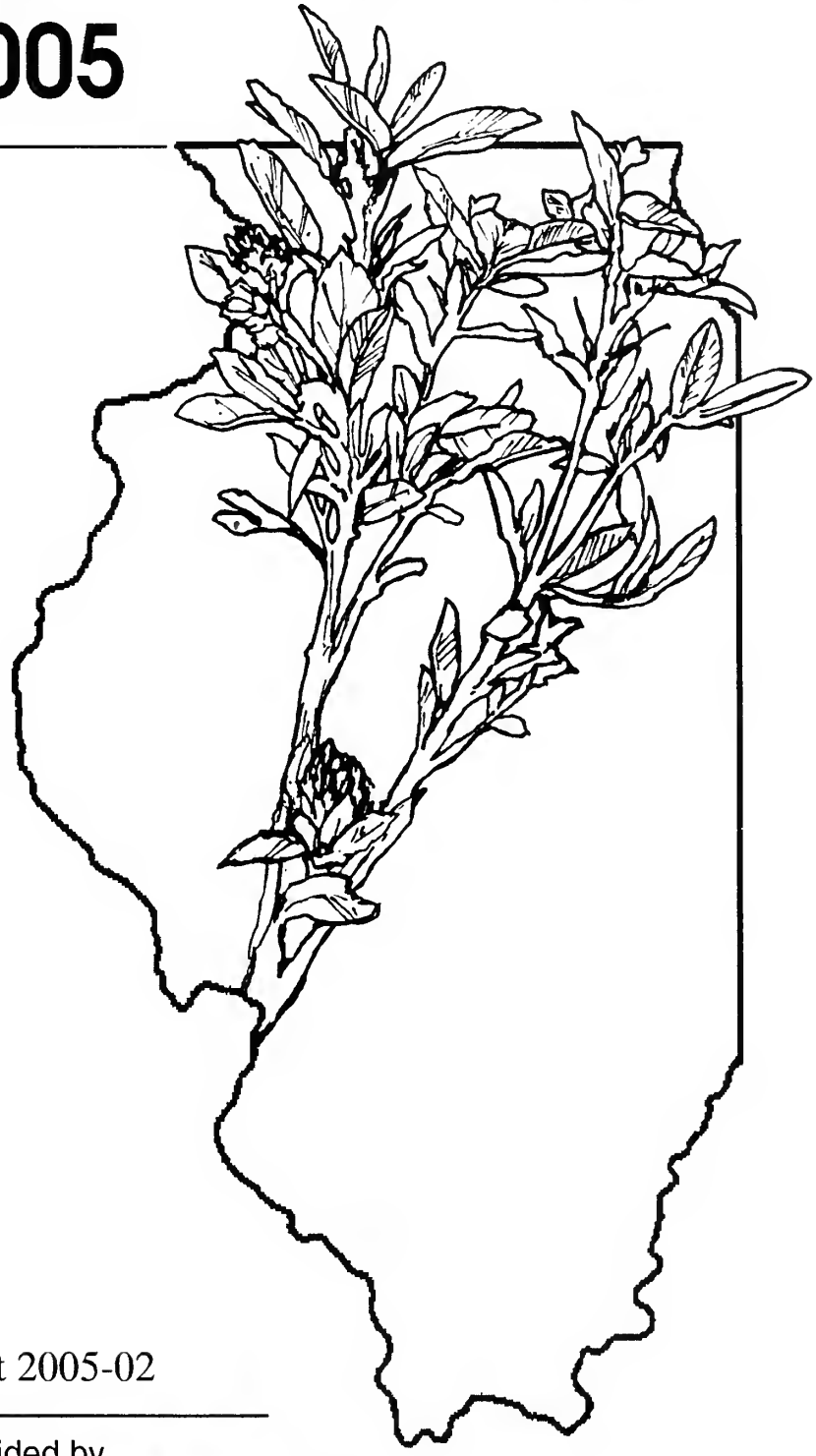
ıge Crop Variety Trials in Illinois-2005



Crop Sciences Special Report 2005-02

Performance Information Provided by

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
Department of Crop Sciences
http://vt.cropsci.uiuc.edu/
College of Agricultural, Consumer and Environmental Sciences

CONTENTS

DATA ALSO AVAILABLE AT: http://vt.cropsci.uiuc.edu

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PERFORMANCE OF COMMERCIAL FORAGES IN ILLINOIS

THE UNIVERSITY OF ILLINOIS commercial forage testing program has been testing public and private forages for over 54 years. The initial purpose was to evaluate the many public varieties available, today public varieties are far out numbered by private varieties. This year 34 seed companies are participating in the 2005 trials.

The purpose of this commercial forage testing program is to provide unbiased, objective, and accurate testing of all varieties entered. The tests are conducted on as uniform a soil as is available in the testing area. Small plots are used to reduce the chance of soil and climatic variations occurring between one variety plot and another.

The results of these tests should help you judge the merits of varieties in comparison with other private and public varieties. Because your soils and management may differ from those of the test location, you may wish to plant variety strips of the higher-performing varieties on your farm. The results printed in this circular should help you decide which varieties to try.

TEST PROGRAM

Selection of entries Forage producers in Illinois and surrounding states were invited to enter varieties in the 2005 Illinois forage performance trials. Entrants were required to provide seed in a commercially available container to the University of Wisconsin for distribution to other public testing programs. This is to ensure performance is not affected by seed source and to avoid each entrant the cost of sending a commercial bag of seed to each program.

To help finance the testing program, a fee of $450 per location per 4 years was charged for each variety entered by the seed producer. Most of these varieties are commercially available, but some experimental varieties were also entered. A total of 97 varieties were tested in 2005.

Number and location of tests In 2005, tests were conducted at 3 locations throughout the state (see map on pg. 4). These sites represent the major soils and dairy producing areas of the state.

Field plot design Entries of each test were replicated four times in a randomized complete block. Plot size was 23 feet by 3 feet and end trimmed at each harvest to obtain a 19 foot long plot.

Fertility and weed control All test locations were managed at a high level of fertility for each crop. Herbicides were used at all test locations for weed control.

Method of planting and harvesting All trials were seeded with a five row seeder modified to accommodate small plot seeding. Plots were seeded at 18 pounds per acre. Harvests were taken with a custom built flail chopper equipped with electronic data gathering equipment.

PERFORMANCE DATA

Yield Forage yield is reported in tons dry matter per acre. Yields were converted to a dry matter basis by estimating percent moisture within each trial.

SUGGESTIONS FOR COMPARING ENTRIES

It is impossible to obtain an exact measure of performance when conducting any test of plant material. Harvesting efficiency may vary, soils may not be uniform, and many other conditions may produce variability. Results of repeated tests are more reliable than those of a single year or a single-strip test. When one variety consistently out yields another at several test locations and over several years of testing, the chances are good that this difference is real and should be considered in selecting a variety.

As an aid in comparing alfalfa varieties within a single trial, certain statistical tests have been devised. One of these tests, the least significant difference (L.S.D.), when used in the manner suggested by Carmer and Swanson[1] is quite simple to apply and is more appropriate than most other tests. When two entries are compared and the difference between them is greater than the tabulated L.S.D. value, the entries are judged to be "significantly different."

The L.S.D. is a number expressed in tons dry matter per acre and presented following the average yield. An L.S.D. of 5% is shown. Add the L.S.D. value to the trial mean. Every variety with a greater yield than the resulting number is "statistically better than average". Consider the merits of the varieties in this group when making varietal selections.

To make the best use of the information presented in this circular and to avoid any misunderstanding or misrepresentation of it, the reader should consider an additional caution about comparing entries. Readers who compare entries in different trials should be extremely careful, because no statistical tests are presented for that purpose. Readers should note that the difference between a single entry's performance at one location and its performance at another is caused primarily by environmental effects and random variability. Furthermore, the difference between the performance of entry A in one trial and the performance of entry B in another trial is the result not only of environmental effects and random variability, but of genetic effects as well.

[1]Carmer, S.G. and M.R. Swanson. "An Evaluation of Ten Pairwise Multiple Comparison Procedures by Monte Carlo Methods." Journal of American Statistical Association 68:66-74. 1983.

2005 TEST FIELDS

Freeport
Location: Stephenson county, north of Freeport, north central Illinois.
Cooperators: Dave and Mike Macomber.

Urbana
Location: University of Illinois, Crop Sciences Research and Education Center, Champaign county, east central Illinois.
Cooperators: Robert Dunker; agronomist, Mike Kleiss; farm foreman.

Belleville
Location: Southern Illinois University Research Center, east of Belleville, St. Clair county.
Cooperators: Ed Varsa; research director; Ron Krausz; field manager.

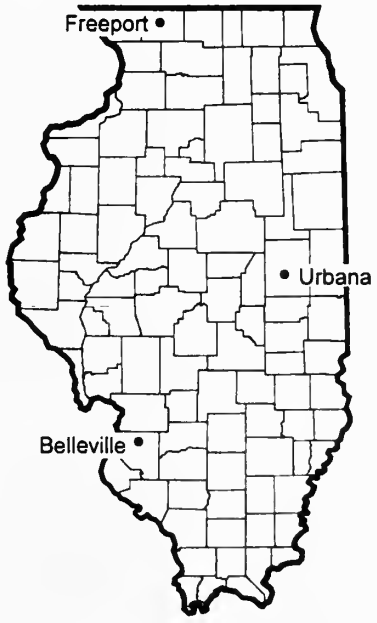
2005 GROWING SEASON RAINFALL

Location	April	May	June	July	Aug
Freeport	1.70	3.80	2.20	1.16	7.23
Urbana	3.98	4.50	4.08	5.67	4.29
Belleville	2.85	8.72	2.18	6.75	5.22

SOURCES OF SEED

AgriPro, AgriPro Seeds, Inc., R.R. 2, Hwy 30 East, Ames, IA 50010
Allied Seed, Allied Seed, L.L.C., 1108 Hilldale Dr., Macon, MO 63552
Ampac, Ampac Seed Co., P.O. Box 318, Tangent, OR 97389
Beck, Beck's Hybrids, 6767 E 276th, Atlanta, IN 46031
Bio Plant, Bio Plant Research, P.O. Box 320, Camp Point, IL 62320
Cebeco, Cebeco International Seeds, Inc., P.O. Box 229 / 175 W. "H" Street, Halsey, OR 97333
Croplan Genetics, Croplan Genetics, P.O. 64406, St. Paul, MN 55164-0406
Dairyland, Dairyland Seed Co., P.O. Box 958, West Bend, WI 53095
Dekalb, Monsanto, 800 N Lindbergh Blvd., St. Louis, MO 63167
DLF Int'l Seeds, DLF- International Seeds. Inc., P.O. Box 229, Halsey, OR 97348
Forage Genetics, Forage Genetics, 1897 195th St., Boone, IA 50036
Emerald, Emerald Commodities, Inc., 32041 Cartney Dr. Harrisburg, OR 97466
Garst, Garst Seed Co., 2369-330th St, P.O. Box 500, Slater, IA 50244
George Keller, George Keller & Sons Co., P.O. Box 490, 909 Maine St., Quincy, IL 62306-0490
Great Plains, Great Plains Research Co., Inc., 3624 Kildaire Farm Rd., Apex, NC 27539
Growmark, Growmark Inc., 1701 Towanda Ave., Bloomington, IL 61701
Hoffman, Hoffman Seed House, 200 E 4th St., Hoffman, IL 62250
Hughes, Hughes Hybrids, 206 N Hughes Rd., Woodstock, IL 60098
Improved Forages, Improved Forages, P.O. Box 230, Lake Oswego, OR 97034
Journey Brand, Fontanelle Hybrids, 10981 8th St., Fontanelle, NE 68044
Lewis Seed, Lewis Seed Co., 33820 Linn-West Dr. Shedd, OR 97377
Mycogen, Mycogen Seeds, 9330 Zionsville Rd., Indianapolis, IN 46268
Ottilie, Ottilie RO Seed, 1462 Sanford Ave., Marshalltown, IA 50158
Pennington Seed, Pennington Seed, Inc. of Oregon, Lebanon, OR 98355
PGI, PGI Alfalfa, Inc., 225 West 1st St., Story City, IA 50248
Pickseed West, Pickseed West Inc., P.O. Box 888, Tanget, OR 97389
Pioneer, Pioneer Hi-bred International, Inc., 14171 Carole Dr., Bloomington, IL 61704
Power Seeds, 658 Larner Line, RR 1, Fraserville, Ont. Canada, K0L 1V0
Public Varieties, Various sources
Renk , Renk Seed Co., 6800 Willburn Rd., Sun Prairie, WI 53590
Schultz, Schultz Turf and Forage Seed, P.O. Box 1623, Effingham, IL 62401
Seed Research, Seed Research of Oregon, 27630 Llewellyn Rd. Corvalis, OR 97333
Smith Farms, Loren J Smith Farms, 30361 Loren Lane, Corvallis, OR 97333
Smith Seed, Smith Seed Services, P.O. Box 288, Halsey OR 97348
Target, Target Seed, P.O. Box 300, Parma, ID 83660

2005 FORAGE LOCATIONS



2005 Alfalfa and Forage Grass Entries

* experimental Company-Brand	Variety	Freeport 02	 03	 04	 05	Urbana 02	 04	Belleville 03
JOURNEY BRAND	204 HYBRID		x					
HUGHES	321 HYB*			x				
FORAGE GENETICS	42H167*			x				
FORAGE GENETICS	42H169*			x				
MYCOGEN	4A421				x			
MYCOGEN	4R429			x	x			
PIONEER	53Q30				x			
PIONEER	54H91	x	x	x				x
PIONEER	54V46		x	x	x		x	x
PIONEER	5454			x				
PIONEER	54V54	x						
GARST	6325		x	x				
GARST	6400HT		x		x			
GARST	6410	x						
GARST	6415			x	x			
GARST	6420	x	x		x			
GARST	6530			x				
PGI ALFALFA	A 30-06				x			
GEORGE KELLER	ABSOLUTE GZ BRAND	x						x
GEORGE KELLER	ABSOLUTE II BRAND	x						
GEORGE KELLER	ABSOLUTE III BRAND		x					x
BIO PLANT RESEARCH	ABUNDANCE		x					
BIO PLANT RESEARCH	BPR387				x			
DEKALB	DKA 33-16		x					
DARIYLAND	DS320*		x					
DARIYLAND	DS321*		x					
DARIYLAND	DS322*		x					
DARIYLAND	DS323*		x					
AGRIPRO	FEAST +EV	x	x					
ALLIED SEED	FSG 400LH			x				
ALLIED SEED	FSG 406						x	
ALLIED SEED	FSG 408DP						x	
ALLIED SEED	FSG 505						x	x
HOFFMAN	HAYBLAZER-444 HYB*			x			x	
DARIYLAND	HYBRIFORCE-420 WET		x	x			x	x
CROPLAN GENETICS	LEGENDAIRY 5.0				x			
BIO PLANT RESEARCH	MILESTONE				x			
GREAT PLAINS	NOVA						x	
BIO PLANT RESEARCH	PHIRST		x					
GEORGE KELLER	PLH 4000 BRAND							x
POWER SEEDS	POWER 4.2		x					
TARGET	REBEL						x	
CROPLAN GENETICS	REBOUND 5.0				x			
PGI ALFAFLA	REWARD II	x	x				x	
RENK/BECK	SUMMER GOLD			x			x	
ALLIED SEED	TRIPLE CROWN	x						
OTTILIE	TRUMP II		x					
PUBLIC	VERNAL	x	x	x	x		x	x
GROWMARK	WL 319 HQ	x						
GROWMARK	WL 338 SR	x						
GROWMARK	WL 345 LH				x			
GROWMARK	WL 346 LH			x				
GROWMARK	WL 348 AP		x					
GROWMARK	WL 357 HQ		x					x
Perennial Forage Grasses[1]								
SCHULTZ TURF & FORAGE	ALBERT OG					x		
DLF INT'L SEEDS	AMBASSADOR OG						x	
ALLIED SEED	ARKPLUS TF						x	
SEED RESEARCH OF OREGON	AUBISQUE PRT						x	
PUBLIC	BISON HRG					x	x	
IMPROVED FORAGES	BULL TF					x		

2005 Alfalfa and Forage Grass Entries

* experimental Company-Brand	Variety	Freeport 02 03 04 05	Urbana 02	Urbana 04	Belleville 03
SEED RESEARCH OF OREGON	CENTURY OG		x		
CEBECO INT'L. SEEDS, INC.	CISI OG 10* OG		x		
PUBLIC	CLAIR TM		x	x	
EMERALD COMMODITIES	EC407* PRG		x		
ALLIED SEED	ENHANCE TF			x	
ALLIED SEED	EXTEND OG		x		
DLF INT'L SEEDS	FELINA FS		x		
PICKSEED WEST	FESTIVAL TF			x	
ALLIED SEED	GRAND DADDY PRT			x	
SMITH SEED SERVICES	GRAND DADDY PRT		x		
DLF INT'L SEEDS	HYKOR FS			x	
SEED RESEARCH OF OREGON	ICON OG		x		
PENNINGTON	JESUP MAX Q TF			x	
AMPAC	K5666 V* TF		x		
PUBLIC	KENTUCKY 31 TF		x	x	
DLF INT'L SEEDS	KORA TF		x		
CEBECO INT'L. SEEDS, INC.	LATEMATE OG		x		
PUBLIC	LINCOLN SB		x	x	
ALLIED SEED	MARATHON RC		x		
SEED RESEARCH OF OREGON	MONTANA MB			x	
ALLIED SEED	OG 9701 OG		x		
PUBLIC	PALATON RC		x		
ALLIED SEED	PEAK SM		x		
SMITH SEED SERVICE	PERSIST OG			x	
DLF INT'L SEEDS	PERUN FS			x	
PUBLIC	POTOMAC OG		x	x	
SMITH FARMS	PROFILE OG			x	
AMPAC	QUANTUM* TF		x		
LEWIS SEED	RAD-MA216* TF		x		
SEED RESEARCH OF OREGON	STOCKMAN TF			x	
ALLIED SEED	SUMMIT TM		x		
SMITH SEED SERVICES	TAKENA OG		x		
SMITH SEED SERVICE	TAKENA 2 OG			x	
DLF INT'L SEEDS	TERELITE II HRG			x	
PUBLIC	TONGA PRT		x	x	
IMPROVED FORAGES	UDDER OG		x		
LEWIS SEED	VALLY SELECT MX		x		
LEWIS	VOYAGER HRG			x	
AMPAC	YORK* SB		x		

[1]**Key to Grass Species**

C= Chicory
FS= Festulolium
HRG= Hybrid ryegrass
LH= Lolium hybridum
MX= Mixture
OG= Orchard grass
PB= Prairie bromegrass
PG= Prairie grass
PR= Perennial ryegrass
PRT= Perennial ryegrass tetraploid
RC= Reed canarygrass
SB= Smooth bromegrass
TF= Tall fescue
TM= Timothy

[2] Fall Dormancy Scale: 1= Least fall growth; 9= greatest fall Growth
[3]WS = winter survival index as determined in University of Wisconsin and Minnesota trials:
1= superior winter survival 2= very good 3= good 4= adequate 5= low 6= no winter survival
^ Varieties not reviewed by the National Alfalfa Review Board. Resistance information not Verified.

[4]**Disease and Pest Abbreviations**

BW= Bacterial Wilt
VW =Verticillium Wilt
FW = Fusarium Wilt
AN = Anthracnose
PRR = Phytophthora Root Rot
APH = Aphanomyces
PA = Pea Aphid
SN = Stem Nematode
RN = Root Knot Nematode
LH = Leafhopper

% Resistant Plants	Resistance Class
HR = High Resistance	>50
R = Resistant	31-50
MR = Medium Resistance	15-30
LR = Low Resistance	6-14
S = Susceptible	0-5
ND = Not Determined	

Disease and Fall Dormancy Ratings of Alfalfa Varieties in Illinois

			Disease Resistance[4]										
Variety	FD[2]	WS[3]	BW	VW	FW	AN	PRR	APH race 1	APH race 2	PA	SN	RN	LH
204 HYBRID	4	-	HR	R	HR	HR	HR	R	-	R	R	-	LR
321 HYB^	4	-	HR	R	HR	R	HR	R	-	-	-	-	-
42H167^	4	-	HR	HR	HR	HR	HR	HR	-	-	-	-	HR
42H169^	4	-	HR	HR	HR	HR	HR	HR	-	-	-	-	HR
4A421	4	-	HR	HR	HR	HR	HR	HR	-	HR	HR	MR	-
4R429	4	2.0	HR	HR	HR	HR	HR	HR	HR	R	MR	-	-
53Q30^	3	2.5	HR	HR	HR	HR	HR	HR	LR	R	MR		S
54H91	4	3.0	HR	HR	R	HR	HR	R	-	R	MR	MR	-
54V46	4	3.1	R	HR	HR	HR	HR	R	R	R	MR	HR	HR
5454	4	2.7	R	MR	HR	HR	HR	LR	-	R	MR	-	-
5454	4	2.7	R	MR	HR	HR	HR	LR	-	R	LR	-	-
6325	3	-	HR	HR	HR	HR	HR	HR	R	R	-	-	HR
6400HT	4	2.4	HR	HR	HR	HR	HR	HR	-	HR	-	-	-
6410	4	2.7	HR	HR	HR	HR	HR	HR	-	HR	MR	-	-
6415	4	1.4	HR	HR	HR	HR	HR	HR	-	R	-	-	-
6420	4	-	HR	R	HR	R	HR	R	-	R	R	HR	-
6530	5	-	HR	HR	HR	HR	HR	HR	MR	HR	R	-	-
A 30-06	3	2	HR	HR	HR	HR	HR	HR	-	R	-	-	-
ABSOLUTE GZ BRAND^	4	-	HR	R	HR	HR	HR	R	-	HR	-	-	-
ABSOLUTE II BRAND^	4	-	HR	R	HR	HR	HR	R	-	HR	R	-	-
ABSOLUTE III BRAND^	4	-	HR	R	HR	HR	HR	HR	-	HR	-	-	-
ABUNDANCE	4	3.3	HR	R	HR	R	HR	R	-	R	R	HR	-
BPR387	4	2	HR	HR	HR	HR	HR	R	-	R	-	-	-
DKA 33-16	3	-	HR	HR	HR	HR	HR	HR	-	R	-	-	-
DS320^	4	-	HR	R	HR	HR	HR	R	-	-	-	-	-
DS321^	4	-	HR	R	HR	HR	HR	R	-	-	-	-	-
DS322^	4	-	HR	R	HR	HR	HR	R	-	-	-	-	-
DS323^	4	-	HR	R	HR	HR	HR	R	-	-	-	-	-
FEAST +EV	3	-	HR	HR	HR	R	HR	HR	-	MR	MR	-	-
FSG 400LH	4	-	HR	HR	HR	HR	HR	HR	-	R	-	-	-
FSG 406	4	2.0	HR	HR	HR	HR	HR	HR	-	R	-	-	-
FSG 408DP	4	-	HR	R	HR	HR	HR	R	-	-	-	-	-
FSG 505	5	2.9	HR	HR	HR	HR	HR	R	-	R	R	R	-
HAYBLAZER-444 HYB^	4	-	HR	R	HR	R	HR	R	-	-	-	-	-
HYBRIFORCE-420/WET	4	3.1	HR	R	HR	R	HR	R	-	R	HR	HR	-
LEGENDAIRY 5.0^	3	-	HR	HR	HR	HR	HR	HR	-	R	-	-	-
MILESTONE	4	2	HR	R	HR	R	HR	R	-	R	-	-	-
NOVA	4	-	HR	R	HR	R	HR	MR	-	HR	-	-	-
PHIRST	4	-	HR	R	HR	HR	HR	R	-	R	R	HR	-
PLH 4000 BRAND^	4	-	HR	R	HR	HR	HR	HR	-	HR	-	-	HR
POWER 4.2	4	-	HR	R	HR	HR	HR	HR	-	R	HR	R	-
REBEL	4	-	HR	HR	HR	HR	HR	R	-	HR	-	-	-
REBOUND 5.0^	4	-	HR	HR	HR	HR	HR	HR	-	R	-	-	-
REWARD II	4	-	HR	R	HR	R	HR	R	-	R	R	HR	-
SUMMER GOLD	4	-	HR	HR	HR	HR	HR	HR	-	R	HR	R	-
TRIPLE CROWN	3	-	HR	R	HR	HR	HR	HR	-	HR	MR	-	-
TRUMP II^	4	-	HR	HR	HR	HR	HR	HR	-	R	R	-	-
VERNAL	2	2.0	R	S	MR	S	S	S	-	S	-	MR	-
WL 319 HQ	3	1.6	HR	HR	HR	HR	HR	HR	LR	HR	MR	-	-
WL 338 SR	4	-	HR	R	HR	HR	HR	HR	-	R	-	-	-
WL 345 LH^	3	2.4	HR	HR	HR	HR	HR	HR	-	R	MR	MR	HR
WL 346 LH	4	-	HR	HR	HR	HR	HR	HR	-	MR	MR	-	-
WL 348 AP	4	2	HR	HR	HR	HR	HR	HR	HR	R	MR	-	-
WL 357 HQ	5	2.1	HR	HR	HR	HR	HR	HR	LR	HR	-	-	LR

[2,3,4]see page 5 for abbreviation key.

^ Varieties not reviewed by the National Alfalfa Review Board. Resistance information not Verified.

2002 Freeport Alfalfa Variety Trial

Brand-Variety * Experimental	2005 5/24 T DM/A	 6/24 T DM/A	 7/27 T DM/A	 8/26 T DM/A	 Total T DM/A	2004 Total T DM/A	2003 Total T DM/A	3-yr Total T DM/A	Relative Yield % Trial Mean
WL 319 HQ	2.90	2.52	1.75	1.57	8.73	7.24	7.85	23.82	113
6410	2.98	2.65	1.84	1.58	9.04	7.14	7.58	23.76	112
54V54	2.79	2.40	1.72	1.50	8.40	6.46	6.75	21.61	102
ABSOLUTE II BRAND	2.71	2.28	1.61	1.45	8.05	6.52	6.84	21.41	101
6420	2.66	2.24	1.56	1.41	7.86	6.52	6.88	21.26	101
REWARD II	2.50	2.23	1.58	1.36	7.66	6.43	7.06	21.15	100
TRIPLE CROWN	2.54	2.19	1.56	1.38	7.67	6.39	6.85	20.91	99
ABSOULTE II BRAND	2.44	2.16	1.60	1.39	7.59	6.23	6.93	20.75	98
FEAST + EV	2.52	2.11	1.50	1.36	7.48	6.14	6.93	20.55	97
54H91	2.47	1.94	1.48	1.30	7.17	6.09	6.96	20.21	96
WL 338 SR	2.10	1.92	1.43	1.30	6.75	5.94	6.71	19.39	92
VERNAL	2.62	1.94	1.33	1.26	7.14	5.60	6.26	19.00	90
Mean	2.60	2.21	1.58	1.40	7.79	6.39	6.96	21.15	
5%_LSD	0.22	0.16	0.12	0.12	0.52	0.50	0.43	1.21	
CV(%)	5.77	5.05	5.32	5.74	4.62	5.40	4.25	3.96	
MCV(%)	8.30	7.27	7.66	8.26	6.64	7.77	6.11	5.70	

Date of Seeding: April 15th, 2002.
Soil Type: Flagg silt loam.
Herbicides: March 9th (Sencor).
Pest Control: June 14th, June 24th and July 27th (Pounce).
Plot Dimensions: 3' x19'.

2003 Freeport Alfalfa Variety Trial

Brand-Variety * Experimental	2005 5/24 T DM/A	 6/24 T DM/A	 7/27 T DM/A	 8/26 T DM/A	 Total T DM/A	2004 Total T DM/A	2-yr Total T DM/A	Relative Yield % Trial Mean
WL 357 HQ	3.37	2.71	2.36	2.07	10.50	7.62	18.13	119
DKA33-16	3.29	2.69	2.07	1.79	9.84	7.22	17.05	112
54V46	3.14	2.46	2.02	1.69	9.31	7.37	16.67	109
WL 348 AP	3.25	2.40	1.95	1.67	9.27	7.10	16.36	107
POWER 4.2	3.11	2.40	1.98	1.73	9.22	7.13	16.34	107
ABSOLUTE III BRAND	2.88	2.28	1.92	1.49	8.57	7.11	15.68	103
DS321*	2.91	2.24	1.96	1.51	8.62	7.06	15.67	103
HYBRIFORCE-420 WET	2.90	2.30	1.87	1.66	8.72	6.89	15.61	102
TRUMP II	3.05	2.38	1.78	1.49	8.70	6.76	15.46	101
6420	3.02	2.18	1.84	1.61	8.64	6.80	15.44	101
DS322*	2.96	2.24	1.81	1.63	8.63	6.71	15.34	100
DS320*	2.94	2.35	1.86	1.36	8.50	6.73	15.23	100
ABUNDANCE	3.02	2.19	1.73	1.52	8.46	6.56	15.02	98
PHIRST	2.78	2.19	1.75	1.57	8.29	6.60	14.89	98
54H91	2.80	2.00	1.69	1.51	7.99	6.73	14.72	96
DS323*	2.79	2.10	1.81	1.56	8.25	6.40	14.65	96
204 HYBRID	2.87	2.15	1.68	1.38	8.08	6.54	14.61	96
REWARD II	2.75	1.94	1.66	1.53	7.88	6.39	14.27	93
6400HT	2.73	2.05	1.67	1.44	7.89	6.26	14.15	93
6325	2.59	1.89	1.57	1.45	7.50	6.14	13.64	89
VERNAL	2.75	1.92	1.50	1.32	7.50	6.08	13.57	89
FEAST +EV	2.50	1.90	1.63	1.31	7.33	6.11	13.44	88
Mean	2.93	2.22	1.82	1.56	8.53	6.74	15.27	
5%_LSD	0.24	0.18	0.28	0.29	0.8	0.55	1.21	
CV(%)	5.91	5.83	10.75	13.08	6.61	5.75	5.61	
MCV(%)	8.34	8.24	15.19	18.49	9.34	8.12	7.92	

Date of Seeding: April 25th, 2003.
Soil Type: Flagg silt loam.
Herbicides: March 9th (Sencor).
Pest Control: June 14th, June 24th and July 27th (Pounce).
Plot Dimensions: 3' x19'.

2004 Freeport Alfalfa Variety Trial

Brand-Variety * Experimental	2005 5/24 T DM/A	 6/24 T DM/A	 7/27 T DM/A	 8/26 T DM/A	 Total T DM/A	Relative Yield % Trial Mean
6415	3.12	2.56	2.32	1.71	9.71	113
SUMMER GOLD	2.99	2.39	2.06	1.64	9.07	105
321 HYB*	3.09	2.31	1.97	1.63	8.98	104
54V46	2.85	2.41	2.08	1.64	8.97	104
HAYBLAZER-444 HYB	2.91	2.34	2.01	1.58	8.83	102
HYBERFORCE 420 WET	3.06	2.21	1.85	1.57	8.69	101
4R429	2.83	2.21	1.88	1.52	8.42	98
5454	3.00	2.19	1.76	1.47	8.40	97
6530	2.85	2.24	1.78	1.43	8.29	96
VERNAL	2.62	1.77	1.33	1.16	6.88	80
Mean	2.93	2.26	1.90	1.53	8.62	
5%_LSD	0.21	0.14	0.15	0.07	0.46	
CV(%)	4.94	4.31	5.32	3.33	3.67	
MCV(%)	7.17	6.25	7.72	4.84	5.32	
Without Insecticides						
42H167*	2.82	2.35	1.76	1.55	8.47	108
42H169*	3.10	2.14	1.64	1.40	8.27	105
5454	3.14	2.07	1.47	1.36	8.04	102
54H91	3.11	2.03	1.50	1.29	7.94	101
FSG 400LH	2.89	2.06	1.50	1.38	7.83	100
WL 346 LH	2.99	1.96	1.40	1.32	7.66	98
6325	3.01	1.96	1.34	1.23	7.53	96
VERNAL	2.89	1.75	1.21	1.20	7.04	90
Mean	2.99	2.04	1.48	1.34	7.85	
5%_LSD	0.29	0.22	0.27	0.12	0.75	
CV(%)	6.64	7.43	12.27	6.00	6.52	
MCV(%)	9.77	10.92	18.04	8.83	9.59	

Date of Seeding: April 7th, 2004.
Soil Type: Flagg silt loam.
Herbicides: March 9th (Kerb).
Pest Control: June 14th, June 24th and July 27th (Pounce).
Plot Dimensions: 3' x 19'.

2005 Freeport Alfalfa Variety Trial

Brand-Variety	2005 6/24	2005 7/27	2005 8/26	2005 Total	Relative Yield
* Experimental	T DM/A	T DM/A	T DM/A	T DM/A	% Trial Mean
MILESTONE*	1.99	1.17	1.48	4.64	109
4R429	1.87	1.20	1.51	4.58	107
4A421	1.99	1.23	1.35	4.57	107
BPR387*	1.96	1.14	1.44	4.54	106
53Q30	1.79	1.15	1.46	4.41	103
LEGENDAIRY 5.0	1.79	1.09	1.43	4.31	101
6420	1.78	1.12	1.40	4.30	101
6415	1.69	1.13	1.37	4.19	98
WL 345 LH	1.71	1.12	1.36	4.18	98
REBOUND 5.0	1.66	1.08	1.41	4.14	97
54V46	1.66	1.14	1.32	4.11	96
6200HT	1.76	1.03	1.30	4.09	96
VERNAL	1.66	1.02	1.26	3.94	92
A 30-06	1.73	1.00	1.13	3.85	90
Mean	1.79	1.11	1.37	4.27	
5%_LSD	0.29	0.12	0.17	0.50	
CV(%)	11.42	7.35	8.69	8.15	
MCV(%)	16.34	10.52	12.42	11.65	

Date of Seeding: April 7th, 2005.
Soil Type: Flagg silt loam.
Herbicides: April 7th (Treflan) June 14th and July 27th (Select).
Pest Control: June 14th, June 24th and July 27th (Pounce).
Plot Dimensions: 3' x 19'.

2004 Urbana Alfalfa Variety Trial

Brand-Variety	2005 5/18	6/20	7/18	8/22	Total	Relative Yield
* Experimental	T DM/A	T DM/A	T DM/A	T DM/A	T DM/A	% Trial
SUMMER GOLD	3.13	1.92	2.06	1.61	8.72	105
REWARD II	3.12	1.83	1.95	1.72	8.61	104
FSG 408DP	3.21	1.92	1.82	1.62	8.56	103
FSG 406	3.03	1.89	1.97	1.57	8.45	102
HYBRIFORCE 420 WET	2.94	1.91	1.81	1.69	8.36	101
54V46	2.93	1.92	1.91	1.60	8.35	100
NOVA	3.12	1.82	1.78	1.61	8.32	100
FSG 505	2.70	1.92	1.96	1.70	8.28	100
HAYBLAZER-444 HYB	2.84	1.82	1.77	1.65	8.08	97
REBEL	3.18	1.78	1.76	1.36	8.07	97
VERNAL	3.06	1.60	1.60	1.36	7.62	92
Mean	3.02	1.85	1.85	1.59	8.31	
5%_LSD	0.37	0.19	0.25	0.15	0.71	
CV(%)	8.38	7.24	9.31	6.46	5.89	
MCV(%)	12.10	10.45	13.44	9.33	8.50	

Date of Seeding: April 3rd, 2004.
Soil Type: Drummer-Flanagan silty-clay loam.
Herbicides: March 2nd (Kerb).
Pest Control: June 28th and July 29th (Pounce).
Plot Dimensions: 3' x 19'.

2003 Belleville Alfalfa Variety Trial

Brand-Variety	2005 5/9	6/11	7/15	8/9	Total	2004 Total	2-yr Total	Relative Yield
* Experimental	T DM/A	T DM/A	T DM/A	T DM/A	T DM/A	T DM/A	T DM/A	% Trial Mean
FSG 505	2.40	1.55	1.64	1.45	7.03	6.57	13.60	107
HYBRIFORCE-420 WET	2.42	1.56	1.42	1.50	6.89	6.57	13.46	106
WL 357 HQ	2.28	1.67	1.50	1.47	6.92	5.99	12.91	102
ABSOLUTE III BRAND	2.07	1.40	1.52	1.40	6.38	6.22	12.59	99
ABSOLUTE GZ BRAND	2.12	1.47	1.54	1.37	6.50	6.09	12.59	99
54V46	2.18	1.43	1.45	1.34	6.40	6.07	12.46	98
VERNAL	2.08	1.41	1.42	1.30	6.20	6.09	12.30	97
PLH 4000 BRAND	2.06	1.30	1.39	1.19	5.94	6.17	12.11	96
54H91	2.00	1.26	1.38	1.16	5.80	6.20	11.99	95
Mean	2.18	1.45	1.47	1.35	6.45	6.22	12.67	
5%_LSD	0.24	0.15	0.25	0.11	0.51	0.49	0.79	
CV(%)	7.67	6.91	11.60	5.39	5.45	5.46	4.28	
MCV(%)	11.20	10.09	16.93	7.86	7.95	7.96	6.25	

Date of Seeding: May 15th, 2003.
Soil Type: Alford silt loam.
Herbicides: March 1st (Sencor) and July 25th (Select).
Pest Control: April 15th (Warrior), June 1st and July 25th (Mustang Max).
Plot Dimensions: 3' x19'.

2002 Urbana Grass Variety Trial

Brand-Variety * Experimental	Species[1]	2005 5/17 T DM/A	6/20 T DM/A	7/18 T DM/A	8/22 T DM/A	Total T DM/A	2004 Total T DM/A	2003 Total T DM/A	3-yr Total T DM/A	Relative Yield % Trial Mean
Palaton	RC	4.37	1.12	1.32	0.87	7.68	8.63	7.47	23.77	132
Century	OG	4.47	0.81	0.82	0.66	6.76	7.79	7.25	21.79	121
Albert	OG	4.38	0.73	0.81	0.54	6.45	7.84	7.36	21.65	121
Marathon	RC	3.67	0.97	1.17	0.92	6.74	7.93	6.76	21.42	119
Bull	TF	3.48	0.67	0.92	1.27	6.34	8.03	6.69	21.06	117
Kentucky 31	TF	3.84	0.70	0.82	1.05	6.41	7.73	6.85	20.98	117
Felina	FS	3.80	0.75	0.87	1.32	6.73	7.56	6.64	20.93	117
Quantum*	TF	3.57	0.72	0.79	1.23	6.31	7.32	6.78	20.41	114
OG 9701	OG	4.12	0.62	0.67	0.56	5.96	7.13	6.79	19.88	111
Kora	TF	3.45	0.61	0.70	1.68	6.43	6.82	6.57	19.82	110
Potomac	OG	3.78	0.77	0.62	0.62	5.79	7.29	6.70	19.78	110
RAD-MA216*	TF	3.08	0.66	0.74	1.04	5.52	7.08	6.73	19.33	108
Icon	OG	4.13	0.58	0.55	0.68	5.93	6.93	6.36	19.23	107
Takena	OG	4.04	0.62	0.68	0.65	5.98	6.72	6.37	19.07	106
Extend	OG	3.57	0.58	0.58	0.73	5.45	6.99	6.43	18.87	105
LateMate	OG	3.65	0.62	0.70	0.62	5.58	6.66	6.55	18.79	105
K5666 V*	TF	3.15	0.78	0.88	1.20	6.01	6.70	5.64	18.35	102
Lincoln	SB	3.59	0.30	0.58	0.96	5.43	6.08	6.71	18.22	102
Udder	OG	3.11	0.67	0.52	0.56	4.84	7.09	6.18	18.11	101
Peak	SB	3.20	0.40	0.61	0.95	5.15	5.78	6.90	17.83	99
York*	SB	3.38	0.53	0.79	0.87	5.56	6.04	6.17	17.77	99
CISI OG 10*	OG	2.76	0.80	0.58	0.57	4.69	5.99	5.89	16.57	92
Clair	TM	2.96	0.24	0.28	0.73	4.20	5.38	5.75	15.32	85
Summit	TM	2.80	0.28	0.34	0.63	4.04	5.39	4.83	14.26	79
Bison	HRG	1.80	0.46	0.48	1.07	3.80	4.45	4.53	12.79	71
Tonga	PRT	1.42	0.57	0.53	0.83	3.36	4.06	4.33	11.75	65
EC407*	PRG	1.10	0.46	0.40	1.03	2.99	4.12	3.96	11.07	62
Vally Select	BL	0.59	0.38	0.25	0.70	1.93	4.45	4.60	10.97	61
Grand Daddy	PRT	1.23	0.33	0.29	0.75	2.59	3.70	4.43	10.72	60
Mean		3.19	0.61	0.66	0.87	5.33	6.47	6.14	17.95	
5%_LSD		0.66	0.18	0.25	0.29	0.91	0.84	0.87	2.10	
CV(%)		14.83	20.43	27.22	23.68	12.20	9.21	10.05	8.31	
MCV(%)		20.85	28.73	38.28	33.30	17.16	12.96	14.14	11.69	

Date of Seeding: April 11th, 2002.

[1] see page 5 for key

Soil Type: Drummer Flanagan silty-clay loam.

Herbicides: June 28th (Stinger) and July 29th (LV2,4-D).

Fertilization: 50 lbs N 30 days before harvest.

Plot Dimensions: 3' x19'.

2004 Urbana Grass Variety Trial

Brand-Variety * Experimental	Species[1]	2005 5/17 T DM/A	 6/20 T DM/A	 7/18 T DM/A	 8/22 T DM/A	 Total T DM/A	Relative Yield % Trial Mean
STOCKMAN	TF	2.33	0.78	1.07	1.63	5.81	139
FESTIVAL	TF	2.26	0.83	1.13	1.52	5.74	137
JESUP MAX Q	TF	2.45	0.72	0.94	1.46	5.56	133
KENTUCKY 31	TF	2.31	0.71	0.99	1.39	5.39	129
ARKPLUS	TF	2.17	0.79	1.04	1.40	5.39	129
ENHANCE	TF	2.47	0.87	0.87	1.15	5.36	128
AMBASSADOR	OG	2.69	0.88	0.89	0.86	5.31	127
HYKOR	FS	1.94	0.63	0.90	1.31	4.77	114
PERSIST	OG	2.06	0.65	0.71	0.91	4.33	103
TAKENA 2	OG	1.75	0.74	0.86	0.89	4.24	101
PERUN	FS	1.77	0.85	0.76	0.76	4.15	99
PROFILE	OG	1.94	0.57	0.77	0.86	4.12	98
POTOMAC	OG	1.76	0.64	0.69	0.83	3.91	93
MONTANA	MB	1.38	0.60	0.72	0.83	3.54	84
LINCOLN	SB	1.63	0.32	0.71	0.88	3.53	84
BISON	HRG	0.96	0.86	0.59	1.03	3.44	82
CLAIR	TM	1.74	0.43	0.46	0.77	3.40	81
TONGA	RGT	0.98	0.70	0.42	1.08	3.17	76
TERELITE II	HRG	0.95	0.88	0.58	0.75	3.15	75
GRAND DADDY	RG	1.16	0.73	0.48	0.63	2.99	71
AUBISQUE	PRT	0.75	0.69	0.45	0.66	2.53	60
VOYAGER	HRG	0.72	0.71	0.43	0.58	2.44	58
Mean		1.73	0.71	0.75	1.01	4.19	
5%_LSD		0.40	0.20	0.17	0.29	0.79	
CV(%)		16.32	19.80	16.39	20.21	13.29	
MCV(%)		23.06	27.97	23.15	28.55	18.78	

Date of Seeding: April 3rd, 2004.
Soil Type: Drummer-Flanagan silty-clay loam.
Herbicides: June 28th (Stinger) and July 29th (LV2,4-D).
Fertilization: 50lbs N 30 days before harvest.
Plot Dimensions: 3' x19'.

[1] see page 5 for key