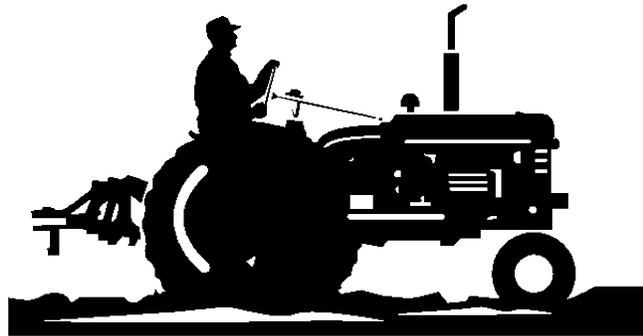


# FIELD CROPS NEWSLETTER

September 2015



## 2015 Wheat Variety and Performance Data

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While it may seem early to be thinking about wheat variety selection, it's already September! "Prime wheat planting" dates for Onslow County are October 25-November 4 depending on where in the county you are located. Below is a list of recommendations to consider when selecting wheat varieties based on previous year's research data from Dr. Ron Heiniger, NCSU, and Dr. Christina Cowger, USDA-ARS. Data is collected on yields and test weight at every location, and heading date information is collected each year. Pest resistance information is updated whenever possible. Dr. Heiniger and Dr. Cowger's rankings are not always the same as those reported in the OVT, because 1.) they may use additional tests not available to the OVT, and 2.) they may exclude locations used in the OVT.

**Plant At Least Three Varieties:** The "Above-Average Yielding" varieties are good first choices for 2014 (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 should be the last ones drilled in.

**Reduce the Risk of Head Scab.** Head scab can cause yield losses, low test weight, and load rejections due to high vomitoxin any year in any part of NC. The best way to minimize this risk is to plant varieties rated “MR” to head scab (Table1). If weather makes scab risk high, fungicides may be recommended at flowering. However, even if selected, timed, and applied correctly, they can only reduce scab damage, not eliminate it. Consequently, we recommend mainly planting varieties rated "MR" to scab. See [www.smallgrains.ncsu.edu/head-scab.html](http://www.smallgrains.ncsu.edu/head-scab.html) for more information.

**Maximize Yield By Managing Powdery Mildew or Leaf Rust.** Research has shown that when powdery mildew or leaf rust is developing, the combination of varieties rated “R” or “MR” (in Table 1) **and** a fungicide application leads to the highest yields. Selecting varieties with resistance to these diseases is always a good idea. See [www.smallgrains.ncsu.edu/video-library.html](http://www.smallgrains.ncsu.edu/video-library.html) for more information about these diseases. (Note that these diseases are less common in the Piedmont.)

**Are Soil Virus Diseases Important?** In 2014, we saw 14% lower yields for varieties rated “S” compared to those rated “MR” for wheat spindle-streak mosaic virus in an infested field. Once a field has soil virus symptoms, it is important to plant varieties rated MR or R to that particular virus.



**Table 1. 2014 and 2015 Wheat Variety Performance**

Wheat Variety	Test Weight	Heading Date	Pest Resistance To									
			Powdery Mildew	Leaf Rust	Head Scab	Hessian Fly Blotyle-L	SNB	Soilborne Mosaic Virus	Spindle Streak Virus	Barley Yellow Dwarf Virus	Stripe Rust	Tan Spot
Above Average Yield												
AgMX 415	+	MED	MS	MR	MR	FAIR	MR	MS	MR			MR
AgMX 446	+	LATE	MS		S	EXCELLENT	S	S				
DG 9552	+	LATE	MS		MS		MS	MS				
DG Shirley	-	LATE	R	MR	S	POOR	MR	MR	MR	MR		
DG 9223	-	MED	MS	S	MS	POOR	MR	MS	MR			S
Harvey's AP 1871E	ave	LATE	MR		MS		S	MS				
P 26R10	+	LATE	MS	MS	MS	EXCELLENT	MR	MR	R	MS		MR
P 26R20	+	LATE	MR	MR	S	GOOD	MR	R	MR	S		MR
P 26R53	ave	MED	MS	MS	MS	FAIR	S	MS	MR	MS		MS
S Harvest 4400	+	LATE	MS		MS		S	MS				
SS 8360	ave	LATE	MS		MS	EXCELLENT	MS	S				
SY Harrison	-	MED	S	S	MR	GOOD	MR	MS	MR	MR		MR
USG 3895	+	MED	S		MS		MR	MS				
USG 3251	ave	LATE	MS	MS	S	FAIR	MR	MR	MR			MR
USG 3201	+	MED	MS	MR	MS	FAIR	MS	MR	MR	MR		MS
USG 3523	ave	LATE	MS	S	MR	GOOD	MR	MR	MR			MR
USG 3404	-	LATE	MS	MS	MR	EXCELLENT	MR	MS	R			MR
Above Average Yield But Less Consistent												
AgMX 413	-	MED	MS	MS	MS	POOR	S	MS	MR			MR
AgMX 444	-	LATE	MS	R	MR	POOR	MR	MS	R			MR
Fthstone VA-258	-	MED	MR	R	S	POOR	MR	MR	MR	S		S
S Harvest 4300	+	LATE	MS		MR		MR	MS				
SS 8340	+	MED	MS	MS	MR	POOR	MR	MR	MR	MS		MS
USG 3993	+	MED	MR	MR	MR	FAIR	MR	MR	MR			MR
USG 3120	+	EARLY	R	R	S	GOOD	S	MS	S	MR		S
Average Yielding												
AgMX434	-	MED	MS	S	MS	GOOD	S	MS	MR			MR
DG9522	ave	LATE	MR		MR		MS	MR				
Fthstone 73	-	LATE	MR		MR	GOOD	MR	MS				
Lgrain LCS NEWS	-	MED	MR		MR		MR	S				
Prog P 870	-	MED	MR	MS	S	POOR	MS	MR	MR	MR		MR
Prog P 357	-	LATE	S	S	MS	FAIR	MR	R	R	MR		MR
SS 8500	+	LATE	MS	MR	S	FAIR	MR	MS	MR	MR		S
SY 9978	-	MED	R	MS	S	EXCELLENT	MR	S	MR	MR		MS
SY Oakes	+	MED	S	MS	MR	POOR	MR	S	MS	MS		MS
USG 3833	-	LATE	S	S	MS	GOOD	MR	MR				
USG 3756	-	MED	MS		MR		MR	MS				
USG 3612	+	MED	MS		MS	FAIR	MR	MR				
Below Average Yielding												
AgMX 427	-	MED	MR	S	MS	POOR	MR	MR	MS			MS
AGSouth AGS 2027	+	EARLY	MR	R	MS	GOOD	S	MS				MS
Armor Havoc	-	MED	MR		MR		MS	MS				
DG Savoy	-	EARLY	MR		MS	GOOD	S	MS				
Harvey's AP 1882E	-	LATE	MR		MR		MR	R				
Lgrain LCS 2347	ave	LATE	MS		MR		MR	MS				
Lgrain LCS 2214	ave	MED	MR		S		S	MS				
NC Yadkin	+	LATE	R	MR	MR	POOR	MR	MR	R	MS	MS	S
P 25R32	ave	LATE	MR	MS	MR	GOOD	MR	MR	R	MS		MR
Prog P 117	-	MED	S	S	MS	POOR	S	S	MS	MS		S
Prog P 410	-	LATE	MS		MR		MR	MS				
S Harvest 555	+	MED	MR		S		MS	MS				
S Harvest 3200	+	MED	R		MR		MR	MS				
SS 8404	+	MED	MR	R	S	FAIR	MS	S	MS	MR	S	MS
SS 520	+	EARLY	MR		S		S	S				
SY Cypress	ave	EARLY	MR		MS		S	MS				

- Listed alphabetically within groups: AgSouth = AgSouth Genetics; AgMX = AgriMAXX; DG = Dyna-Gro; Fthstone = Featherstone; Lgrain = Limagrain; P = Pioneer; Prog = Progeny; S Harvest = Southern Harvest; SS = Southern States; SY = Syngenta; USG = UniSouth Genetics.
- For test weight "+", "ave", and "-" stand for above average, average, and below average, respectively.
- SNB stands for Stagonospora nodorum blotch. S, MS, MR, and R stand for Susceptible, Moderately Susceptible, Moderately Resistant, and Resistant.

## **Corn and Soybean Yield Contests**

Just a reminder that the 2015 Corn and Soybean Yield Contests for Onslow County and the NC State are now active.

To be eligible for the corn and soybean contests, you must grow one acre or more of corn (No. 2) or soybeans in North Carolina. Only one entry per farm unit is eligible for an award, but several applications may be submitted if production practices are different.

Please call me to set up a time to come out and measure off your fields for the contest. What better way to “show off” your hard work! Let’s put Onslow County on the map with some HIGH yields! ☺

### **Soybean Rust Update**

**August 31, 2015**

*Jim Dunphy, Extension Soybean Specialist*

Several confirmations of Asiatic Soybean Rust on soybeans came in over the weekend. Since the finds mentioned in the August 21 update, rust has been confirmed on soybeans in Jefferson County, FL, and Franklin, Lee, Hinds, Pike, and Tippah counties in MS. Lee and Tippah counties are in the northeast corner of MS, and about 265 miles from Cherokee, and 455 miles from Charlotte. All the announced finds to date are more than 400 miles from Elizabeth City, Fayetteville, Raleigh, Washington, Wilmington, and Winston-Salem.

I do not consider these confirmations to signal any imminent threat to NC soybeans. I still consider Steve Koenning’s (recently retired Extension Plant Pathologist) and my recommendation to not spray soybeans that have not yet bloomed, nor blooming soybeans that are more than 100 miles from confirmed presence of rust on soybeans, to be a valid recommendation for most soybeans in NC.

The current status of rust in the continental US can be found anytime at <http://sbr.ipmpipe.org>.

## **On-Farm Tests and Demonstrations**

A special THANKS to the cooperators who have taken time out of their “already hectic” schedules to help provide us with further research and data on a local level. Thank you also goes out to NCSU Extension Specialists, NCSU Extension Technicians, and Commercial Seed Companies that without their support, these tests and demonstrations would not be possible.

### Multi-County Corn Variety Tests Plots

Barry Shepard (Jacksonville) and Donnie Riggs (Maysville)

18 different corn varieties were planted at 8 locations across the Southeast District. Maturity dates ranged from 113-118 days.

### Soybean Variety Test Plot

Ricky Watkins (Richlands)

12 different varieties were planted at this location. Maturity group dates range from 5-8.

### Soybean Uniform Emergence Test

Ronnie Cox (Richlands)

This test looks at the importance uniform emergence plays on increasing yields.

**Thank You!**