

Table 2. Average high and low temperatures for each location from September 2015 to June 2016.

Month	Holly Springs		Starkville		Newton		Poplarville	
	H	L	H	L	H	L	H	L
	°F	°F	°F	°F	°F	°F	°F	°F
2015								
Sept.	82	62	82	62	85	64	88	72
Oct.	73	52	76	52	76	55	77	60
Nov.	70	35	74	36	76	40	80	44
Dec.	68	36	72	37	75	41	78	46
2016								
Jan.	61	24	60	26	63	34	66	38
Feb.	62	30	65	34	68	38	72	42
March	68	38	69	40	72	47	77	48
April	72	51	68	63	75	55	78	58
May	78	56	81	58	82	61	80	63
June	78	72	84	69	88	79	86	78

PROTOCOL

Annual ryegrass, small grains, and annual clover trials across the state were established from late September until the first week of October in 2015. At all locations, soil samples were taken and analyzed by the MSU Soil Testing Laboratory. Trial areas were amended with lime and fertilized with phosphorus (P_2O_5) and potassium (K_2O) according to the soil-test recommendations for individual species. The annual ryegrass and small grain trials were fertilized with 300 pounds of 15-5-10 at the time of planting and with 50 pounds of N per acre after each harvest using urea ammonium sulfate (33-0-0S). Annual clover trials were fertilized with 50 pounds per acre of 0-0-60 (K_2O) at planting and an additional 100 pounds per acre of phosphorus (P_2O_5) and potassium (K_2O) early in the spring using 0-20-20.

Plots were 6x10 feet and planted using a precision cone seeder on a prepared seedbed. Trial design was a randomized complete block replicated four times. Recommended seeding rates were used and are presented in Table 3. All trials were harvested when 75% of the plots achieved 15 inches of growth. All plots were harvested to a stubble height of 3 inches. Plots were harvested using a Ferris zero-turn mower equipped with

Table 3. Seeding rates.

Type/Species	Seed weight
<i>lb/A</i>	
Small Grains	
Rye	100
Oat	100
Annual Ryegrass	
	30
Annual Clovers	
Arrowleaf	10
Berseem	25
Balansa	4
Ball	3
Crimson	30
Persian	8

a bagging system that collected a 4.3x10-foot swath to calculate total yield. A subsample was collected and dried at 130°F until constant weight was achieved to calculate dry matter (DM) concentration. Data were analyzed using the General Linear Model (PROC GLM) of SAS, and mean separation was conducted using LSD at $\alpha = 0.05$.