

TRITICALE VS. WHEAT TEST 2000-01

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Location: Edisto Research and Education Center, Barnwell Co. SC, Field B-6 B.

Design: RCB with four replicates; plot size 8 rows (8" spacing) x 40'

Soil Type: Varina sandy loam.

Rotation: 1996 corn/wheat; 1997 wheat/fallow; 1998 corn/fallow; 1999 peanut/fallow; 2000 strip-till corn.

Seeding

Rate: 24 seed / row foot

General

Fertility: 35 lbs./acre P₂O₅ + 100 lbs. K₂O was applied in late October 2000. 30 lbs./acre N (11.3 gal S-25) was applied 15 Dec (early post-emergence) and 70 lbs./acre N (26.4 gal S-25) was applied 23 Feb (GS 23). Total N = 100 lbs./acre, total S = 14 lbs./acre.

Herbicide: 0.28 oz Express 75DF was applied with N on 23 Feb.

Insecticide: 3.87 oz. Warrior 1EC 5 Mar.

Methods: Plots were planted with a Hege small plot drill. Fungicide and insecticide were applied with a tractor-mounted three-point hitch sprayer delivering 20 GPA @ 35 psi through Tee Jet 8003 flat fan nozzles. The inner six rows of each 8-row plot were harvested 1 June with an Almaco plot combine. Yield samples were weighed on an electronic balance. Test weight was taken by funneling a sub-sample of grain through a Seedbuo 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. Yield of triticale based on 48 lb/bu. Wheat yield based on 60 lb/bu. All yields were adjusted to 13.5% moisture before analysis.

Analysis: ANOVA, using SAS PROC GLM.

Fisher's protected LSD was used for mean separation ($P=0.10$).

Table 1. Triticale and wheat yield and test weight, Blackville, SC 2000-01.

Cultivar	Planting date	Yield bu/ac	Test weight lb/bu
RSI 314 triticale	7 Dec	110 a	52 b
Pioneer 2684 wheat	30 Nov	87 b	60 a
Trical 498 triticale	7 Dec	85 b	47 d
RSI 351 triticale	7 Dec	66 c	48 c

Yield LSD = 5.0 bu/ac ($P=0.05$); Test weight LSD = 0.10 lb/bu.

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Means followed by the same letter are not significantly different, Fisher's protected LSD ($P=0.10$).