

WHEAT VARIETY CHALLENGE

2005-06

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- Location:** Edisto Research and Education Center, Barnwell Co. SC, Field B-6 C
- Design:** RCB with six replicates; plot size 8 rows (8" spacing) x 35'
- Soil Type:** Dothan loamy sandy.
- Rotation:** 2005 strip-till corn; 2004peanut, fallow; 2003 strip-till corn, fallow; 2002 wheat, fallow.
- Planting Date:** 26 Nov 2005
- Seeding Rate:** 24 seed / row foot
- General Fertility:** 30 lbs./acre N (11.3 gal S-25) was applied 14 Nov and 60 lbs./acre N (23.0 gal S-25) was applied 10 Feb (GS 23).
- Herbicide:** 0.33 oz Express 75DF was applied 11 Jan.
- Insecticide:** Warrior T (3.87 oz /ac) applied 17 Feb.
- Methods:** Three replicates were treated with fungicide (Headline 6 oz/ac 24 March (GS 40), 9 GPA, TX 8 hollow cone nozzles) and three were left untreated.
- Disease symptoms were too low to rate in all varieties. The inner six rows of each 8-row plot were harvested 30 May with Kincaid plot combine. Yield samples were weighed on an electronic balance. Test weight was taken by funneling a sub-sample of grain through a Seedburo No. 151 filling hopper and weighing one dry pint of grain on an electronic scale. Grain moisture content was measured with a Burrows DMC-700 moisture meter. The meter was factory calibrated to measure wheat grain moisture down to 5%. All samples were below 5% thus no adjustment for moisture was made in the following table.
- Wheat maturity was determined by examining representative plants from one replicate. Heights were measured from one representative location per plot.
- Analysis:** ANOVA, using SAS PROC GLM and Fisher's protected LSD ($P=0.05$).

Table 1. Wheat variety performance, Blackville, SC 2005-2006.

Variety	Fung. Treated Yield 3 reps	Fung. Treated Test weight 3 reps	Untreated Yield 3 reps	Untreated Test weight 3 reps	Fungicide treatment yield difference	Fungicide treatment test wt. difference	Mean Yield 6 reps yld	Mean Test weight 6 reps
Pioneer 26R12	101.9	61.6	94.4	61.7	7.5	-0.1	98.2	61.7
USG 3209	97.2	60.8	97.2	60.7	0.0	0.1	97.2	60.8
Panola	101.5	59.9	92.6	59.8	8.9	0.1	97.1	59.9
SS 8308	98.1	62.2	93.6	62.2	4.5	0.0	95.8	62.2
Pioneer 26R38	97.9	60.9	93.2	60.8	4.7	0.1	95.6	60.9
SS 8404	95.3	62.5	91.5	62.3	3.9	0.2	93.4	62.4
AGS 2000	95.9	61.9	90.7	62.0	5.3	-0.1	93.3	61.9
AGS 2485	92.3	62.6	90.1	62.6	2.2	0.0	91.2	62.6
USG 3592	91.6	61.6	89.8	61.5	1.8	0.1	90.7	61.6
Macintosh	90.4	61.5	90.8	61.2	-0.3	0.3	90.6	61.4
Pioneer 26R61	93.5	62.0	87.5	61.4	5.9	0.7	90.5	61.7
Pioneer 26R31	90.7	59.9	87.6	59.5	3.1	0.4	89.1	59.7
Pioneer 2684	88.3	61.8	88.2	61.8	0.1	0.0	88.3	61.8
Dominion	87.0	60.7	88.8	60.5	-1.8	0.2	87.9	60.6
Coker b990133	89.9	61.0	82.7	60.8	7.2	0.2	86.3	60.9
SS 520	79.9	58.6	87.5	57.8	-7.6	0.8	83.7	58.2
Coker 9553	80.1	61.7	79.4	61.6	0.7	0.1	79.8	61.6
AGS 2010	75.5	61.0	78.4	61.2	-2.9	-0.1	76.9	61.1
LSD ($P=0.05$)	9.7	0.9	7.8	0.7	---	---	6.0	0.5

Planted 26 Nov 2005

3 replicates were treated with Headline (6.0 oz / acre) @ flag leaf emergence 24 March