY 31 E+	21-May	53	67
<b>Bromegrass</b>				<b>Orchardgrass</b>			
GRL	19-May	61	73	Potomac	4-May	58	76
York	19-May	58	78	AMP-1MB	6-May	56	78
Peak	19-May	57	75	Tekapo-coated	6-May	56	76
				Tekapo	6-May	54	78
				Profit	10-May	57	74
				Profit-coated	10-May	57	74
				IS-OG 52	10-May	58	76
				RAD-LCF21	19-May	59	70
				Dividend VL	21-May	53	75
				<b>Timothy</b>			
				Richmond	24-May	59	70
				Climax	1-Jun	68	63
				Tuukka	3-Jun	67	67
<b>Trial Sown 2009 Boot Stage in 2010</b>							
	Date at Boot Stage	% NDF	% NDFD				
<b>Annual Ryegrass</b>							
Fantastic	17-May	37	75				
AMP-1IR	17-May	40	75				
Bruiser	17-May	38	74				
Feast II	21-May	44	76				
A 108	21-May	39	76				
MX 108	21-May	44	73				
06 B Lh	21-May	46	72				
PSG 29 BF 06	21-May	47	74				



## CORRECTED NDFD 1-18-2012

**Perennial Forage Grass Varieties - 2010 Forage Quality, Maturity and Yield at Spring Growth at Harvest 1 (See Table 6 below)**

Two samples were taken from each variety just prior to first harvest. The data from these samples can be used to compare forage quality of varieties on the same day, but at different stages of maturity. Varieties are sorted from earliest heading date to latest heading date within each trial.

Grass varieties that are harvested prior to boot stage such that the seed heads are not harvested in the first cutting, will have seed head emergence at the second harvest. Varieties with seed heads at second harvest can be expected to have lower forage quality at second harvest compared to a variety that does not have seed head emergence at that harvest. Samples were not taken for analyses at the second harvest.

**Table 6: 2010 Spring, First Harvest Forage Quality Data for Grass Varieties**

	Trial Sown 2008					Trial Sown 2009					
	First Harvest in 2010 - May 24			% Seed Heads at Harvest 2	2010 Aftermath Forage Yield (t/a)	First Harvest in 2010 - May 25			% Seed Heads at Harvest 2	2010 Aftermath Forage Yield (t/a)	
	Yield (t/a) Harvest 1	% NDF	% NDFD			Yield (t/a) Harvest 1	% NDF	% NDFD			
<b>Perennial Ryegrass and Kentucky Bluegrass</b>						<b>Perennial Ryegrass</b>					
KenBlue (Kentucky bluegr)	2.02	60	63	1	3.22	Tonga	2.82	50	71	9	3.12
Troy (Kentucky bluegrass)	2.23	61	63	1	3.26	Spring Green	3.20	55	72	73	3.57
Lato (Kentucky bluegrass)	2.16	57	66	1	3.08	Linn	2.92	56	68	4	2.76
Barderbly (Kentucky blueg)	1.97	64	64	1	3.82	Duo	2.77	50	75	85	3.22
Linn	2.17	48	73	5	2.32	AMP-EDR1	3.27	57	70	85	3.85
PSG AM 108	1.84	42	80	33	2.80	Impressario	2.53	47	75	6	3.29
PSG 06 B Lh	2.52	47	75	80	2.03	AMP-MDR2	3.13	50	76	73	3.65
PSG 47 MOL	2.15	43	79	70	2.46	Power	2.49	47	77	6	3.80
Calibra	1.61	40	78	55	2.81	Orantas	1.77	49	78	8	3.34
Pastour	1.21	46	83	60	3.52	Calibra	2.50	43	78	5	3.48
Cancan	1.07	42	83	63	3.59	<b>Tall and Meadow Fescue</b>					
Foxtrot	1.30	42	82	61	3.31	Goliath-coated	2.21	59	64	1	5.01
<b>Tall Fescue</b>						Goliath	2.07	58	64	1	5.25
KY 31-	2.53	51	70	1	5.32	Bronson	2.13	58	64	1	4.75
KY 31+	2.24	51	71	1	5.37	AMP-1MF (Meadow Fes.)	2.26	59	72	1	3.13
BAR FA BE9301A	2.20	51	70	1	5.27	KY 31 E-	2.09	57	67	1	5.10
Bariane	2.11	49	72	1	4.67	Pradel (Meadow Fes.)	2.26	57	74	1	3.37
<b>Bromegrass</b>						IS-FTF 48	1.88	58	64	1	5.12
Harvest 1 on May 28th						KY 31 E+	2.04	56	68	1	4.95
GRL	3.05	69	64	1	1.54	<b>Orchardgrass</b>					
York	3.01	67	68	1	2.00	Harvest 1 on May 28th					
Peak	3.70	68	67	1	1.78	Potomac	3.67	65	67	1	5.10
<b>Trial Sown 2009</b>						AMP-1MB	3.80	67	76	1	2.38
First Harvest in 2010 - May 25			% Seed Heads at Harvest 2	2010 Aftermath Forage Yield (t/a)	First Harvest in 2010 - May 25			% Seed Heads at Harvest 2	2010 Aftermath Forage Yield (t/a)		
Yield (t/a) Harvest 1	% NDF	% NDFD			Yield (t/a) Harvest 1	% NDF	% NDFD				
<b>Annual Ryegrass</b>						Tekapo-coated	3.40	63	68	1	4.54
Fantastic	2.35	53	68	95	2.41	Tekapo	2.85	64	68	1	4.27
AMP-11R	3.70	52	69	95	4.89	Profit	3.49	65	69	1	4.13
Bruiser	2.85	54	65	95	2.61	Profit-coated	3.94	66	69	1	4.61
Feast II	2.71	48	73	95	4.59	IS-OG 52	4.33	67	69	1	4.76
A 108	2.80	44	77	5	2.89	RAD-LCF21	3.28	66	78	1	4.28
MX 108	3.48	51	68	95	4.23	Dividend VL	3.09	56	76	1	3.41
06 B Lh	3.85	52	71	95	4.78	<b>Timothy</b>					
PSG 29 BF 06	3.54	51	71	95	4.67	Harvest 1 on May 28th					
						Richmond	4.22	59	70	1	2.79
						Climax	3.57	59	75	1	2.36
						Tuukka	3.81	56	77	1	2.17

Table 14: Annual Ryegrass Trials, and Perennial Cool Season Grass Trials Sown in 2011.

Variety	Marketing Company	2011			2010		2 or 3-Yr. Total	Variety	Marketing Company	2011		Stand 22-Nov
		Total Season	% Stand 22-Nov	Heading Date	Total Season	T/A				3-Nov	T/A	
<b>Annual Ryegrass</b>							<b>Sown May 6, 2009</b>					
AMP-1IR	AMPAC	4.84	53	24-May	8.59	17.98	<b>Orchardgrass</b>					
06 B Lh	PICKSEED	4.96	55	24-May	8.63	17.50	IS-OG 53	DLF International Seeds	1.05	90		
PSG 29 BF 06	PICKSEED	5.08	48	24-May	8.21	17.46	Extend	Seedway	0.91	90		
Feast II	AgriCulver / AMPAC	3.87	45	27-May	7.33	16.93	Olympia	Pennington Seed	0.91	90		
Feast II	check	3.65	43	27-May	7.30	16.44	Potomac	check	0.84	90		
MX 108	PICKSEED	4.41	40	27-May	7.71	15.67	LSD(.05)		0.13			
Bruiser	AgriCulver / AMPAC	3.80	2	22-May	5.46	14.52	<b>Tall Fescue</b>					
Fantastic	AgriCulver / AMPAC	3.75	2	19-May	4.75	13.62	Tower 647	DLF International Seeds	1.35	90		
A 108	PICKSEED	3.48	71	27-May	5.69	12.40	KY 31 E-	check	1.14	90		
LSD(.05)		0.44	10		0.61		KY 31 E+	check	1.02	90		
							Enhance	Seedway	0.90	91		
							LSD(.05)		0.14			
<b>Annual Ryegrass</b>							<b>Sown May 11, 2010</b>					
Max	PICKSEED	6.59	70	27-May	1.99	8.58	<b>Bromegrass</b>					
Feast II	check	5.31	68	27-May	3.18	8.50	Barpal 16	Barenbrug	1.21	90		
PS07-2 AR	PICKSEED	6.46	78	24-May	1.98	8.44	Hakari	Barenbrug	0.78	91		
PS-Lm-09-2	PICKSEED	6.00	75	24-May	2.29	8.29	Peak	Seedway/ FSG	0.48	83		
AE 110	PICKSEED	5.15	60	20-May	2.48	7.63	LSD(.05)		0.16	3		
Ed (2n)	Smith Seeds	4.10	23	20-May	3.20	7.29	<b>Perennial Ryegrass</b>					
Thunder	Burlingham Seeds	4.09	43	17-May	2.76	6.85	Gain	Seedway	1.27	85		
Big Boss (4n)	Smith Seeds	3.45	18	24-May	3.20	6.65	Spring Green	check	0.54	90		
LSD(.05)		0.43	11		0.46		Tivoli	DLF International Seeds	0.53	90		
							PPG-FPRT103	Mountain View Seed	0.52	90		
<b>Annual Ryegrass</b>							<b>Sown May 11, 2011</b>					
PPG-LWT104	Mountain View Seed	2.57	78				PPG-LHT103	Mountain View Seed	0.50	90		
Feast II	Check	2.34	83				Boost	Seedway	0.42	89		
PPG-LWD101	Mountain View Seed	2.26	85				Linn	check	0.39	93		
PS-Lm-09-2	PICKSEED USA, Inc	2.07	83				LSD(.05)		0.15	3		
PS-AR-09-1	PICKSEED USA, Inc	2.06	88				<b>Timothy</b>					
MX 108	Check	1.95	80				Climax	check	Not	90		
AE 110	Check	1.87	76				Richmond	check	Available	88		
Maximo	PICKSEED USA, Inc	1.80	85				Crest	Seedway / FSG		93		
LSD(.05)		0.46	6				Summit	Seedway / FSG		90		
							LSD(.05)			5		

Table 15: Marketing Companies for Grass Varieties

Marketing Company	Marketing Co. Phone Number	Web or E-mail Address
AgriCulver	1-800-836-3701	
Allied Seed, L.L.C.	1-208-250-6321	<a href="http://www.alliedseed.com">www.alliedseed.com</a>
AMPAC Seed Company	1-800-547-3230	<a href="http://www.ampacseed.com">www.ampacseed.com</a>
Barenbrug USA	1-800-547-4101	<a href="http://www.barusa.com">www.barusa.com</a>
Burlingham Seeds	1-503-623-2306	<a href="http://www.burlinghamseeds.com">www.burlinghamseeds.com</a>
DLF International Seeds	1-541-369-2251	<a href="http://www.dlfls.com">www.dlfls.com</a>
Grassland Oregon	1-503-566-9900	
Growmark FS	1-800-338-4769	<a href="http://www.fsseed.com">www.fsseed.com</a>
Land O' Lakes	1-800-328-9680	<a href="http://www.landolakesinc.com">www.landolakesinc.com</a>
Lewis Seed Co.	1-541-466-3704	<a href="http://www.lewisseed.com/">www.lewisseed.com/</a>
Pennington Seed	1-800-285-SEED	<a href="http://www.penningtonseed.com">www.penningtonseed.com</a>
PICKSEED	1-705-878-9240	<a href="http://www.pickseed.com/ECanada/index.html">http://www.pickseed.com/ECanada/index.html</a>
ProSeeds Marketing	1-541-928-9999	<a href="http://www.proseeds.net">www.proseeds.net</a>
Seed Research of Oregon	1-800-253-5766	<a href="http://www.sroseed.com">www.sroseed.com</a>
Seedway/FSG	1-800-836-3710	<a href="http://www.seedway.com">www.seedway.com</a>
Smith Seeds		<a href="http://www.smithseed.com/contact.shtml">www.smithseed.com/contact.shtml</a>

Estimates of potential corn yields by soil type in tables 1-8 are from the New York state corn N calculator: <http://nmsp.cals.cornell.edu/software/calculators.html>