

2005 New Kent Wheat Strip Trial
L. C. Davis Sons, New Kent

Cooperators: Producer: Boogie and Wayne Davis
 Extension: David Moore, Middlesex, VCE; Paul Davis, New Kent/Charles City VCE
 Agribusiness: Jim Wallace, Water Quality Specialist, Colonial Soil and Water Conservation District; Berry Lewis, Gustafso

Tillage: No-till into mowed corn stalks

Row Spacing: 7" rows

Soil Type: Altavista, fine sandy loam

Variety: Nineteen different varieties

Fertilization: Pre-plant broadcast 40-80-80 October 12, 2004
 Winter N 44# 24-0-0-3 February 19, 2005
 Spring N 70# 30%UAN April 8, 2005

Herbicides: Burn down 1.5pts Gramoxone Max October 12, 2004
 Post emergence 4.75oz Osprey, .33oz Harmony GT December 5, 2004

Insecticides: 2.5oz Warrior December 5, 2004

Planted: October 26, 2004

Harvested: June 24, 2005

Variety	At Planting Seeds/lb	Harvest Notes	bu/A Yield	% Moisture	Lbs Test Weight	*Lodging
USG 3137	11,350		92.5	13.5	62	0
USG 3209	15,000		94.3	16.2	60	1
USG 3592	16,000	Heavy straw	92.3	14.1	62	3
Renwood 3260	16,800		96.9	13.2	63	2.5
Renwood 3706	14,800		104.5	13.0	62	1
Sisson	13,600		100.0	13.5	62	1.5
McCormick	14,100		92.5	13.5	64	0
Tribute	13,600	Heavy straw	102.7	13.8	63	1
Vigoro 9412	14,000		100.8	13.6	62	1
Vigoro 9510	14,000	Bearded	104.9	11.6	63	2.5
Hubner 50	12,300	Tall	99.1	13.9	61	2
Hubner 84	13,500		95.2	13.1	62	1
Hubner 32	13,600		104.1	13.4	62	1
SS 8302	12,500	Bearded	99.2	14.2	61	.5
SS 520	15,100		104.9	13.1	61	1
			2			

Variety	At Planting Seeds/lb	Harvest Notes	bu/A Yield	% Moisture	Lbs Test Weight	*Lodging
Pioneer 26R31	12,500	Short	100.8	13.2	62	0
Pioneer 26R12	13,500	Bearded	91.4	13.3	62	0
Pioneer 26R15	13,500	Bearded	93.1	12.6	62	0
Pioneer 26R58		Bearded	94.5	12.5	61	0
Averages			98.1	13.4	62	1

*Lodging 1 = 100% standing
5 = flat on ground

Discussion:

This growing season showed the excellent breeding and yield potential of many different wheat varieties. Without disease and insect pressures, you could not go wrong in selecting any of these varieties. Compare these varieties to others used in the past and at other locations before making your seed selection decisions.

No Cerone was applied to this trial and some varieties stood better than others. If the lodging rating is 2.5 or greater I would recommend a growth regulator on your better soils but not on your lighter soils such as Bojac and Conetoe.

2004-05 PRINCE GEORGE WHEAT VARIETY TRIAL

Cooperators: **Producer:** Glenn F. Chappell
Extension: Glenn F. Chappell, II
Paul Davis
Agribusiness: Pioneer, Royster Clark, Hubner,
Southern States, Renwood Farms

Date Planted: 11/15/2004
Soil Type: Emporia sandy loam
Previous Crop: Corn
Tillage/equipment: Light Disk and JD 1590 No-till drill
Variety: Various
Fertilization: Preplant 50-100-100
2/24/05 80-0-0
3/30/05 40-0-0
Crop Protection: 3/30/05 Warrior – 2.0 oz
Tilt – 4.0 oz
Harmony Extra – 0.5 oz
Date Harvested: 6/24/05

Treatment	Rep	*Bel. Lodge	Moisture	Test Wt.	Yield (bu./acre@13.5%)
Hubner 50	1	0.2	11.6	62	83.06
FFR 8302	1	0.2	11.7	62	75.76
P 26R31	1	0.2	11.9	62	79.08
Hubner 84	1	0.2	10.6	62	71.70
P 26R15	1	0.2	10.6	61.5	73.16
Sisson	1	0.2	11.8	61.5	67.45
Hubner 32	1	0.2	11.3	61.5	80.44
Tribute	1	0.2	12.4	64	68.82
Vigro 9412	1	0.2	11.7	62	76.79
McCormick	1	0.2	11.5	62	75.52
Renwood 3706	1	0.2	11.8	61	63.33
FFR 520	1	0.2	11.2	59	76.81
Renwood 3260	1	0.2	11.7	62	65.88

*Lodge ratings were taken 6/24/05 using the Belgian Lodging Scale. (0.2 = none affected and 10 = total plant affected)

Discussion:

Initial growth was slow do to the late planting and wet conditions.

2004-2005 Wheat Comparison Plot

Cooperators: Producers: Jason Benton
 Agribusiness: Participating Seed Dealers
 Extension: David Moore, VCE-Middlesex

Soil Type: Suffolk Fine Sandy Loam

Previous Crop: Corn

Planting Date: October 28, 2004 – No-Till in 7 inch rows

Fertilization: 30-70-100 at planting
 45#N March 1, 2005
 50#N March 28, 2005

Crop Protection: Burndown with 1 quart Roundup
 ½ ounce Harmony Extra March 1, 2005

Harvest Date: June 24, 2005

<u>Variety/Treatment</u>	<u>Moisture</u>	<u>TW</u>	<u>Yield @15.5%</u>
Pioneer 26R15/Raxil Thiram (Check)	15.3	61	80.8
USG 3209/Dividend Extreme	15.5	61	82.4
Renwood 3260/Dividend Extreme	15.2	61	80.7
Check	14.8	61	79.1
Tribute/Dividend Extreme	16.3	62	81.0
Check	14.5	61	78.1
Vigoro 9412/Dividend Extreme	14.3	60	81.2
Check	14.6	61	75.3
SS 520/Raxil Thiram	14.7	60	90.5
Check	14.5	61	75.7

SS 8302/Raxil Thiram	16.0	62	83.2
Check	13.9	62	74.3
Hubner H84/Dividend Extreme	14.2	62	75.0
Check	13.9	61	78.6
Hubner H50/Dividend Extreme	14.1	62	73.4
Check	14.0	61	72.5
Hubner H32/Dividend Extreme	14.1	61	85.1
Check	14.0	61	76.5
Pioneer 26R31/Dividend Extreme	14.0	61	89.5
Check	13.8	61	75.3
Sisson/Raxil Thiram	14.1	61	86.8
Check	13.9	61	78.6
McCormick/Raxil Thiram	14.9	63	78.3
Plot Average:	79.6 bushels		
Variety Average:	82.3 bushels		
Check Average:	76.8 bushels		

Discussion:

Overall a very good plot! Great test weight as was seen throughout this season. Some observations include: McCormick and USG varieties had plump, dark brown seed. Renwood variety had smaller seed. The only variety that lodged, and that was insignificant, was SS520. SS8302 experienced considerable powdery mildew during the spring, but was not treated. Overall, insect and disease pressure was low.

Westmoreland Wheat Variety Trial

Cooperators:
Producer: F. F. Chandler, Jr.
Agribusiness: Andy Kume, Pioneer Seed
 Curtis Packett, Royster Clark
 Rusty Green, Royster Clark
Extension: Sam Johnson

Date Planted: October 27, 2004
Equipment: Great Plains solid stand 12; planted at 32 seeds/row foot.
Soil Type: Suffolk
Previous Crop: Corn
Field Prep: Dyna-Drive
Fertilization: 30-50-90 broadcast at planting
 1/15, 50 lbs. N, 6 lbs. S (24-0-0-3)
 4/4, 50 lbs. N., 6 lbs. S (24-0-0-3)
Crop Protection: 4/4, Warrior T, 2.56 ozs.
Date Harvested: July 11, 2005

Variety	Seed Treatment	% Moisture	Test Wt.	Yield (bu./acre @ 13.5%)
Sisson	Raxil Thiram Storcide	12.4	57.8	84.78
Pioneer 26R31	Raxil Thiram	12.4	57.5	84.39
Southern				
States 8302	Raxil Thiram Reldan	12.4	57.7	82.04
Pioneer 26R15	Raxil Thiram	12.3	56.4	79.57
Hubner 32	Dividend Reldan	12.7	58.8	78.77
Vigoro 9412		12.7	58.4	78.24
Tribute		12.9	59.3	77.61
McCormick	Raxil Thiram Storcide	13.1	59.5	75.46
Southern				
States 520	Raxil Thiram Reldan	12.3	56.4	74.62
Hubner 84	Dividend Reldan	12.6	57.7	74.36
Hubner 50	Dividend Reldan	12.7	56.9	72.76
Campbell 9455		12.4	56.7	64.98

Discussion:

Another variety plot with very good yields. Test weights held up very well considering the lateness of harvest and the fact that the plot received significant rainfall after the varieties matured.

2005 CHESAPEAKE WHEAT VARIETY COMPARISON

Cooperator: **Producer:** G. C. Nicholas, Jr.
Extension: Watson Lawrence - VCE - Chesapeake
Date Planted: October 26, 2004
Previous Crop: Corn
Tillage: Switch Plow, Disk & Culti-packer
Soil Type: Sassafras fine sandy loam
Fertilization: October 6, 2004 – 400 lbs. 5-15-20 pre-plant
 March 15 – 90 lbs. Nitrogen (30%)
Crop Protection: December 9, 2004 – Osprey 4.75 oz/acre + 1 qt. Nitrogen/acre
 + non-ionic surfactant
Date Harvested: June 23, 2005

<u>VARIETY</u>	(%) <u>MOISTURE</u>	(lbs.) <u>TEST WT.</u>	*(%) <u>MILDEW</u>	** <u>TILLERING</u>	(bu./A) <u>YIELD</u>
Tribute	16.4	60	0	E	86.45
Sisson	16.0	59	0	F	80.40
SS 550	16.4	59	0	F	75.60
McCormick	16.3	61	0	G	74.63
Century II	15.9	59	20	G	74.62
SS 8302	15.9	59	2	G	72.23
Coker 9184	16.2	61	0	G	70.76
Hubner 50	16.1	59	8	F	70.15
Coker 9295	16.7	59	0	F	69.74
Hubner 84	16.2	59	5	E	62.21

*Powdery Mildew: 0-100% of leaf area

**Tillering Rating: F = Fair; G = Good; E = Excellent

Discussion: Varieties were planted October 26 under good conditions. Century II showed the best seedling vigor of all varieties. Varieties were rated for powdery mildew on May 3rd showing considerable differences in susceptibility. Note the top four varieties Tribute, Sisson, SS 550, and McCormick, showed natural resistance to mildew. Coker 9184, and Coker 9295 also showed good resistance. No fungicide was applied for mildew control. Subsequently, SS 8302, Hubner 84, and Hubner 50 had moderate powdery mildew present. Century II had significant powdery mildew present which retarded its good early season vigor advantage. There were no other pest problems this year requiring treatment. Standability was excellent for all varieties. Good test weights this year were recorded for all varieties in contrast to last year when scab was prevalent. Note McCormick, Coker 9184, and Tribute all had excellent test weights, which are consistent with those varieties. Tribute is the yield leader for the second year in a row in this Chesapeake comparison.

Summary of Wheat Variety Demonstration Plots in Eastern Virginia for 2004-05

Discussion:

During the 2004-05 wheat producing year, extension agents in eastern Virginia planted 5 on-farm wheat variety demonstration plots in cooperation with farmers and agribusiness representatives. Plots were located in the following counties: Chesapeake, Middlesex, New Kent, Prince George, and Westmoreland. Following is a summary of all of the varieties that were planted in at least 3 locations. Producers should also review the data from each individual plot location as there was a significant difference in yields between locations. In addition to yield and test weight, producers should also consider maturity, height, standability, and disease resistance when selecting varieties the 2005-06 growing season. The best source of information for wheat variety selection for Virginia conditions is Virginia Cooperative Extension Publication # 424-001, "Small Grains in 2005."

Variety	# of Locations	Test Weight (lbs.)	%Moisture	Yield (bu./acre@13.5%)
Pioneer 26R31	4	60.6	12.9	88.5
Hubner 32	4	60.8	12.9	87.1
SS 520	4	59.1	12.8	86.7
Vigoro 9412	4	60.6	13.1	84.3
Sisson	5	60.3	13.6	83.9
Tribute	5	61.7	14.4	83.3
SS 8302	5	60.3	14.0	82.5
Pioneer 26R15	3	60.0	11.8	82.0
McCormick	5	61.9	13.9	79.3
Hubner 50	5	60.2	13.7	78.9
Hubner 84	5	60.5	13.3	75.7