

2010 Red and White Clover Report

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Introduction

Red clover (*Trifolium pratense L.*) is a high-quality, short-lived, perennial legume that is used in mixed or pure stands for pasture, hay, silage, green chop, soil improvement, and wildlife habitat. This species is adapted to a wide range of climatic and soil conditions. Stands of improved varieties are generally productive for two-and-a-half to three years, with the highest yields occurring in the year following establishment. Red clover is used primarily as a renovation legume for grass pastures. It is a dominant forage legume in Kentucky because it is relatively easy to establish and has high forage quality, high yield, and animal acceptance.

White clover (*Trifolium repens L.*) is a low-growing, perennial pasture legume with white flowers. It differs from red clover in that the stems (stolons) grow along the surface of the soil and can form adventitious roots that may lead to the development of new plants. Three types of white clover grow in Kentucky: Dutch, intermediate, and ladino. Dutch white clover, sometimes called common, naturally occurs in many Kentucky pastures and even lawns. It is generally long lived and reseeds readily, but its small leaves and low growth habit result in low forage yield. The intermediate type is a cross between ladino and Dutch white clover and has been developed to give higher yields than the Dutch type and to persist better than the ladino type under pasture or continuous grazing conditions. Ladino white clover has larger leaves and taller growth than the intermediate and Dutch types and is the highest yielding of the three white clover types. Information on the grazing tolerance of white clover varieties can be found in the *2010 Red and White Clover Grazing Tolerance Report*.

Yield and persistence of red and white clover varieties are dependent on envi-

Table 1. Temperature and rainfall at Lexington, Kentucky in 2008, 2009, and 2010.

	2008				2009				2010 ²			
	Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	32	+2	3.91	+1.05	28	-3	2.45	-0.41	29	-2	2.40	-0.46
FEB	36	+1	6.11	+2.90	38	+3	2.86	-0.35	29	-6	1.38	-1.83
MAR	44	+1	6.51	+1.91	48	+4	2.19	-2.21	47	+3	1.05	-3.35
APR	55	0	5.89	+2.01	55	0	4.48	+0.60	59	+4	2.74	-1.14
MAY	62	-2	4.33	+0.14	64	0	5.05	+0.58	67	+3	7.84	+3.37
JUN	74	+2	3.59	-0.07	74	+2	5.41	-1.75	76	+4	4.61	+0.95
JUL	76	0	3.41	-1.59	71	-5	5.89	+0.89	78	+2	5.49	+0.49
AUG	75	0	2.18	-1.75	73	-2	5.38	+1.45	78	+3	1.54	-2.39
SEP	72	+4	1.42	-1.78	68	0	5.37	+2.17	71	+3	1.14	-2.06
OCT	57	0	1.53	-1.04	54	-3	4.83	+2.26	59	+2	1.22	-1.35
NOV	43	-2	2.53	-0.86	49	+4	0.94	-2.45				
DEC	35	-1	6.03	+2.05	36	0	3.86	-0.12				
Total			47.24	+2.69			48.71	+4.16			29.41	-7.77

¹ DEP is departure from the long-term average.
² 2010 data is for the 10 months through October.

ronment and pressure from diseases and insects. The most common red clover diseases in Kentucky are southern antracnose, powdery mildew, sclerotinia crown rot, and root rots. For white clover, the most common pests are stolon rots, root rots, and potato leafhoppers. High yield and persistence (as measured by percent stand) are two indications that a red or white clover variety is resistant to or tolerant of these pests when grown in Kentucky.

This report provides current yield data on red and white clover varieties included in yield trials in Kentucky as well as guidelines for selecting clover varieties. Tables 19 and 20 show a summary of all clover varieties tested in Kentucky for the past 10-plus years. The UK Forage Extension web site at <www.uky.edu/Ag/Forage> contains electronic versions of all forage variety testing reports from Kentucky and surrounding states and a large number of other forage publications.

Table 2. Temperature and rainfall at Princeton, Kentucky in 2008, 2009, and 2010.

	2008				2009				2010 ²			
	Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	37	+3	2.40	-1.40	33	-1	0.94	-2.86	31	-3	3.06	-0.74
FEB	39	+1	6.76	+2.33	42	+4	3.28	-1.15	33	-5	1.54	-2.89
MAR	48	+1	7.55	+2.61	53	+6	2.89	-2.05	48	+1	3.24	-1.7
APR	58	-1	6.56	+1.76	58	-1	5.35	+0.55	62	3	3.3	-1.54
MAY	65	-2	6.19	+1.23	67	0	6.14	+1.18	69	+2	10.41	+5.45
JUN	78	+3	1.24	-2.61	77	+2	7.97	+4.12	79	4	4.82	0.97
JUL	79	+1	5.12	+0.83	74	-4	7.45	+3.16	80	2	2.73	-1.56
AUG	77	0	0.69	-3.32	75	-2	2.44	-1.60	81	4	2.46	-1.55
SEP	74	+3	0.61	-2.72	71	0	4.61	+1.28	72	1	0.94	-2.39
OCT	60	+1	2.21	-0.84	55	-4	9.08	+6.03	60	+1	0.97	-2.08
NOV	46	-1	2.59	-2.04	52	+5	1.50	-3.13				
DEC	39	0	6.49	+1.95	36	-3	2.73	-2.31				
Total			48.95	-2.18			54.31	+3.22			33.47	-7.99

¹ DEP is departure from the long-term average.
² 2010 data is for the 10 months through October.

Important Selection Considerations

Local adaptation and persistence. The variety should be adapted to Kentucky as indicated by superior performance across years and locations in replicated yield trials such as those reported in this publication. High-yielding varieties are generally also those varieties that are the most persistent. Improved red clover generally produces measurable yields for two-and-a-half to three years, with the year of establishment considered as the first year. The highest yields occur in the year following establishment. White clover may persist longer than red clover, particularly in wet seasons, and has the ability to reseed even under grazing.

Seed quality. Buy premium quality seed that is high in germination and purity and free from weed seed. Buy certified seed or proprietary seed of an improved variety. An improved variety is one that has performed well in independent trials, such as those reported in this publication. Other information on the label will include the test date (which must be within the previous nine months), the level of germination, and other crop and weed seed. Order seed well in advance of planting time to assure that it will be available when needed.

Description of the Tests

This report summarizes studies at Lexington (two in 2008, two in 2009, and two in 2010), Princeton (2008 and 2009), Quicksand (2008 and 2010), and Eden Shale (2008 and 2010). The soils at Princeton (Crider), Lexington (Maury), Eden Shale (Nicholson) and Quicksand (Nolin) are well-drained silt loams. All are well suited to clover production. Plots were 5 by 20 feet in a randomized complete block design with four replications with a harvested plot area of 5 by 15 feet.

Seedlings were made at 12 pounds of seed per acre for red clover and 3 pounds of seed per acre for white clover into a prepared seedbed using a disk drill. The first cutting in the seeding year was delayed to allow the clover to completely reach maturity as indicated by full bloom, which generally occurs about 60 to 90 days after seeding. Otherwise, harvests were taken when the clover was in the

Table 3. Temperature and rainfall at Quicksand, Kentucky in 2008, 2009, and 2010.

	2008				2009				2010 ²			
	Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	34	+3	2.07	-1.22	30	-1	4.81	+1.52	31	0	4.09	+0.80
FEB	38	+5	3.52	-0.08	40	+7	1.23	+2.37	32	-1	2.82	-0.77
MAR	46	+5	3.62	-0.72	49	+8	3.61	-0.73	47	+6	2.38	-1.96
APR	56	+3	3.99	-0.11	56	+3	3.34	-0.76	60	+7	2.64	-1.46
MAY	63	+1	3.69	-1.79	66	+4	8.81	+4.33	67	+5	6.00	+1.52
JUN	75	+5	3.96	+0.14	72	+2	4.84	+1.02	76	+6	4.26	+0.44
JUL	76	+2	5.88	+0.63	71	-3	4.02	-1.23	77	+3	3.06	-2.19
AUG	74	+1	1.16	-2.85	73	0	1.86	-2.15	77	+4	3.77	-0.24
SEP	72	+6	0.64	-2.88	69	+3	4.08	+0.56	69	+3	0.63	-2.89
OCT	58	+4	1.28	-1.63	54	0	3.97	+1.06	57	+3	1.33	-1.58
NOV	44	+2	2.71	-1.17	48	+6	0.96	-2.92				
DEC	37	+4	4.81	+0.67	37	+4	5.67	+1.53				
Total			36.33	-11.01			47.20	-0.14			30.99	-8.33

¹ DEP is departure from the long-term average.

² 2010 data is for the 10 months through October.

bud to early flower stage using a sickle-type forage plot harvester. Fresh weight samples were taken at each harvest to calculate percent dry matter production. All tests for establishment, fertility, and harvest management were managed according to University of Kentucky Cooperative Extension Service recommendations. Weeds were controlled to avoid limiting production and persistence.

Results and Discussion

Weather data for Lexington, Princeton, Quicksand, and Eden Shale are presented in Tables 1 through 4.

Yield data (on a dry matter basis) are presented in Tables 5 through 16. Yields are given by cutting date for 2010 and as total annual production. Varieties are listed in order from highest to lowest

total production (for the life of the test). Experimental varieties are listed separately at the bottom of the tables and are not available commercially.

Statistical analyses were performed on all clover data (including experimental varieties) to determine if the apparent differences are truly due to variety. Varieties not significantly different from the top variety within a column are marked with one asterisk (*). To determine if two varieties are truly different, compare the difference between the two varieties with the Least Significant Difference (LSD) at the bottom of the column. If the difference is equal to or greater than the LSD, the varieties are truly different when grown under the conditions at a given location. The Coefficient of Variation (CV), which is a measure of the variability of the data, is included for each column

Table 4. Temperature and rainfall at Eden Shale, Kentucky in 2008 and 2009.

	2008				2009				2010 ²			
	Temperature		Rainfall		Temperature		Rainfall		Temperature		Rainfall	
	°F	DEP ¹	IN	DEP	°F	DEP	IN	DEP	°F	DEP	IN	DEP
JAN	31	+1	3.63	+1.09	28	-2	3.46	+0.92	28	-2	2.38	-0.16
FEB	34	+1	5.15	+2.4	37	+4	2.70	-0.05	29	-4	1.78	-0.97
MAR	42	-1	12.29	+7.57	48	+5	2.46	-2.26	47	+4	2.92	-1.80
APR	55	+1	4.04	-0.11	55	+1	5.88	+1.73	59	+5	2.65	-1.50
MAY	61	-2	6.93	+2.52	65	+2	6.01	+1.60	66	+3	6.83	+2.43
JUN	74	+3	7.20	+3.43	71	0	6.72	+2.95	76	+5	7.64	+3.87
JUL	75	0	3.61	-0.92	70	-5	6.03	+1.50	77	+2	3.00	-1.53
AUG	75	+1	1.97	-1.76	72	-2	3.41	-0.32	77	+3	0.78	-2.95
SEP	71	+3.	1.32	-1.87	67	-1	4.21	+1.02	71	+3	0.21	-2.98
OCT	57	0	1.86	-1.13	53	-4	8.15	+5.16	59	+2	1.18	-1.81
NOV	43	-2	2.60	-0.95	48	+3	0.91	-2.64				
DEC	34	-1	4.53	+1.10	34	-1	3.6	+0.17				
Total			55.13	+11.37			53.54	+9.78			29.37	-7.41

¹ DEP is departure from the long-term average.

² 2010 data is for the 10 months through October.

Variety	Percent Stand					Yield (tons/acre)						3-year Total
	2008		2009		2010	2008	2009	2010				
	Oct 21	Mar 24	Oct 7	Mar 29	Aug 20	Total	Total	May 10	Jun 10	Jul 14	Total	
Commercial Varieties—Available for Farm Use												
Plus II	86	86	78	74	15	0.48	4.56	0.93	0.62	0.69	2.24	9.61*
Kenton	85	84	68	66	18	0.89	4.03	0.90	0.68	0.61	2.19	8.94*
Kenway	83	81	70	63	14	0.93	3.91	1.19	0.73	0.60	2.52	8.75*
Freedom! MR	68	70	68	71	20	0.42	4.02	1.27	0.78	0.95	3.00	8.46*
Cinnamon Plus	81	83	75	79	9	0.65	3.81	1.18	0.57	0.67	2.42	8.28*
Starfire II	65	65	60	55	19	0.39	3.54	1.01	0.68	0.69	2.38	7.47
Freedom!	69	69	30	28	6	0.81	3.31	0.74	0.55	0.31	1.60	7.42
Kenland	58	53	50	51	7	0.40	3.47	1.10	0.71	0.50	2.31	7.35
Rustler	49	49	28	29	5	0.45	2.84	0.90	0.46	0.27	1.62	6.13
CommonC	78	76	15	5	1	0.48	2.19	0.06	0.06	0.04	0.16	4.86
CommonO	69	58	18	18	1	0.64	1.76	0.54	0.30	0.17	1.02	4.15
Experimental Varieties												
KY Tetraploid	66	64	60	41	16	0.55	4.23	1.26	0.71	0.72	2.70	9.01*
CW 202	89	88	76	75	21	0.60	4.19	1.26	0.72	0.76	2.73	8.98*
RC 0501	71	71	53	43	13	0.46	3.87	1.02	0.66	0.76	2.44	8.21*
CW 040040	74	75	66	66	20	0.40	3.73	1.11	0.65	0.62	2.38	7.87
RC 0601	74	66	38	29	8	0.47	3.34	0.78	0.54	0.53	1.85	7.14
PG 606	73	71	30	25	4	0.48	3.16	0.71	0.47	0.54	1.72	6.80
B8.0083	69	65	28	21	2	0.56	3.05	0.54	0.40	0.39	1.33	6.66
GAC1RC	74	75	25	26	3	0.43	2.84	0.74	0.39	0.28	1.41	6.11
GO-ABR	68	53	25	21	3	0.32	1.88	0.73	0.42	0.32	1.46	4.07
Mean	72.0	70.0	47.9	44.2	10.3	0.54	3.39	0.90	0.55	0.52	1.97	7.31
CV,%	17.5	18.9	26.9	30.1	71.7	43.73	14.39	33.44	22.19	32.51	26.12	14.15
LSD, 0.05	17.9	18.7	18.2	20.0	10.4	0.34	0.69	0.43	0.17	0.24	0.73	1.46

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

of means. Low variability is desirable, and increased variability within a study results in higher CVs and larger LSDs.

Certified Kenland continues to rank near the top of tests. It is important to

note yield differences between certified and uncertified Kenland red clover. Most Kenland offered for sale is uncertified, and our tests show it is significantly lower in yield than certified Kenland. White

clover varieties, as managed in these trials, yielded less than most red clover varieties but were more persistent. Again, certified seed of improved varieties is recommended.

Variety	Percent Stand						Yield (tons/acre)						3-year Total
	2008		2009		2010		2008	2009	2010				
	May 21	Oct 30	Apr 17	Oct 28	Mar 18	Aug 19	Total	Total	May 18	Jun 16	Jul 22	Total	
Commercial Varieties—Available for Farm Use													
Kenland (certified)	99	86	93	63	70	26	0.74	4.31	1.54	1.02	0.39	2.95	8.00*
Kenton	97	90	96	68	83	10	0.77	4.46	1.53	0.95	0.21	2.69	7.93*
Starfire II	98	89	93	88	86	16	0.81	4.37	1.68	0.77	0.27	2.73	7.91*
Robust II	93	93	95	75	79	13	0.83	4.32	1.54	0.77	0.31	2.61	7.77*
Freedom!	94	90	99	59	58	7	0.90	4.38	1.34	0.77	0.19	2.31	7.59*
Kenway	90	86	99	73	80	15	0.68	4.14	1.50	0.96	0.23	2.69	7.51*
Rocket	98	85	95	58	78	29	0.70	4.21	1.55	0.74	0.28	2.57	7.48*
Cinnamon Plus	100	88	96	65	74	16	0.73	4.09	1.38	0.73	0.30	2.41	7.24*
Dominion	95	83	93	61	73	15	0.75	4.06	1.41	0.71	0.28	2.40	7.22*
Juliet	87	93	97	48	44	3	0.74	3.98	1.10	0.68	0.12	1.90	6.62
Morning Star	95	85	94	50	38	6	0.89	3.71	1.07	0.53	0.16	1.77	6.37
Red Gold	83	83	93	38	45	10	0.59	3.85	1.04	0.55	0.26	1.85	6.29
Common O	93	91	94	49	53	10	0.68	3.69	0.81	0.70	0.15	1.65	6.02
Kenland (uncertified)	98	69	73	31	22	8	0.57	3.43	0.72	0.45	0.09	1.26	5.26
Experimental Varieties													
KY Tetraploid	99	91	96	80	68	29	0.75	4.50	1.41	0.87	0.39	2.67	7.92*
RC 005	97	89	97	69	69	30	0.70	3.84	1.17	0.66	0.37	2.21	6.75*
RC 006	98	83	95	48	56	16	0.63	3.68	1.02	0.66	0.28	1.96	6.27
Mean	95.0	86.5	93.8	59.9	63.0	15.2	0.73	4.06	1.28	0.74	0.25	2.27	7.07
CV,%	9.8	10.8	9.0	34.8	27.8	72.8	27.95	10.69	27.10	18.94	29.64	21.51	13.48
LSD, 0.05	13.2	13.2	12.0	29.6	24.9	15.7	0.29	0.62	0.50	0.20	0.11	0.70	1.35

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Variety	Percent Stand				Yield (tons/acre)							3-year Total
	2008		2009		2010		2008	2009	2010			
	Nov 5	Apr 8	Nov 4	Mar 19	Total	Total	May 12	Jun 15	Jul 23	Total		
Commercial Varieties—Available for Farm Use												
Starfire II	99	99	63	57	1.07	3.86	0.72	1.04	0.72	2.47	7.40*	
Cinnamon Plus	99	99	67	65	1.27	4.30	0.40	0.93	0.40	1.73	7.30*	
Freedom!	100	100	68	65	1.34	3.98	0.41	1.03	0.41	1.86	7.18*	
Kenland	95	99	69	66	0.86	4.33	0.46	0.94	0.46	1.86	7.05*	
Kenton	100	100	76	73	1.20	3.48	0.45	1.06	0.45	1.96	6.65*	
Plus II	98	98	53	59	1.03	3.57	0.53	0.97	0.53	2.03	6.53*	
Rustler	92	94	19	19	1.04	4.05	0.34	0.57	0.34	1.25	6.34*	
Kenway	99	100	76	74	1.12	3.61	0.38	1.03	0.38	1.79	6.33*	
Common O	84	84	21	21	1.28	3.30	0.30	0.37	0.30	0.97	6.01*	
Experimental Varieties												
CW 202	99	100	50	54	1.29	4.10	0.60	0.77	0.60	1.97	7.36*	
RC 0501	99	100	65	64	1.03	3.95	0.71	0.96	0.71	2.37	7.27*	
B8.0083	96	99	31	34	1.25	4.27	0.46	0.66	0.46	1.58	7.11*	
CW 040040	99	99	76	73	1.24	3.83	0.45	0.93	0.45	1.84	6.94*	
KY Tetraploid	90	93	78	73	0.86	3.95	0.57	0.91	0.57	2.05	6.77*	
RC 0601	99	100	63	66	1.05	3.56	0.52	0.81	0.52	1.84	6.69*	
GO-ABR	56	51	12	11	0.45	3.11	0.21	0.20	0.21	0.61	4.25	
Mean	93.7	94.3	55.1	54.2	1.08	3.85	0.47	0.82	0.47	1.75	6.73	
CV,%	9.7	9.2	26.2	26.9	34.70	14.34	42.31	22.05	42.31	27.95	14.77	
LSD, 0.05	13.2	12.7	21.0	21.2	0.55	0.87	0.29	0.26	0.29	0.71	1.57	

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

In addition to the commercially available varieties and experimental lines, selected “common” red clovers are included in the variety tests for comparison. Common red clover, generally sold as “medium red clover variety unknown,” is unimproved red clover with unknown performance. Several years of testing show only about one out of every

10 common red clovers is as productive as certified or proprietary red clovers. In Kentucky, the average yield advantage of seeding better red clovers compared to common types is 3 to 6 tons of dry matter over the life of the stand.

Tables 17 and 18 summarize information about proprietors, distributors, and yield performance across years and loca-

tions for all varieties currently included in this report. Varieties are listed in alphabetical order, with the experimental varieties at the bottom. Experimental varieties are not available for farm use, but commercial varieties can be purchased from dealerships. In Tables 17 and 18, an open block indicates that the variety was not included in that particular test

Variety	Percent Stand						Yield (tons/acre)						3-year Total
	2008		2009		2010		2008	2009	2010				
	Jun 17	Oct 15	Mar 24	Oct 14	Mar 30	Oct 14	Total	Total	May 20	Jun 15	Jul 23	Total	
Commercial Varieties—Available for Farm Use													
Starfire II	99	100	100	98	95	68	2.52	5.06	1.45	0.67	1.12	3.24	10.81*
Kenland (certified)	99	100	100	98	96	80	2.16	4.73	1.49	0.77	1.16	3.43	10.31*
Dominion	100	100	100	99	96	47	2.15	4.82	1.47	0.66	1.10	3.23	10.20*
Rocket	100	100	100	99	97	58	2.24	4.75	1.44	0.66	1.05	3.15	10.15*
Robust II	97	98	100	99	98	57	2.15	4.79	1.51	0.62	1.09	3.21	10.15*
Cinnamon Plus	99	99	100	96	95	53	2.27	4.73	1.47	0.65	0.98	3.10	10.10*
Red Gold	99	99	99	97	93	30	2.27	4.56	1.30	0.52	0.98	2.80	9.62
Freedom!	100	100	100	96	93	47	2.15	4.33	1.17	0.71	1.04	2.93	9.40
Morning Star	96	97	98	88	75	12	2.10	3.86	1.28	0.53	0.69	2.50	8.46
Juliet	100	100	99	93	74	3	2.30	3.77	0.84	0.53	0.42	1.79	7.86
Kenland (uncertified)	90	88	81	40	28	1	1.64	3.51	0.47	0.21	0.36	1.04	6.19
Experimental Varieties													
RC 005	98	100	100	99	98	72	2.34	4.91	1.49	0.72	1.13	3.34	10.59*
KY Tetraploid	98	100	99	98	93	63	2.54	4.69	1.39	0.68	1.16	3.23	10.46*
RC 006	99	100	100	98	95	65	2.08	4.62	1.32	0.65	0.98	2.94	9.64
Mean	98.1	98.4	98.1	92.6	87.4	46.8	2.21	4.51	1.29	0.61	0.95	2.85	9.57
CV,%	3.5	2.9	5.9	5.2	9.7	27.3	11.89	6.80	14.53	20.28	16.50	12.33	7.32
LSD, 0.05	4.9	4.1	8.3	6.8	12.2	21.4	0.38	0.44	0.27	0.18	0.22	0.50	1.00

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 9. Dry matter yields, seedling vigor, and stand persistence of red clover varieties sown April 2, 2009 at Lexington, Kentucky.

Variety	Seedling Vigor ¹ Jun 3, 2009	Percent Stand			Yield (tons/acre)					2-year Total
		2009		2010	2009	2010			Total ²	
		Jun 3	Oct 7	Mar 29	Total	May 10	Jun 10	Jul 14		
Commercial Varieties—Available for Farm Use										
Cinnamon Plus	3.8	98	99	99	3.46	2.83	0.95	1.15	4.93	8.39*
Emarwan	4.3	96	97	99	3.52	2.60	0.91	0.94	4.44	7.96*
Kenland (certified)	3.1	91	99	100	3.12	2.54	1.03	0.89	4.46	7.57*
Freedom!	4.0	94	96	97	3.17	2.26	1.07	0.89	4.22	7.39*
Wildcat	3.0	94	98	99	2.76	2.30	0.89	0.93	4.11	6.87*
Quinequeli	3.0	93	95	94	3.25	1.80	0.81	0.39	3.00	6.25
Juliet	4.3	99	92	91	2.84	1.98	0.76	0.17	2.92	8.00
Common O	3.1	94	79	80	1.88	1.71	0.63	0.19	2.53	4.41
Experimental Varieties										
RC 9703	4.3	98	99	99	3.59	2.32	0.97	1.09	4.38	7.97*
KY Tetraploid	3.5	89	99	99	3.29	2.28	0.95	1.06	4.29	7.58*
GA-9908	3.8	94	94	94	3.31	2.25	0.86	0.94	4.05	7.36*
GA-100RC	4.4	96	96	97	3.30	2.23	0.94	0.82	3.99	7.29*
B-8.1500	3.5	94	98	100	3.18	2.25	0.92	0.73	3.90	7.08*
Low Phenolic	3.1	91	98	99	2.67	2.13	0.89	1.06	4.08	6.75*
Mean	3.6	94.2	95.5	96.0	3.09	2.25	0.90	0.80	3.95	7.05
CV,%	19.5	4.7	5.0	6.7	29.35	14.70	11.27	21.93	11.86	17.75
LSD, 0.05	1.0	6.3	6.8	9.5	1.30	0.47	0.14	0.25	0.67	1.79

¹ Vigor score based on a scale of 1 to 5, with 5 being the most vigorous seedling growth.
² Due to very dry weather there was no growth for a late summer or fall harvest and no greenup for a fall rating.
 *Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

(labeled at the top of the column), and an (x) in the block means that the variety was included in the test but yielded significantly less than the top-yielding variety in the test. A single asterisk (*) means that the variety was not significantly different

from the highest-yielding variety based on the 0.05 LSD. Look at data from several years and locations when choosing a variety of clover rather than results from one test year, as is reported in Tables 5 through 16. Make sure seed of the variety

selected is properly labeled and will be available when needed.

Tables 19 and 20 are summaries of yield data from 1998-2010 of commercial varieties that have been entered in the Kentucky trials. The data is listed as a

Table 10. Dry matter yields, seedling vigor, and stand persistence of red clover varieties sown April 17, 2009 at Princeton, Kentucky.

Variety	Seedling Vigor ¹ May 12, 2009	Percent Stand				Yield (tons/acre)					2-year Total
		2009		2010		2009	2010			Total ²	
		May 12	Oct 28	Mar 18	Oct 12	Total	May 18	Jun 16	Jul 22		
Commercial Varieties—Available for Farm Use											
Freedom!	3.5	100	98	99	18	1.83	2.41	1.05	0.48	3.95	5.78*
Freedom! MR	3.0	98	100	98	33	1.64	2.24	1.03	0.49	3.75	5.39*
Wildcat	3.3	99	97	98	3	1.61	2.44	0.93	0.31	3.68	5.30*
Kenland	3.0	95	100	100	34	1.54	2.12	1.10	0.48	3.71	5.25
Emarwan	3.5	99	98	97	10	1.58	2.17	1.04	0.46	3.67	5.25
Kenway	4.0	100	98	98	24	1.37	2.51	0.91	0.32	3.74	5.11
Cinnamon Plus	4.3	98	100	100	18	1.62	2.17	0.86	0.41	3.44	5.06
Kenton	3.3	100	99	100	32	1.11	2.16	1.04	0.39	3.59	4.69
Juliet	4.0	99	85	99	3	1.37	1.82	0.92	0.38	3.11	4.48
Common O	3.8	100	88	100	5	1.22	2.16	0.85	0.18	3.19	4.41
Quinequeli	2.0	91	88	93	2	1.16	1.89	0.70	0.23	2.81	3.96
Experimental Varieties											
RC 9703	4.5	100	100	100	23	2.00	2.60	1.00	0.54	4.14	6.14*
GA-9908	3.8	100	96	98	8	1.75	2.30	0.99	0.54	3.83	5.58*
KY Tetraploid	3.8	98	100	99	41	1.58	2.25	0.99	0.46	3.70	5.27*
GA-100RC	4.3	99	100	100	11	1.87	1.84	0.96	0.50	3.30	5.16
B-8.1500	4.0	100	97	98	2	1.52	1.96	0.96	0.31	3.23	4.75
Mean	3.6	98.4	96.2	98.4	16.6	1.55	2.19	0.96	0.41	3.55	5.10
CV,%	22.9	2.2	10.6	2.7	69.1	22.62	13.09	14.55	31.98	10.28	11.97
LSD, 0.05	1.2	3.0	14.6	3.8	16.3	0.50	0.41	0.20	0.18	0.52	0.87

¹ Vigor score based on a scale of 1 to 5 with 5 being the most vigorous seedling growth.
² Due to very dry weather, there was not enough growth for a late summer or fall harvest.
 *Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

percentage of the mean of the commercial varieties entered in each specific trial. In other words, the mean for each trial is 100 percent—varieties with percentages over 100 yielded better than average, and varieties with percentages less than 100 yielded lower than average. Direct, statistical comparisons of varieties cannot be made using the summary Tables 19 and 20, but these comparisons do help to identify varieties for further consideration. Varieties that have performed better than average over many years and at several locations have very stable performance; others may have performed very well in wet years or on particular soil types. These details may influence variety choice, and the information can be found in the yearly reports. See footnotes in Tables 19 and 20 to determine which yearly report to refer to.

Summary

Red and white clovers can be productive components of pasture and hayfields. Choose varieties with proven performance in yield and persistence.

The following College of Agriculture publications related to the establishment, management, and harvesting of clover are available at local county Extension offices and are listed in the “Publications” section of the UK Forage web site, www.uky.edu/Ag/Forage:

- AGR-1—*Lime and Fertilizer Recommendations*
- AGR-2—*Producing Red Clover Seed in Kentucky*
- AGR-18—*Grain and Forage Crop Guide for Kentucky*
- AGR-26—*Renovating Hay and Pasture Fields*
- AGR-33—*Growing Red Clover in Kentucky*

- AGR-64—*Establishing Forage Crops*
- AGR-90—*Inoculation of Forage Legumes*
- AGR-93—*Growing White Clover in Kentucky*
- AGR-148—*Weed Control Strategies for Alfalfa and Other Forage Legume Crops*
- ENT-17—*Insect Management Recommendations for Field Crops and Livestock*
- PPA-10D—*Kentucky Plant Disease Management Guide for Forage Legumes*
- PPFS-AG-F-04—*“Emergency” Inoculation for Poorly Nodulated Legumes*

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Table 11. Dry matter yields and stand persistence of red clover varieties sown April 6, 2010 at Lexington, Kentucky.

Variety	Percent Stand		Yield (tons/acre)		
	2010		2010		
	Aug 8	Oct 15	Jul 16	Aug 25	Total
Commercial Varieties—Available for Farm Use					
Starfire II	98	96	0.70	0.29	0.99*
Freedom!	94	88	0.64	0.33	0.97*
Freedom! MR	96	97	0.64	0.28	0.92*
Cinnamon Plus	92	84	0.54	0.29	0.83*
Common O	95	92	0.54	0.18	0.71*
Rustler	92	92	0.44	0.24	0.68*
Kenland (certified)	88	78	0.46	0.20	0.66*
GLB09	93	92	0.44	0.18	0.62*
Kenland (uncertified)	69	45	0.39	0.12	0.52*
Experimental Varieties					
AMP-116	98	94	0.69	0.25	0.94*
B-9.2013	94	93	0.63	0.31	0.94*
CW 202	88	77	0.54	0.29	0.84*
CW 30091	97	94	0.62	0.19	0.81*
KY Tetraploid	95	94	0.54	0.24	0.78*
Mean	92.0	86.7	0.56	0.24	0.80
CV,%	7.8	17.5	52.97	73.11	56.59
LSD, 0.05	10.3	21.7	0.42	0.25	0.65

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 12. Dry matter yields and stand persistence of red clover varieties sown April 7, 2010 at Quicksand, Kentucky.

Variety	Percent Stand	Yield (tons/acre)		
	2010	2010		
	Oct 10	Jul 26	Sep 9	Total
Commercial Varieties—Available for Farm Use				
Starfire II	99	0.93	0.59	1.52*
Freedom! MR	98	0.96	0.48	1.44*
Cinnamon Plus	95	0.98	0.42	1.40*
Rustler	98	0.91	0.47	1.38*
Freedom!	99	0.81	0.50	1.31*
Kenland (certified)	95	0.91	0.37	1.28*
Wildcat	99	0.73	0.53	1.26*
Eamarwan	98	0.72	0.45	1.17
Common O	86	0.65	0.26	0.91
GLB09	82	0.58	0.24	0.82
Kenland (uncertified)	83	0.59	0.22	0.81
Experimental Varieties				
KY Tetraploid	99	1.07	0.48	1.54*
AMP-116	100	0.83	0.34	1.16
CW 30091	100	0.81	0.34	1.15
B-9.2013	96	0.76	0.32	1.08
CW 202	89	0.74	0.33	1.08
Mean	94.6	0.81	0.40	1.21
CV,%	7.9	24.50	23.54	21.00
LSD, 0.05	10.6	0.29	0.13	0.36

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 13. Dry matter yields, seedling vigor, and stand persistence of red clover varieties sown April 15, 2010 at the Eden Shale Farm near Owenton, Kentucky.

Variety	Seedling Vigor ¹ May 20, 2010	Percent Stand		Yield (tons/acre)	
		2010		2010	
		May 20	Oct 14	Jul 23	Total ²
Commercial Varieties—Available for Farm Use					
Kenland (certified)	2.3	91	93	1.02	1.02*
Freedom! MR	3.3	90	91	1.00	1.00*
Rustler	2.8	87	88	0.96	0.96*
Freedom!	3.5	95	87	0.95	0.95*
Kenland (uncertified)	1.6	71	68	0.86	0.86*
Quinequeli	3.0	97	89	0.86	0.86*
Cinnamon Plus	3.4	91	97	0.83	0.83*
Starfire II	2.9	94	90	0.80	0.80*
GLB09	4.1	98	93	0.66	0.66
Common O	3.4	93	88	0.65	0.65
Juliet	3.4	97	90	0.57	0.57
Experimental Varieties					
CW 30091	3.8	95	93	0.91	0.91*
KY Tetraploid	4.6	97	95	0.90	0.90*
AMP-116	3.6	96	89	0.75	0.75*
B-9.2013	3.3	95	93	0.74	0.74*
CW 202	2.5	92	89	0.73	0.73*
Mean	3.2	92.3	89.5	0.82	0.82
CV,%	31.0	7.2	7.0	25.78	25.78
LSD,0.05	1.4	9.4	8.9	0.30	0.30

¹ Vigor score based on a scale of 1 to 5, with 5 being the most vigorous seedling growth.
² Due to very dry weather, there was only one harvest in 2010.
*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 14. Dry matter yields and stand persistence of white clover varieties sown April 8, 2008 at Lexington, Kentucky.

Variety	Percent Stand						Yield (tons/acre)						3-year Total
	2008		2009		2010		2008	2009	2010				
	Oct 21	Apr 13	May 22	Oct 9	Apr 13	Nov 22	Total	Total	May 11	Jun 22	Jul 26	Total ¹	
Commercial Varieties—Available for Farm Use													
Will	71	74	93	94	98	43	0.51	2.70	1.08	0.54	0.25	1.86	5.08
Patriot	76	70	80	75	83	40	0.50	2.15	0.97	0.44	0.27	1.68	4.33
RegalGraze	64	53	53	74	83	28	0.48	2.05	0.79	0.32	0.28	1.39	3.92
Regal	53	30	24	56	78	31	0.46	1.81	0.84	0.47	0.24	1.56	3.83
Kopu II	60	34	35	75	88	56	0.39	1.73	0.91	0.40	0.23	1.54	3.67
Rampart	63	51	41	55	76	33	0.46	1.45	0.96	0.34	0.22	1.53	3.44
Companion	81	48	33	63	78	51	0.49	1.19	0.99	0.45	0.22	1.66	3.34
Durana	80	78	60	70	84	51	0.42	1.36	0.89	0.29	0.18	1.36	3.15
Experimental Varieties													
GO-ABAR	83	83	91	97	99	68	0.74	3.14	1.29	0.73	0.33	2.36	6.24*
CW 204	70	68	79	91	97	39	0.52	2.70	0.85	0.45	0.22	1.51	4.73
KY Select	88	90	96	96	95	53	0.57	2.45	0.99	0.33	0.28	1.60	4.62
GO-7SG	88	63	56	84	90	45	0.63	2.23	0.88	0.37	0.25	1.50	4.36
GO-ABC	73	73	75	94	86	59	0.41	1.98	0.94	0.38	0.23	1.54	3.93
GO-AJ	63	70	65	86	89	43	0.53	1.90	0.88	0.37	0.25	1.50	3.92
B-7.1749	49	53	68	81	91	63	0.33	1.94	0.94	0.37	0.21	1.53	3.79
CW 0401	79	40	38	60	74	30	0.75	1.66	0.74	0.39	0.22	1.35	3.76
GO-HSM	84	73	68	85	95	68	0.45	1.63	0.91	0.36	0.17	1.43	3.51
GO-BSG	86	23	10	55	81	38	0.62	1.10	0.99	0.43	0.21	1.63	3.36
B-7.1499	71	40	34	40	53	26	0.54	1.02	0.69	0.29	0.17	1.15	2.71
Mean	68.8	53.4	51.5	65.9	84.7	45.3	0.47	1.76	0.91	0.40	0.23	1.54	3.77
CV,%	23.8	25.4	33.1	20.5	16.2	41.2	36.28	27.99	16.91	31.85	37.77	19.20	19.78
LSD, 0.05	23.2	19.2	24.1	19.1	19.8	26.5	0.24	0.70	0.22	0.18	0.12	0.42	1.06

¹ Due to very dry weather, there was not enough growth to get a late summer or fall harvest.
*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 15. Dry matter yields, seedling vigor, and stand persistence of white clover varieties sown April 2, 2009 at Lexington, Kentucky.

Variety	Seedling Vigor ¹ Jun 3, 2009	Percent Stand				Yield (tons/acre)					2-year Total
		2009		2010		2009 Total	2010			Total ²	
		Jun 3	Oct 7	Apr 13	Nov 22		May 11	Jun 23	Jul 26		
Commercial Varieties—Available for Farm Use											
Regal	4.8	98	100	98	29	2.27	0.98	0.45	0.58	2.01	4.27*
Will	3.3	98	100	100	48	1.76	1.28	0.43	0.47	2.18	3.94*
Kopu II	3.5	95	100	98	44	1.79	1.17	0.34	0.50	2.01	3.80*
RegalGraze	4.3	98	100	100	43	1.80	1.02	0.46	0.50	1.97	3.77
Rampart	2.8	96	99	97	51	1.61	1.08	0.43	0.42	1.94	3.55
Patriot	3.5	97	100	77	35	1.72	1.03	0.35	0.38	1.76	3.48
Companion	3.3	96	98	98	71	1.47	1.19	0.35	0.45	1.98	3.46
Durana	2.1	94	94	100	38	1.28	1.20	0.33	0.33	1.86	3.14
Experimental Varieties											
CW 0401	5.0	99	100	99	30	2.33	1.30	0.39	0.54	2.23	4.56*
CW 204	4.1	98	99	100	51	2.33	1.11	0.41	0.56	2.08	4.40*
CW 040041	3.5	94	97	96	41	1.98	1.31	0.48	0.58	2.37	4.35*
GO-7SG	3.8	96	100	91	71	2.12	1.04	0.36	0.58	1.98	4.10*
GO-ABAR	3.3	95	100	100	81	1.67	1.26	0.52	0.54	2.32	3.98*
GO-ABC	3.3	96	98	99	64	1.46	1.36	0.40	0.50	2.26	3.72
GO-HSM	2.8	97	98	98	61	1.56	1.20	0.29	0.51	2.00	3.56
GO-AJ	3.0	96	97	100	43	1.34	1.45	0.32	0.42	2.19	3.53
B-8.1485	2.5	89	94	98	25	1.72	1.07	0.32	0.42	1.81	3.53
KY Select	2.4	93	95	78	35	1.72	0.93	0.30	0.44	1.67	3.39
GO-BSG	3.1	95	97	90	54	1.50	1.07	0.32	0.45	1.84	3.34
B-7.1749	1.5	80	90	97	54	1.23	1.19	0.36	0.43	1.98	3.21
B-7.1499	2.8	93	91	94	25	1.50	0.97	0.31	0.31	1.60	3.10
KY MC	2.1	95	85	94	15	1.18	1.09	0.24	0.29	1.62	2.80
Mean	3.0	92.3	94.2	95.4	45.8	1.65	1.14	0.37	0.46	1.97	3.62
CV,%	22.0	6.7	6.2	14.5	42.6	27.76	15.65	20.64	25.56	12.30	15.18
LSD, 0.05	0.9	8.7	8.3	19.6	27.5	0.65	0.25	0.11	0.17	0.34	0.78

¹ Vigor score based on a scale of 1 to 5, with 5 being the most vigorous seedling growth.

² Due to very dry weather, there was not enough growth to get a late summer or fall harvest.

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 16. Dry matter yields and stand persistence of white clover varieties sown April 6, 2010 at Lexington, Kentucky.

Variety	Percent Stand		Yield (tons/acre)		
	2010		2010		
	Aug 6	Oct 15	Jul 16	Aug 25	Total
Commercial Varieties—Available for Farm Use					
Will	100	97	0.60	0.36	0.95*
Crusader II	100	96	0.55	0.30	0.84*
Patroit	99	96	0.52	0.29	0.80*
Regal	99	95	0.51	0.28	0.79*
Kopu II	100	97	0.49	0.26	0.75*
Ocoee	99	96	0.51	0.21	0.72*
Common	99	94	0.39	0.32	0.71*
Companion	98	96	0.48	0.22	0.70*
Ivory 2	98	98	0.34	0.24	0.58
Durana	96	97	0.37	0.20	0.58
Rampart	98	93	0.39	0.18	0.57
Experimental Varieties					
CW 204	98	97	0.59	0.36	0.95*
CW 040041	99	99	0.53	0.30	0.82*
AMP-124	99	92	0.48	0.22	0.69*
RD86	99	99	0.46	0.23	0.69*
KY MC	98	97	0.44	0.15	0.58

*Not significantly different from the highest numerical value in the column, based on the 0.05 LSD.

Table 17. Performance of red clover varieties across years and locations.

Variety	Proprietor/KY Distributor	Lexington					Eden Shale				Princeton					Quicksand			
		2008 ¹		2009		2010	2008		2010	2008			2009		2008		2010		
		08 ²	09	10	09	10	10	08	09	10	10	08	09	10	09	10	08	09	10
Commercial Varieties—Available for Farm Use																			
Cinnamon Plus	FFR/Southern States	*	x ³	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Common C	Public	x	x	x															
Common O	Public	*	x	x	x	x	*				x	*	x	x	x	x	*	x	x
Dominion	Seed Research of Oregon							x	*	*			*	*	*				
Emarwan	Rose-AgriSeed				*	*								*	*				x
Freedom!	Barenbrug	*	x	x	*	x	*	x	x	*	*	*	*	*	*	*	*	*	*
Freedom! MR	Barenbrug	x	*	*			*			*			*	*	*				*
Juliet	Caudill Seed Company				*	x		*	x	x	x	*	*	x	x	x			
GLB09	Public						*			x									x
Kenland, certified	KY Agr. Exp. Station	x	x	*	*	*	*	x	*	*	*	*	*	*	*	*	*	*	*
Kenland, uncertified	Public						*	x	x	x	*	x	x	x					x
Kenton (KNARS)	KY Agr. Exp. Station	*	*	x								*	*	*	x	x	*	*	*
Kenway (KVMRS)	KY Agr. Exp. Station	*	*	*								*	*	*	x	*	*	*	*
Morning Star	Cal/West Seeds							x	x	x		*	x	x					
Plus II	Allied Seed, LLC	x	*	x													*	*	*
Quinequeli	Caudill Seed Company				*	x					*				x	x			
Red Gold	Pro Seeds Marketing							*	x	x		x	x	x					
Robust II	Seed Research of Oregon							x	*	*		*	*	*					
Rocket	Seed Research of Oregon							*	*	*		*	*	*					
Rustler	Oregro Seeds	x	x	x			*				*						*	*	x
Starfire II	Cal/West & Ampac Seed	x	x	*			*	*	*	*	*	*	*	*			*	*	*
Wildcat	Brett Young Seeds				*	x									*	*			*
Experimental Varieties																			
AMP-116	Ampac Seed						*				*								x
B8.0083	Blue Moon Farms	x	x	x													*	*	x
B-8.1500	Blue Moon Farms				*	x								*	x				
B-9.2013	Blue Moon Farms						*				*								x
CW 040040	Cal/West Seeds	x	x	*													*	*	*
CW 202	Cal/West Seeds	*	*	*			*				*						*	*	*
CW 30091	Cal/West Seeds						*				*								x
GA100-RC	Univ. of Georgia				*	x								*	x				
GA-9908	Univ. of Georgia				*	x								*	*				
GAC1RC	AgResearch, USA	x	x	x															
GO-ABR	Grasslands Oregon	x	x	x													x	x	x
KY Low phenolic	KY Agr. Exp. Station				*	x													
KY Tetraploid	KY Agr. Exp. Station	x	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PG 606	AgResearch, USA	x	x	x															
RC 005	FFR/Southern States							*	*	*		*	x	x					
RC 006	FFR/Southern States							x	*	*		*	x	x					
RC 0501	FFR/Southern States	x	*	*													*	*	*
RC 0601	FFR/Southern States	x	x	x													*	*	*
RC 9703	Lewis Seed				*	*									*	*			

¹ Establishment year.
² Harvest year.
³ x in the box indicates the variety was in the test but yielded significantly less than the top variety in the test. Open boxes indicate the variety was not in the test.
 *Not significantly different from the top-ranked red clover variety in the test.

Table 18. Performance of white clover varieties across years.								
Variety	Type	Proprietor/KY Distributor	Lexington					
			2008 ¹			2009		2010
			08 ²	09	10	09	10	10
Commercial Varieties—Available for Farm Use								
Companion	Ladino	Oregro Seeds, Inc.	x ³	x	x	x	*	*
Crusader II	Intermediate	Allied Seed, LLC						*
Durana	Intermediate	Pennington	x	x	x	x	x	x
Ivory 2	Medium leaved	DLF International						x
Kopu II	Intermediate	Ampac Seed Co	x	x	x	*	*	*
Ocoee	Ladino	Allied Seed, LLC						*
Patriot	Intermediate	Pennington	x	x	x	*	x	*
Rampart	Ladino	Allied Seed, LLC	x	x	x	x	x	x
Regal	Ladino	Public	x	x	x	*	*	*
RegalGraze	Ladino	Cal/West Seeds	x	x	x	*	*	
Will	Ladino	Allied Seed, LLC	x	*	x	*	*	*
Experimental Varieties								
AMP-124	Intermediate	Ampac Seed Co.						*
B-8.1485	Intermediate	Blue Moon Farms				*	x	
B-7.1499	–	Blue Moon Farms	*	x	x	x	x	
B-7.1749	–	Blue Moon Farms	x	x	x	x	*	
CW 040041	Ladino	Cal/West Seeds				*	*	*
CW 0401	Ladino	Cal/West Seeds	*	x	x	*	*	
CW 204	Ladino	Cal/West Seeds	*	*	x	*	*	*
GO-ABAR	Ladino	Grasslands Oregon	*	*	*	x	*	
GO-ABC	Intermediate	Grasslands Oregon	x	x	x	x	*	
GO-AJ	Intermediate	Grasslands Oregon	*	x	x	x	*	
GO-B5G	Intermediate	Grasslands Oregon	*	x	x	x	x	
GO-HSM	Intermediate	Grasslands Oregon	x	x	x	x	*	
GO-75G	Ladino	Grasslands Oregon	*	x	x	*	*	
KY Select	Intermediate	KY Agr. Exp. Station	*	*	x	*	x	x
RD86	Ladino	Allied Seed, LLC						*
¹ Establishment year. ² Harvest year. ³ x in the box indicates the variety was in the test but yielded significantly less than the top variety in the test. Open boxes indicate the variety was not in the test. *Not significantly different from the top-ranked white clover variety in the test.								

Variety		Summary of Kentucky White Clover Yield Trials 1998-2010 (yield shown as a percentage of the mean of the commercial varieties in the trial.)																Eden Shale	
		Lexington				Princeton				Quicksand				Eden Shale					
Type	Proprietor	02 ^{1/2} 3yr ⁴	03 3yr	04 3-yr	06 2-yr	07 2-yr	08 3yr	09 2yr	03 3yr	05 3-yr	98 3yr	03 2yr	03 2yr	106	Mean ³ (#trials)				
Advantage	Allied Seed, LLC		125												116(2)				
Alice	Barenbrug				59					86					-				
Avoca	DLF International Seeds									82					71(2)				
Barblanca	Barenbrug		92												-				
CA ladino	Public			124					103		100	98			105(5)				
Colt	Seed Research of OR		90		57					114					87(3)				
Common	Public	100				53				78					77(3)				
Companion	Oregro Seeds						87	94							91(2)				
Crescendo	Cal/West Seeds				140					109					118(3)				
Excel	Allied Seed, LLC		105	100											-				
Durana	Pennington		94		94	88	82	85	87	83		101	95	90(9)	-				
Insight	Allied Seed, LLC				128										-				
Ivory	Cebeco	96													-				
Ivory II	DLF International Seeds					86									-				
Jumbo	Ampac Seed	93													-				
Kopu II	Ampac Seed	97			97	95	95	103							97(4)				
Patriot	Pennington		103		87	104	113	95	104	100	98	99	100(9)		-				
Pinnacle	Allied Seed, LLC				120					111					116(2)				
Rampart	Allied Seed, LLC		99	96		80	89	97		100	100	104			89(3)				
Regal	Public					125	100	116	107	100	100				104(10)				
RegalGraze	Cal/West Seeds				127	140	102	103							118(4)				
Resolute	FFR/Southern States				63										-				
Seminole	Saddle Butte Ag, Inc			108	70	79									86(3)				
Super Haifa	Allied Seed, LLC			77											-				
Tillman II	Caudill Seed	103													-				
Will	Allied Seed, LLC	107			162	150	132	107		136					132(6)				

1 Year trial was established.

2 Use this summary table as a guide in making variety decisions, but refer to specific yearly reports to determine statistical differences in forage yield between varieties. To find actual yields, look in the yearly report for the final year of each specific trial. For example, the Lexington trial planted in 2002 was harvested three years, so the final report would be "2004 Red and White Clover Report" archived in the KY Forage web site at <www.uky.edu/Ag/Forage>.

3 Mean only presented when respective variety was included in two or more trials.

4 Number of years of data.



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