

Tall Fescue Variety Trials 2004-2010

Recent Research Results

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Introduction to Tall Fescue

Adaptation: North and central GA north of the Coastal Plain. Best adapted in clay or loam soil. Tolerant of soil acidity, poor drainage, and close grazing. Relatively tolerant of drought.

Establishment: Seed drilled at 15 - 20 lb/A or broadcast at 20 - 25 lb/A in Sept. or Oct.

Recommended Varieties: MaxQ or Texoma MaxQ II (both are novel endophyte varieties) for livestock pasture or hay. 'KY-31' can be planted for conservation and other non-livestock uses.

Tall fescue is a cool season perennial that is well-adapted to areas north of the Fall Line/Sand Hills area. Over 1 million acres of tall fescue are used for pasture in north Georgia. Under irrigation and managed grazing, tall fescue is also productive in the Coastal Plain.

Fescue is a deep-rooted bunch grass that is productive during fall, late winter and spring. More than half of the total yearly production occurs in spring. It does not grow well in mid-summer unless moisture conditions are favorable.

However, with sufficient moisture and an application of up to 60 lbs of N per acre, a substantial flush of tall fescue growth will occur in the fall. This high quality forage can be stockpiled (allowed to accumulate) in pastures and hay fields from August through October and then grazed later in the fall and early winter. This deferred grazing (grazing after forage has been allowed to accumulate) of stockpiled forage can be an effective method for reducing winter feed costs.



Tall Fescue (*Lolium arundinaceum*)

Use tall fescue for grazing and hay production. Forage quality and feed distribution are improved when an adapted legume (such as white clover or red clover) is grown in association with fescue. Close grazing (3 – 6 in.) keeps forage quality high and also helps keep clover in the stand. Unlike bermudagrass, fescue does not respond to exceptionally high N rates. Tall fescue pastures that are on productive sites can benefit from up to 100 lbs of N per acre and support a high stocking rate. However, most fescue pastures in north Georgia are moderately stocked and are on marginal sites that will receive no benefit from N applications in excess of 50 lbs of N per acre. If clover comprises less than 15 percent of the stand, treat it as a grass stand. Reduce N rates to 20 to 30 pounds per acre if the stand contains 15-35% legumes. If the stand contains more than 35% legumes, no supplemental N is needed.

Description of the Variety Trials

Tall fescue variety entries were solicited from the companies who sell them. These companies were charged an entry fee for each variety they entered and for each location in which the variety was tested. This entry fee helped to cover some of the costs of the variety trial.

The tests were planted at Georgia Agriculture Experiment Station (GAES) facilities and maintained by experienced research technicians and other GAES staff under the supervision of the State Forage Extension Specialist. The tall fescue trials were established and managed using standard practices as recommended by UGA Specialists. Unless otherwise indicated, the trials were established by drilling the tall fescue seed into a well-prepared seedbed at the rate of 20 lbs of pure live seed (PLS) per acre. Specific planting dates for individual locations are described in the Yield by Harvest Date sections. Soil fertility was maintained in accordance with soil fertility recommendations.

Two types of variety trials were conducted. The first type of variety trial is the yield trial. Yield-type variety trials simulate forage productivity under a hay production regimen or a well-managed rotational grazing regimen. The tests generally continued for at least three years. Tables that indicate a summary of data from 2008 through 2009 will be continued in 2010. Tests are only ended before three years when the stands of the majority of the entries deteriorate below 60% basal area coverage (60% stand). To our knowledge, no tall fescue variety trials conducted by UGA have failed to complete three years because of stand deterioration. Trials that were cut for yield after 2006 also were assessed annually for stand persistence in a manner similar to that described for the grazing persistence trials below.

The second type of variety trial is the grazing persistence trial. In this trial type, tall fescue varieties were planted and managed similar to the yield trials. Once the stand was well-established (i.e., > 6 inches tall), however, the plots were subjected to continuous grazing pressure by mature beef cows during the growing season of the three years of the trial. The result of this grazing pressure was a simulation of severe over-grazing.



Example of (top) a tall fescue variety ('Jesup MaxQ') growing in plot used in the yield trial and (bottom) a series of plots in grazing persistence trial.

Stands were assessed using a quantitative measure of the plot area that is covered by living tall fescue plants after harvest (basal area coverage). This stand assessment usually was made during the dormant season (winter).

Statistical analyses were performed on all data to determine if the numerical differences were truly the result of varietal differences or just random differences. To determine if two varieties are truly different, compare the difference between them and the LSD (Least Significant Difference) 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 the given locations. The comparison is aided by the fact that the value for the best variety within a column is bolded. In addition, values sharing the same letter are not different. NS indicates no differences were observed. The Coefficient of Variation (CV) is a measure of the variability of the data and is included for each column of means when differences exist. Low variability is desirable (generally, a CV less than 15%).

Tall Fescue Yield Trial Summary

Table 1. Forage yield of tall fescue varieties averaged over the 2004- 2006 growing seasons and/or 2008- 2009 growing seasons in Blairsville and Athens, GA.†

Variety	3-yr Average 2004-06		3-yr Average 2007-09	3-yr Average 2008-10
	Blairsville	Athens	Blairsville	Athens
----- (dry lbs/acre) -----				
Commercial Varieties - Available for Use				
Drover	-	-	-	7784 bcd
Jesup MaxQ 542	11987	10481 ab	8998 a	7775 bcd
Kentucky 31 EI	11685	9492 c		7610 cde
Jesup EF	-	-	8850 a	7338 de
Bronson	-	-	8955 a	7297 de
Cowgirl	-	-	-	7109 ef
BarOptima	-	-	-	6589 f
Select	-	-	8228 b	-
Experimental Varieties				
GA 156 542	11867	-	-	8570 a
Texoma MaxQ II	-	-	-	8206 ab
GA 100 542	-	-	-	8123 abc
GA 7 542	12619	10803 a	-	8095 abc
GA 186 584	-	-	-	8032 abc
AGR FA 152	-	-	-	7956 bc
AGR FA 156	-	-	-	7775 bcd
GT 159	-	-	-	7672 bcde
FA 2866	-	-	-	7290 de
AGR FA 150	-	-	-	7141 ef
BAR MT 9301	-	-	-	6697 f
TF 201	-	-	9282 a	-
TF 203G	-	-	9123 a	-
GA 5 542R	11263	10743 a	-	-
GA 102F	12158	10228 ab	-	-
Jesup MaxQ 584	11820	9940 bc	-	-
GA 95 101T	12162	9518 c	-	-
CV%			19	13
LSD	NS(.10)	NS(.12)	254	782

† Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Yields that are in **bold** font are not significantly different from the highest yielding variety.

Stand Assessments (Yield Trial) – Blairsville

Table 2. Percent basal cover of tall fescue varieties in the yield trial located at Blairsville, GA. 2007-2008.[†]

Variety	Percent basal cover within row		
	May 8, 2007	Jan. 24, 2008	Dec. 15, 2008
Jesup MaxQ	94.5 a [‡]	91.5 b	94
Select	88.0 b	92.0 ab	94
Bronson	89.5 ab	89.5 bc	93
TF 201 [§]	85.5 b	97.5 a	93
Jesup EF	86.5 b	85.5 c	93
TF203G [§]	90.0 ab	90.5 bc	90
CV %	5	5	
LSD _{α=0.05}	5.66	5.59	NS

[†] Planted: October 25, 2006.

[‡] Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Values that are in **bold** font are not significantly different from the best variety at that time.

[§] Experimental variety (not available).

Stand Assessments (Yield Trial) – Athens

Table 3. Percent basal cover and vigor estimate of tall fescue varieties in the yield trial located at Athens, GA. 2008-2011.[†]

Variety	January 31, 2008		Dec. 14, 2009	Jan. 21, 2011
	Basal cover within row	Visual vigor estimate 5 best	Basal cover within row	Basal cover within row
Kentucky 31	98	3.0 cde*	82.5 bcdefg	95.0 a
Texoma MaxQ II	95	3.0 cde	95.6 a	91.3 ab
Jesup MaxQ 542	93	3.0 bcd	88.1 abcdefg	90.0 abc
GA 7 542 [§]	97	3.8 ab	88.1 abcdefg	88.1 abc
GA 16L 542 [§]	95	3.3 bcd	90.6 abcde	85.0 abcd
AGR FA 152 [§]	93	3.0 bcd	94.4 ab	83.8 abcd
GA 100 542 [§]	95	3.3 bcd	92.5 abc	81.9 bcd
AGR FA 150 [§]	94	2.8 de	85.6 abcdefg	79.9 cde
GA 186 584 [§]	95	3.8 ab	91.9 abcd	75.6 def
GT 159 [§]	94	3.5 abc	81.3 cdefg	70.0 ef
AGR FA 156 [§]	95	3.8 ab	77.5 fg	65.6 fg
Cowgirl	96	2.5 ef	88.1 abcdefg	57.5 g
FA 2866 [§]	91	3.5 abc	77.5 fg	4.4 h
BAR BE 9301A	91	3.3 bcd	79.4 defg	1.9 h
Jesup EF	96	3.0 cde	89.4 abcde	0.6 h
Drover	91	3.3 bcd	78.8 efg	0 h
Bronson	89	4.0 a	86.3 abcdefg	0 h
BAR MT 9301 [§]	84	2.0 f	75.6 g	0 h
CV%		15	11	15
LSD _{α=0.05}	NS	0.69	13.0	11.5

[†] Planted: October 10, 2007.

[‡] Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Values that are in **bold** font are not significantly different from the best variety at that time.

[§] Experimental variety (not available).

Stand Assessments (Grazing Trial) – Calhoun

Table 4. Percent basal cover of tall fescue varieties in the grazing persistence trial at Calhoun, GA. 2007-2009. †

Variety	Percent basal cover within row			
	May 7, 2007	April 10, 2008	April 30, 2009	% of org. stand
Bronson	89	63 a‡	41 cd	46 cd
Jesup MaxQ	88	60 ab	77 a	85 a
Jesup EF	88	55 abcd	68 ab	75 ab
KY 31 EI	92	40 bcde	48 bc	53 bc
TF 0201§	85	37 cde	53 abc	64 abc
TF 0203G§	90	33 def	57 abc	64 abc
CV %		42	46	45
LSD _{α=0.05}	NS	23	25	28

† Planted: October 25, 2006.

‡ Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Values that are in **bold** font are not significantly different from the best variety at that time.

§ Experimental variety (not available).

Stand Assessments (Grazing Trial) – Eatonton

Table 5. Percent basal cover of tall fescue varieties in the grazing persistence trial at Eatonton, GA. 2007-2009. †

Variety	Percent basal cover within row			
	June 14, 2007	Jan. 4, 2008	Dec. 4, 2008	Dec. 15, 2009
AGR FA 121§	98	100	95	99
AGR FA 148§	97	99	96	96
AGR FA 150§	99	99	95	98
AGR FA 152§	99	98	95	94
Jesup 584§	98	98	98	96
KY 31	97	98	94	97
AGR FA 120§	97	98	91	94
Texoma MaxQ II	98	97	95	96
K6560QII§	97	97	92	94
AGR FA 140§	99	97	95	94
Jesup MaxQ	97	96	93	94
Bronson	98	95	93	94
CV %				
LSD _{α=0.05}	NS	NS	NS	NS

† Planted: November 1, 2006.

‡ Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Values that are in **bold** font are not significantly different from the best variety at that time.

§ Experimental variety (not available).

Yield by Harvest Date – Blairsville

Table 6. Forage yield of tall fescue varieties at Blairsville, GA. 2004- 2006.[†]

Year	Variety	Dry Matter Yield					Total
		dry lbs/acre					
		Harvest Date					
2004		May 4	June 7	July 13	Sept. 23	Nov. 17	
	GA 7 clone 542R [§]	5460 a [‡]	2485	1644	3195	2038 ab	14822
	GA 156 542R [§]	5423 a	2349	1342	2771	2200 a	14085
	GA 95 101T [§]	3505 c	2310	1729	4177	2159 a	13880
	GA 5 542R [§]	4342 abc	3110	1375	2774	2189 a	13790
	GA 102F [§]	4611 abc	2431	1748	3155	1787 abc	13732
	KY 31 EI	4567 abc	2639	1628	2939	1936 ab	13709
	Jesup MaxQ	4946 ab	2380	1502	2405	1307 c	12540
	Jesup 584 [§]	4285 bc	2203	1509	2543	1462 bc	12002
	CV %	19				25	
	LSD _{α=0.05}	1126	NS	NS	NS	612	NS
2005		April 28	June 8	July 20	Oct. 10		Total
	Jesup MaxQ	2824	3189 a	1815	3273 ab		11101
	GA 102F [§]	2696	3201 a	1846	3283 ab		11026
	GA 7 clone 542R [§]	3008	3051 ab	1787	3117 b		10963
	GA 156 542R [§]	2870	3035 ab	1832	3044 bc		10781
	Jesup 584 [§]	2328	3085 ab	1699	3543 a		10655
	GA 95 101T [§]	2459	2770 bc	1841	3528 ab		10598
	KY 31 EI	2639	2879 abc	1863	2886 bc		10267
	GA 102F [§]	2606	2567 c	1693	2651 c		9517
	CV %		10		60		
	LSD _{α=0.05}	NS	404	NS	410		NS
2006		May 4	June 21	Oct. 1			Total
	Jesup 584 [§]	4737	4524 a	3549 a			12804 a
	Jesup MaxQ	4687	4083 abcd	3552 a			12322 ab
	GA 7 clone 542R [§]	4667	4288 ab	3117 ab			12072 abc
	GA 95 101T [§]	4349	4130 abc	3528 a			12007 abc
	GA 102F [§]	4435	3995 abcd	3283 ab			11715 abcd
	KY 31 EI	4552	3549 bcd	2886 bc			11078 bcd
	GA 156 542R [§]	4512	3341 d	2883 bc			10736 cd
	GA 5 542R [§]	4614	3381 cd	2486 c			10481 d
	CV %						
	LSD _{α=0.05}						

[†] Planted: September 25, 2003.

[‡] Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Values that are in **bold** font are not significantly different from the best variety at that time.

[§] Experimental variety (not available).

Table 7. Forage yield of tall fescue varieties at Blairsville, GA. 2007- 2009.[†]

Year	Variety	Dry Matter Yield					Total
		----- lbs/acre-----					
		Harvest Date					
2007		Mar. 8	July 16	Aug. 10	Sept. 12	Nov. 13	
	Jesup MaxQ	991 b [‡]	1809 a	3041	713	1369	7923
	Bronson	1459 a	1440 bc	2518	896	1437	7750
	TF 201 [§]	603 c	1778 a	2678	1110	1514	7683
	TF 203G [§]	766 bc	1695 ab	2796	736	1361	7354
	Jesup EF	733 bc	1485 bc	2631	875	1470	7194
	Select	553 c	1387 c	2474	981	1511	6906
	CV %	27	13				
	LSD _{α=0.05}	298	279	NS	NS	NS	NS
2008		Apr. 22	July 1	Sept. 26			Total
	TF 203G [§]	2863	2383 b	4603			9849
	Jesup EF	2833	2562 b	4421			9816
	TF 201 [§]	2306	3103 a	4372			9781
	Bronson	2961	2513 b	4165			9639
	Jesup MaxQ	2540	2389 b	4204			9133
	Select	2393	2785 ab	3617			8795
	CV %		14				
	LSD _{α=0.05}	NS	471	NS			NS
2009		May 7	June 24	Sept. 3	Nov. 20		Total
	TF 201 [§]	3278 b	2474	1768	2862		10382
	TF 203G [§]	3866 a	2126	1202	2971		10165
	Jesup MaxQ	3471 b	2000	1553	2913		9937
	Jesup EF	3597 ab	2119	1411	2412		9539
	Bronson	3443 b	2015	1301	2718		9477
	Select	3265 b	1791	1265	2662		8983
	CV %	8					
	LSD _{α=0.05}	369	NS	NS	NS		NS

[†] Planted: October 25, 2006.

[‡] Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Values that are in **bold** font are not significantly different from the best variety at that time.

[§] Experimental variety (not available).

Yield by Harvest Date – Athens

Table 8. Forage yield of tall fescue varieties at Athens, GA. 2004- 2006.[†]

Year	Variety	Dry Matter Yield					Total
		----- lbs/acre-----					
		Harvest Date					
2004		April 25	May 26	July 21	Sept. 13	Nov. 17	
	GA 5 542R [§]	1858 a [‡]	2914 a	2236	1994	2749	11751 a
	Jesup MaxQ	1965 a	2461 ab	2125	1766	2729	11046 ab
	GA 7 clone 542R [§]	1851 ab	2360 b	2125	1782	2667	10785 ab
	Jesup 584 [§]	1285 abc	2069 b	2212	1767	2757	10090 abc
	GA 102F [§]	1248 abc	2494 ab	1886	1676	2746	10050 abc
	KY 31 EI	997 c	2241 b	2099	1608	2641	9586 bc
	GA 95 101T [§]	1128 bc	1328 c	1458	1819	3002	8735 c
	CV %	37	18				13
	LSD _{α=0.05}	926	541	NS	NS	NS	1734
2005		April 22	June 10	July 27	Oct. 10	Dec. 12	Total
	GA 7 clone 542R [§]	4170	2845	2010	1370	1937	12332
	GA 95 101T [§]	4134	2579	1559	1579	2134	11985
	Jesup MaxQ	3937	2904	1835	1361	1915	11952
	GA 5 542R [§]	4165	2719	1757	1496	1805	11942
	Jesup 584 [§]	3890	2759	1753	1480	1992	11874
	GA 102F [§]	3610	2909	1768	1467	1951	11705
	KY 31 EI	4007	2941	1790	1224	1836	11598
	CV %						
	LSD _{α=0.05}	NS	NS	NS	NS	NS	NS
2006		April 19	June 13	Sept. 8	Dec. 18		Total
	GA 7 clone 542R [§]	3200 a	865	1664 ab	3562 ab		9291 a
	GA 102F [§]	1911 c	948	1214 c	4271 a		8929 ab
	GA 5 542R [§]	2553 b	787	1710 ab	3485 ab		8535 abc
	Jesup MaxQ	2449 bc	874	1580 abc	3542 ab		8445 abc
	Jesup 584 [§]	2096 bc	850	1799 a	3534 ab		7856 bc
	GA 95 101T [§]	2328 bc	1032	1258 c	3215 b		7833 bc
	KY 31 EI	1950 c	890	1214 c	3237 b		7291 c
	CV %	18		20	20		13
	LSD _{α=0.05}	545	NS	396	396		1357

[†] Planted: October 1, 2003.

[‡] Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another.

Values that are in **bold** font are not significantly different from the best variety at that time.

[§] Experimental variety (not available).

Table 8. Forage yield of tall fescue varieties at Athens, GA. 2008- 2009. †

		Dry Matter Yield					
		----- lbs/acre -----					
Year	Variety	Harvest Date					
		Mar. 28	May 7	June 17	Aug.29	Dec. 5	Total
2008	GA 100 542§	1286 abc‡	3590 ab	1086 bcdef	323 ab	2866 a	9151 a
	GA 186 584§	1561 ab	3437 abcd	1123 bcde	316 abc	2656 abc	9092 ab
	GA 7 542§	1688 a	3463 abcd	1049 bcdef	355 ab	2509 abc	9064 ab
	GA 156L 542§	1243 abcd	3417 abcd	1241 ab	383 ab	2694 ab	8978 ab
	Jesup MaxQ	1177 bcd	3628 a	1232 abc	296 abcd	2612 abc	8945 ab
	Texoma MaxQ II	1281 abc	3378 abcd	1042 bcdef	330 ab	2873 a	8904 abc
	Jesup EF	1052 cde	3726 a	1055 bcdef	278 bcdef	2672 ab	8783 abc
	Drover	1313 abc	2988 abcde	1063 bcdef	333 ab	2871 a	8568 abcd
	AGR FA 152§	764 de	3561 abc	1217 abcd	356 ab	2518 abc	8416 abcde
	Bronson	1235 abcd	3632 a	873 f	188 fg	2387 bc	8315 abcdef
	Kentucky 31 EI	1295 abc	2836 cde	1211 abcd	314 abc	2645 abc	8301 abcdef
	GT 159§	1312 abc	2441 e	1400 a	293 abcde	2690 ab	8136 bcdef
	FA 2866§	1145 bcd	3071 abcde	1008 def	199 efg	2509 abc	7932 cdef
	Cowgirl	1031 cde	3056 abcde	896 f	232 cdefg	2516 abc	7731 def
	AGR FA 156§	1010 cde	3167 abcde	938 ef	200 efg	2254 c	7569 def
	BarOptima	1165 bcd	2864 bcde	1012 def	192 fg	2263 c	7496 ef
	AGR FA 150§	611 e	3322 abcd	1021 cdef	208 defg	2327 bc	7489 ef
BAR MT 9301§	1005 cde	2752 de	1044 bcdef	159 g	2356 bc	7316 f	
CV %	29	16	14	24	11	9	
LSD $\alpha=0.05$	490	744	215	95	407	1011	
2009		Apr. 25	May 29	Aug. 6	Oct.20	Dec.1	Total
	GA 156L 542§	4843 a	1094 gh	1759 a	3110	846 abc	11652 a
	Drover	3917 bcd	1523 cde	1633 abc	2764	884 a	10721 ab
	GA 100 542§	4038 abcd	1193 fgh	1555 abc	2892	870 ab	10548 ab
	FA 2866§	4302 abc	1558 bcd	1302 cd	2613	764 abcde	10539 ab
	AGR FA 156§	4483 ab	1173 fgh	1299 cd	2847	704 abcdef	10506 abc
	Jesup EF	4493 ab	1299 cdefgh	1393 abcd	2493	532 ef	10210 bcd
	Texoma MaxQ II	3866 bcd	1183 fgh	1468 abc	2976	698 abcdef	10191 bcd
	GA 7 542§	3936 bcd	1047 h	1700 ab	2563	776 abcd	10022 bcd
	Bronson	4102 abcd	1204 efgh	1421 abcd	2539	752 abcde	10018 bcd
	AGR FA 152§	3823 bcd	1326 cdefg	1566 abc	2656	615 cdef	9986 bcd
	GA 186 584§	3936 bcd	1138 fgh	1357 bcd	2590	759 abcde	9780 bcd
	Jesup MaxQ	3763 bcde	1223 efgh	1351 bcd	2730	611 def	9678 bcd
	GT 159§	3286 de	1595 abc	1447 abcd	2556	683 abcdef	9567 bcd
	Cowgirl	3545 cde	1263 defgh	1486 abc	2573	639 bcdef	9506 bcd
	AGR FA 150§	3374 de	1438 cdef	1320 bcd	2674	567 def	9373 bcd
	Kentucky 31 EI	2916 e	1409 cdefg	1456 abcd	2743	584 def	9108 cd
BarOptima	3297 de	1863 ab	1072 de	2313	491 f	9036 d	
BAR MT 9301§	3410 de	1908 a	849 e	2361	479 f	9007 d	
CV %	16	17	19		24	10	
LSD $\alpha=0.05$	888	329	390	NS	238	1416	

† Planted: October 10, 2007. § Experimental variety (not available).

‡ Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Values that are in **bold** font are not significantly different from the best variety at that time.

Table 8. Forage yield of tall fescue varieties at Athens, GA. 2010. †

Year	Variety	Dry Matter Yield			
		----- lbs/acre -----			
		Harvest Date			
2010		Mar. 18	July 16	Nov. 18	Total
	Texoma MaxQ II	2277	1772	1475 bc	5524 a
	AGR FA 152§	2020	1903	1544 b	5467 ab
	Kentucky 31 EI	1882	1613	1926 a	5421 abc
	GT 159§	2054	1856	1403 bcd	5313 abcd
	AGR FA 156§	2311	1647	1292 bcde	5250 abcd
	GA 186 584§	2071	1675	1478 bc	5223 abcd
	GA 7 542§	2153	1642	1403 bcd	5198 abcd
	GA 156L 542§	2177	1653	1251 cde	5081 abcd
	Jesup MaxQ	2105	1484	1113 ef	4702 bcde
	GA 100 542§	2029	1430	1212 def	4671 cde
	AGR FA 150§	1792	1421	1348 bcde	4561 de
	Cowgirl	1922	1189	980 f	4091 ef
	Drover	2241	1813	0 g	4054 ef
	BAR MT 9301§	1981	1767	23 g	3771 fg
	Bronson	2335	1198	24 g	3558 f
	FA 2866§	2207	1171	24 g	3401 fg
	BarOptima	1841	1395	0 g	3235 g
	Jesup EF	1953	1632	34 g	3020 g
	CV %			19	13
	LSD $_{\alpha=0.05}$	NS(.10)	NS(.12)	254	782

† Planted: October 10, 2007.

‡ Values within a column that are labeled with the same letter were not significantly different ($\alpha=0.05$) from one another. Values that are in **bold** font are not significantly different from the best variety at that time.

§ Experimental variety (not available).

Weather Data during Trials:

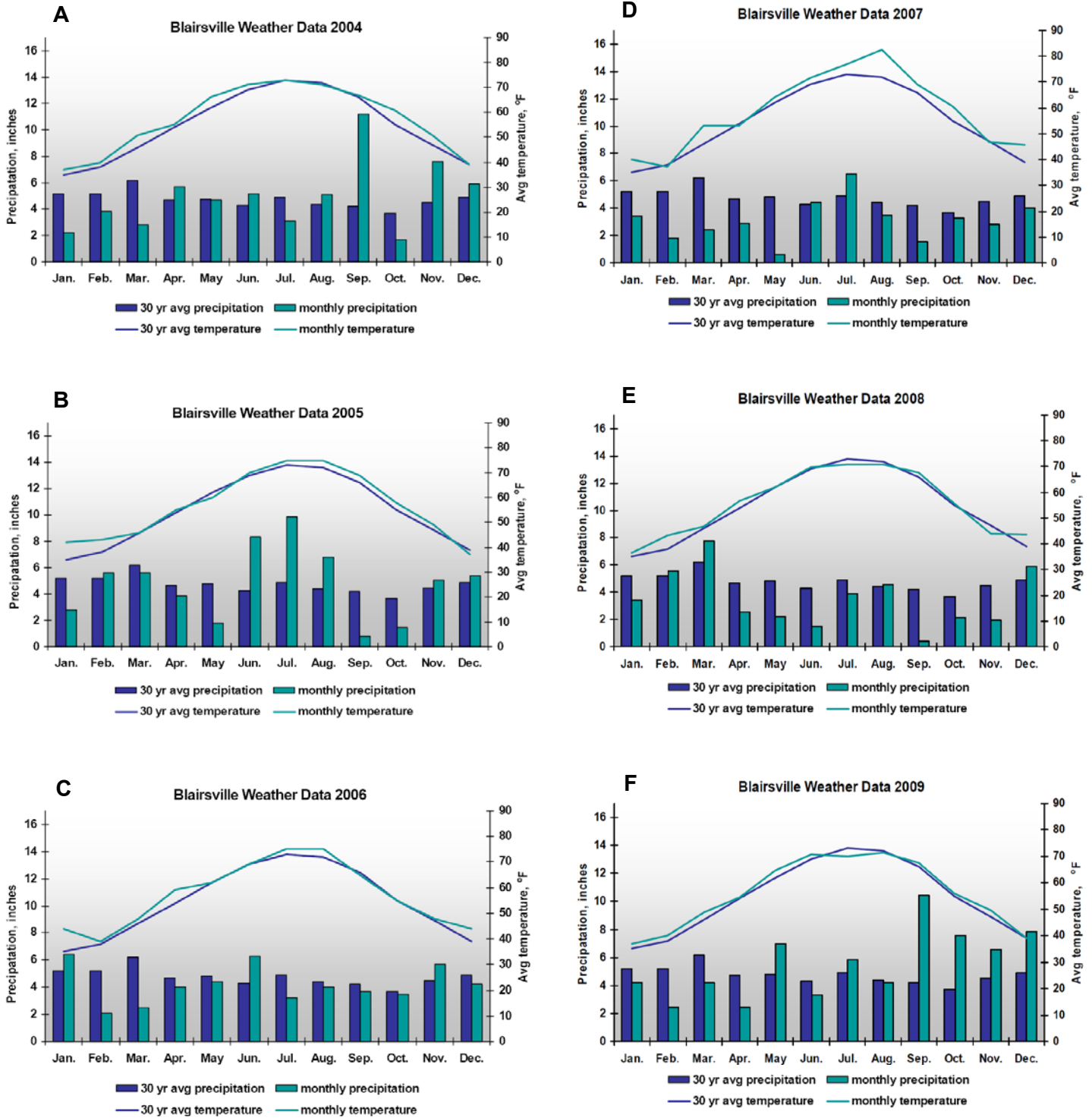


Figure 1. Weather data during the 2004 (A), 2005 (B), 2006 (C), 2007 (D), 2008 (E), and 2009 (F) growing seasons in Blairsville.

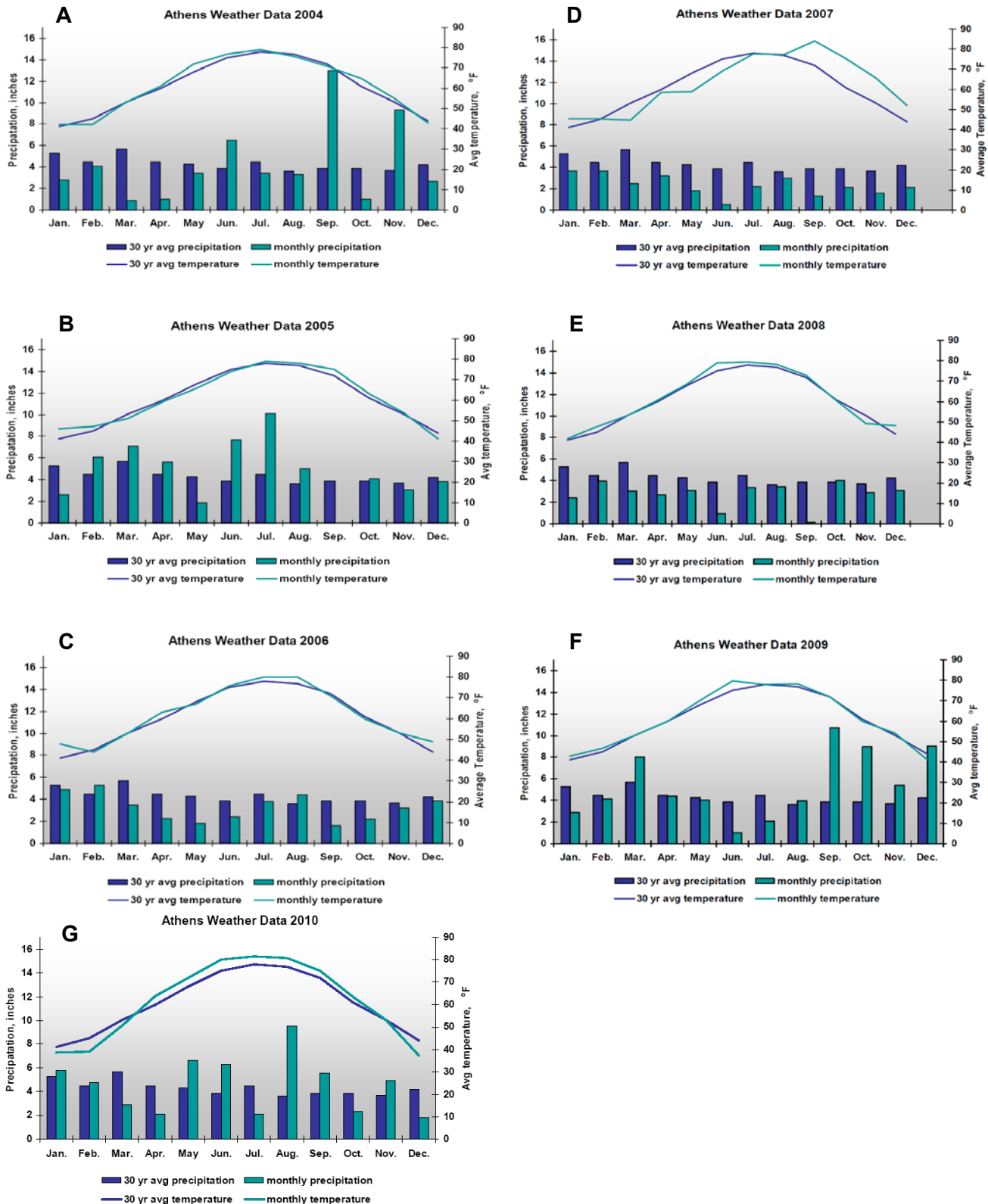


Figure 2. Weather data during the 2004 (A), 2005 (B), 2006 (C), 2007 (D), 2008 (E), 2009 (F), and 2010 (G) growing seasons in Athens.

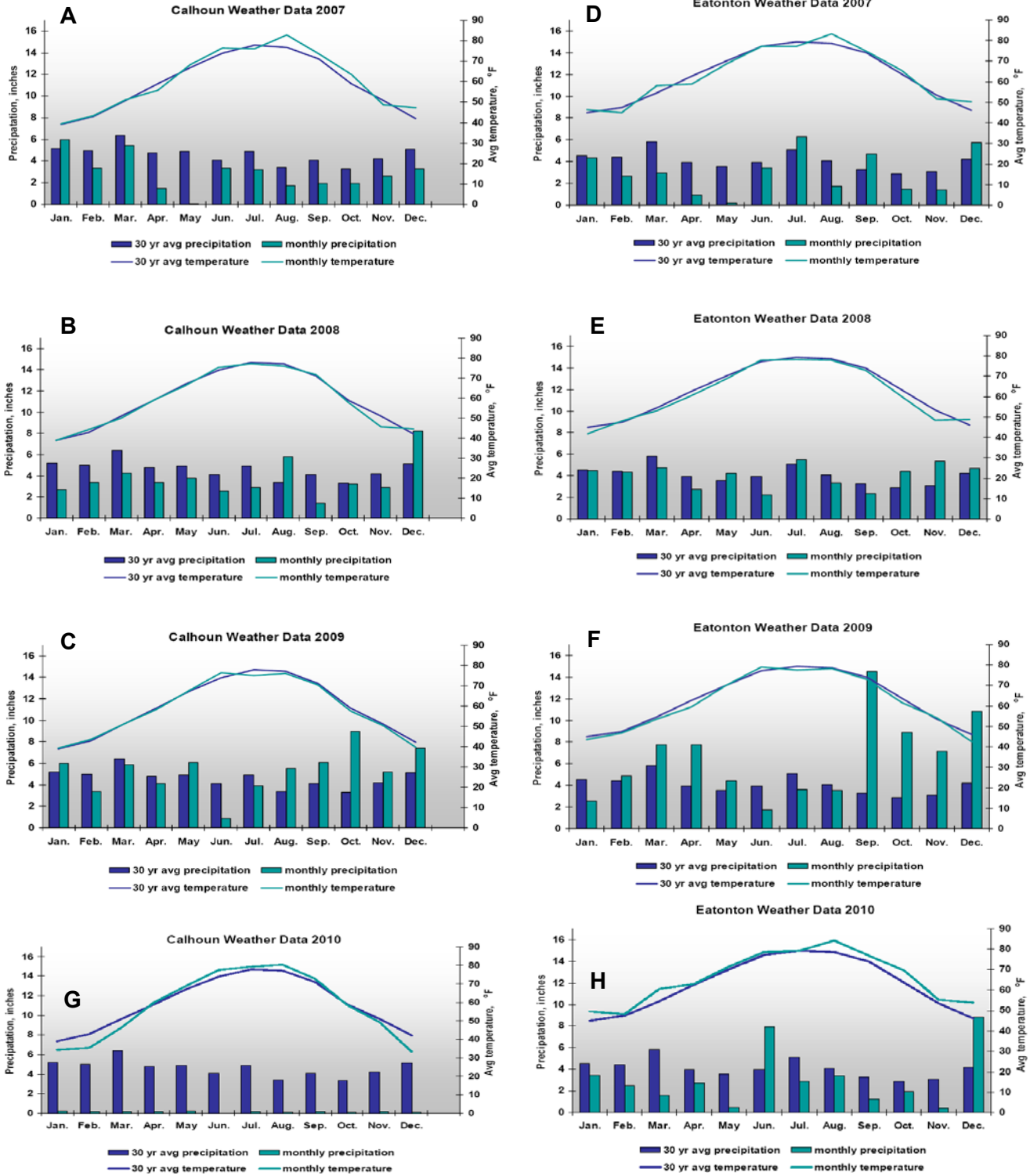


Figure 3. Weather data during the 2007 (A), 2008 (B), 2009 (C), and 2010 (G) growing seasons in Calhoun and the 2007 (D), 2008 (E), 2009 (F), and 2010 (H) growing seasons in Eatonton.

Learning *for* Life

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J. Scott Angle, Dean and Director