

Table 1. Monthly rainfall totals for Poplarville, Starkville, Newton, and Holly Springs, 2016.

Location	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>	<i>in</i>
Poplarville	3.54	6.57	11.82	6.71	3.47	3.46	7.75	7.51	5.17	0.06	0.66	2.04
Starkville	4.48	8.34	7.73	4.34	3.21	3.88	3.54	3.46	2.75	0.04	0.15	0.00
Holly Springs	0.81	1.33	8.37	0.67	1.30	0.09	7.12	3.21	1.37	2.30	3.59	3.23
Newton	3.14	5.44	9.98	6.69	3.29	4.43	4.89	5.03	0.56	0.00	3.93	2.17
MS 30-yr. avg.	4.96	4.76	5.04	4.96	4.37	4.13	4.80	4.25	3.03	3.94	4.76	5.16

Table 2. Mean high and low temperatures by month for Poplarville, Starkville, Newton, and Holly Springs, 2016.

Location	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$	$^{\circ}F$
Poplarville												
High	53	65	68	74	83	93	92	86	80	77	73	76
Low	35	42	52	55	61	65	75	71	63	55	56	45
Newton												
High	57	60	66	77	82	92	94	89	86	79	71	72
Low	31	37	43	52	56	68	71	82	68	58	46	39
Starkville												
High	52	61	70	76	82	92	94	90	93	85	70	70
Low	31	37	46	53	58	70	73	70	68	55	40	42
Holly Springs												
High	61	62	68	72	78	78	92	91	90	84	73	51
Low	24	30	38	51	56	72	70	70	59	50	38	25
MS 30-yr. avg.												
High	56	60	69	76	83	89	92	92	87	77	67	58
Low	35	38	45	52	62	69	72	71	65	53	44	37

PROTOCOL

Tall fescue, perennial clovers, and alfalfa trials across the state were established September 23 to October 9, 2015. Soil samples from each location were taken and analyzed at the Mississippi State University Soil Testing Lab. Each trial area was fertilized with lime, phosphorus (P_2O_5), and potassium (K_2O) according to soil test recommendations. Recommendations for phosphorus and potassium in grass were usually fulfilled with one application of 13-13-13. Tall fescue trials were fertilized with 350 pounds per acre of 13-13-13 at planting, followed by 50 pounds per acre of N using urea ammonium sulfate (33-0-0S) after each harvest. Plot dimensions were 6 feet \times 10 feet and planted using a precision cone seeder on a prepared seedbed. The experimental design was a randomized complete block replicated four times. Recommended seeding rates were based on pure live seed (PLS) and are presented in Table 3. All grass plots were harvested when 75% of the plots achieved 15 inches of growth. Alfalfa was harvested at 50% bloom, and clovers were harvested when 75% of

plots were 10–15 inches in height. Perennial clovers, alfalfa, and tall fescue were harvested to a stubble height of 4 inches. Plots were harvested using a Ferris “Zero-Turn” commercial mower with a bagging system collecting a 53-inch by 10-foot swath to calculate total yield. A subsample was collected and dried at 131 $^{\circ}F$ until dry to calculate dry matter percentage (DM). Data were analyzed using the general linear model (PROC GLM) of SAS, and mean separation was conducted using the least significant difference (LSD) at $\alpha = 0.05$.

Table 3. Seeding rates used in 2016 variety trials.¹

Variety	Seeding rate (PLS)
	<i>lb/A</i>
Alfalfa	20
Red Clover	12
Tall Fescue	20
White Clover	3
Wildrye	15

¹PLS = Pure Live Seed.