2012 Wheat Variety Performance & Recommendations

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These recommendations are based on tests conducted in North Carolina in the 2010-11 and 2011-12 growing seasons. These include tests by the NC Official Variety Testing Program (OVT)[1], Gaylon Ambrose[2], Georgia Love[3], Andrew Gardner[4], Randy Weisz[5], and the Northeast Ag Expo[6]. We collect yield and test weight data at every location, and update heading date and pest resistance information about each variety. Our goal is to keep this information as up-to-date as possible. Our variety rankings are not always the same as those reported in the OVT, because 1) we use additional tests not available to the OVT, 2) we may exclude some locations used in the OVT, and 3) we examine both variety yield and stability of performance across years and regions.

Plant At Least Three Varieties: The "Above-Average Yielding" varieties are good first choices for 2012 (see Table 1). Additionally, the "Average Yielding Varieties" are likely to produce acceptable yields but may not win a yield contest. To help with disease management, make a note of which varieties you plant where.

Avoid Spring Freeze Damage: Early-heading varieties are the most likely to be damaged by spring freezes. Conversely, late-heading varieties are likely to avoid freeze damage. To reduce the risk of yield loss due to freeze damage, plant no more than one early heading variety, and at least one late-heading variety. Late-heading varieties yield best when planted early and should be the first ones planted. Early-heading varieties should be planted on the late side and so should be the last ones drilled in.

Make Variety Resistance Part Of A Disease Management Plan. In the last two years we have had unusually warm winter weather that was ideal for diseases like powdery mildew and leaf rust. Growers need to consider these diseases when they select varieties. Growing varieties rated "MR" or "R" to these diseases (in Table 1) can go a long way toward preventing yield losses. In our variety tests where leaf rust was problematic, and we applied a fungicide for disease control, the highest yielders were often those that had resistance to this disease. If you experience diseases like powdery mildew or leaf rust frequently on your farm, growing varieties with resistance to these diseases is important even if you plan on using a fungicide! Head scab can cause big losses any year in any part of the state, so minimize plantings of varieties rated "S" to scab. Additionally, if a field has ever had symptoms of soilborne wheat mosaic virus or wheat spindle streak mosaic virus, it is very important to always plant varieties rated MR or R for those diseases in that field.

Need More Information On Variety Selection or Disease Management? Check the *Small Grain Production Guide 2011-12*, go to the small grain production website at http://www.smallgrains.ncsu.edu, or call your local county Extension office. Information on variety height can be found at http://www.ncovt.com.

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[1] 2011 OVT tests in Beaufort, Rowan, Perquimans, and Lenoir Counties & 2012 OVT tests in Lenoir and Rowan Counties.

[2] Beaufort County Cooperative Extension 2011 test.

[3] Small Grains Extension Associate, Robeson County 2011 & 2012 tests.

[4] Union County Cooperative Extension, 2011 test.

[5] Small Grain Specialist NCSU, 2012 Rowan County test.

[6] The 2011 Northeast Ag Expo test was in Hertford, NC.

Table 1. 2011 & 2012 Wheat Variety Performance

Wheat Variety[1]	Test Weight[2]	Heading Date	Pest Resistance To[4]								
			Powdery Mildew	Leaf Rust	SNB[3]	Hessian Fly	BYDV	Soilborne Wheat Mosaic	Wheat Spindle Streak	Head Scab	Stripe Rust
Above Average Yielding (88 to 94 Bushels per Acre)											
AGS 2035	ave	early	MS	R	MS	good	MR	MR	MS	MS	MR
DG 9012	ave	late	MS	MR	S		MR			MR	
DG Shirley	-	late	R	MR	S	fair	MR	MR	R	MS	S
FthrStn VA258	ave	medium	MR	R	MR		S			S	
NC Cape Fear	+	early	R	MS	MR	fair	MR	MR	R	MS	S
P 26R20	+	late	MR	R	MS	good-fair	S			S	
Prog 870	-	late	MS	MS			MR			S	
SS 8340	+	late	MR	MS	MR		MS			MR	
Terral TV8861	ave	late	MS	MS	MS		MR			MS	
USG 3120	+	early	MS	R	MR		MR		MR	S	
Above Average Yielding But Less Consistent											
DG Dominion	ave	medium	R	S	MR	fair-poor		R	MS	MR	MR
Oakes	+	medium	MS	MS	MR	fair	MS	S	MS	MR	
P 26R10	-	late	MS	MR			MS			MS	
SS 8500	ave	late	MS	MR	MS		MR			MS	
Terral TV8535	-	late	MS	MS	S		MR			MS	
Terral TV8848	ave	late	MS	MR	MR		MR			MR	
USG 3438	-	medium	MR	MR	MR		MR			MS	
USG 3555	-	medium	MR	S	MS	fair-poor	MR	MR	R	MR	R
Average Yielding (86 to 87 Bushels per Acre)											
AGS 2026	ave	early	MS	R	S	good	MR	MR		S	R
DG 9053	-	late	MS	MS	S		MS			MS	
DG 9171	-	late	MR	MR	MS		MR			MR	
DG Baldwin	ave	medium	MS	R	MS	good	MS	MR	R	MS	MR
NC Yadkin	ave	late	R	MR	MS	fair	MS	MR	R	MR	MS
P 26R12	+	late	MS	S	MS	good	MR	MR	MR	S	MS
P 26R22	-	late	MS	S	MS	fair-poor	MS	MR		MS	R
SS 520	-	early	MR	S	MS	poor	S	S	R	S	S
SS 5205	+	medium	MS	MR	MS	poor	MR		MR	MS	R
SS 8404	+	medium	MS	R	MS	fair-poor	MR	MR	S	S	S
SS 8641	+	medium	R	R	MR	fair-poor	MR	MR	MS	S	MR
SS 8700	-	late	MR	S	MR	fair-poor	MR			MS	
SY 9978	-	late	MR	MS	S	good	MR			S	
Terral TV8525	+	late	MR	MR	MS		MR			MR	
USG 3201	ave	late	MS	MR	MS		MR			MR	
USG 3209	ave	early	MR	S	MS	poor	MS	MR	R	MS	MS
USG 3592	+	medium	MS	R	MS	fair	S	MR	R	S	MS
Below Average Yielding (80 to 85 Bushels per Acre)											
AGS 2056	-	late	MS	MR	S		MR			MS	
C 9553	+	medium	MS	MS	MS	fair-poor	MS	MR	MS	MS	MR
C 9804	-	medium	MS	MR	S	poor	MS		MS	S	
NC Neuse	+	late	R	MR	MR	good	MS	MR	MS	MR	MS
P 25R32	+	late	MS	MR	MR	good-fair	MS			MR	
P 26R15	-	late	MR	R	MS	good-fair	S	MR	R	MR	MR
Prog 117	ave	medium	MS	S	S	poor	MS		R	MR	
Prog 125	ave	early	MS	MS	S		MR			S	
Prog 185	ave	late	MS	MS	MR	poor	MS		MR	MS	S
Prog 357	-	late	MS	S			MR			S	
SS 8302	ave	late	MS	S	MS	fair		MS	MR	MR	R
SS 8308	+	late	MR	MS	MS		MS			S	
Terral TV8626	-	late	MS	S	MS		MR			MS	
USG 3409	ave	medium	MR	S	MS		MR			S	
USG 3665	-	medium	MR	R	S	good-fair	MR	S	R	MR	MS
VA Jamestown	+	early	MR	MS	MS	fair	MR	MS	MS	MR	MR
VA Merl	+	late	MR	MS	MS		S		R	S	

1. Listed alphabetically within groups: AGS = AgSouth Genetics; C = Coker; DG = Dyna-Gro; FthrStn = Featherstone; P = Pioneer; Prog = Progeny; SS = Southern States; SY = Syngenta; USG = UniSouth Genetics.
2. For test weight "+", "ave", and "-" stand for above average, average, and below average, respectively.
3. SNB stands for Stagonospora nodorum blotch.
4. S, MS, MR, & R stand for Susceptible, Moderately Susceptible, Moderately Resistant, & Resistant, respectively.

Recommendations For Very Early Planting

We have been testing a system for planting wheat before soybean harvest. This means planting 10 to 14 days earlier than would normally be considered appropriate for wheat. The system consists of:

1) planting at a 2/3 normal seeding rate,
2) planting only seed treated with an insecticidal seed treatment such as GauchoXT or Cruiser/Dividend,
3) planting about September 29th in the Piedmont and around October 8th in the Coastal Plains and Tidewater, and
4) most importantly, *only planting late-heading varieties*.

Four-year variety performance data at Salisbury North Carolina for this system are shown in Table 2.

Table 2. Very-early-planting variety test results from Salisbury NC. Tests planted on Sept. 29th using reduced seeding rates, GauchoXT, and only late heading varieties.

Wheat Variety†	Yield (bushels per acre)			
	2012	2011	2010	2009
P 26R20	109.0			
DG 9053	105.9			
P 26R12	101.3	131.5	99.7	106.1
DG Shirley	101.2	133.2	102.8	
Branson	98.1	131.3		
P 25R32	93.6	127.2		
USG 3665	91.2	133.5	92.2	102.4
C 9436	91.1	130.3	86.9	85.5
VA Merl	90.6	133.2	92.9	
P 26R15	90.6		82.4	99.0
SS 8302	90.4	132.6	97.1	102.6
ARS Appalachian White (Hard Wheat)	66.6			
DG V9713		128.2	90.0	99.5
NC Yadkin		122.6		
NC Neuse		118.4	87.5	86.4
USG 3725			91.1	
VA Roane			85.8	93.5

† Listed alphabetically within groups: ARS = USDA; C = Coker; DG = Dyna-Gro; P = Pioneer; SS = Southern States; USG = UniSouth Genetics.

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