

# 2014 Evaluation of Wheat Varieties, Jay, Florida

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This report includes the summary of the 2014 wheat variety trial in Jay, Florida. It shows the performance of five wheat varieties. This data represents only one year, results should be considered over several locations and years before conclusions are valid.

## Varieties that were evaluated:

1. Terral LA754
2. Coker 9700
3. AGS 2035
4. AGS 2060
5. Baldwin

## 2014 Growing Conditions and Experimental Design

The soil type was a Red Bay sandy loam that was planted to soybean in 2013. Each wheat variety was planted on 19 Dec 2013 under conventional tillage in a randomized completed block experimental design with four replications. Plots were six rows spaced 8" apart by 25 feet long. Standard practices for wheat production were followed throughout the season. The wheat was top-dressed with 250 lb/A 32-0-0 on 3 March. Wheat density (plants/sq. ft.) and wheat height were recorded on 21 April while disease incidence as percent leaf cover was visually evaluated on 2 May. Wheat was harvested on 10 June 2014 and percent moisture and test weight for each variety was determined.

Rainfall was 2 in. below normal in December and January, normal for February, slightly above normal for March and much above normal for April and May (Table 1). Rainfall during the period December through June totaled 51.5 in., which was 12.8 in. above normal. Weather data was obtained from Florida Automated Weather Network (FAWN) station located on Jay Research Facility and normal represents the mean for the past 54 years of records.

**Table 1. Weather conditions during 2014 in Jay, FL.**

Month	Total rainfall (in.)	Average air temperature (°F)	Minimum air temperature (°F)	Maximum air temperature (°F)
December	3.3 (1.7 below normal)	52.9	26.8	79.2
January	3.4 (2.0 below normal)	42.6	15.6	72.8
February	5.0 (normal amount)	52.7	28.0	75.3
March	7.6 (1.1 above normal)	55.5	30.6	79.6
April	16.7 (11.9 above normal)	64.8	38.8	85.4
May	10.3 (5.8 above normal)	72.4	49.1	93.9
June	5.3 (2.1 below normal)	78.5	65.8	95.2

## Summary

Stand counts ranged from 30 to 36 plants/sq. ft. (Table 2). Plant height ranged from 27 in. for Baldwin to 34 in. for Terral LA754 and AGS2060. Powdery mildew ranged from 21 to 43% leaf cover. AGS 2060 and Baldwin had the least powdery mildew while LA754 had to most. Septoria blight was also present in the study area and ranged from 7 to 17% diseased leaf tissue. Baldwin, AGS 2060 and Coker 9700 had 10% or less Septoria blight while LA 754 had 17% leaf disease. Leaf rust was present at low levels of less than 5% leaf disease with no differences among cultivars.

Grain yield ranged from 50 bu/A 71 bu/A (Table 3). LA754 and AGS 2060 yielded 71 bu/A while Coker 9700, AGS 2035 and Baldwin yielded less than 60 bu/A.

**Table 2. Effect of variety on wheat emergence, plant height and disease incidence.**

Variety	Stand (plants/sq. ft.)	Height (inches)	Leaf rust (% leaf area)	Powdery mildew (% leaf area)	Septoria blight (% leaf area)
	4/21/14	4/21/14	5/2/14	5/2/14	5/2/14
Terral LA754	33	34.3	3	43	17
Coker 9700	36	30.7	2	36	10
AGS 2035	30	32.3	1	39	12
AGS 2060	34	34.3	1	21	9
Baldwin	31	27.2	1	24	7

**Table 3. Effect of variety on wheat lodging, yield and test weight.**

Variety	Lodging (%)	Yield (bu/A)	Test Wt. (lb/bu)
	6/9/14	6/10/14	6/15/14
Terral LA754	9	71	54
Coker 9700	4	50	51
AGS 2035	5	54	53
AGS 2060	8	71	59
Baldwin	6	56	53