

TITLE: Potential Yield Enhancements

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REPORT: In 2005, replicated tests were established in Davie, Pasquotank (& Camden, Chowan, Currituck, Gates, and Perquimans), Onslow, and Wayne counties to compare yield and profitability of 2 seed treatments, 7 inoculants, 200 lbs. N per acre, Temik in-furrow, and Quadris fungicide with and without Warrior insecticide. Yields obtained are shown in the table below.

**Potential Yield Enhancements
North Carolina, 2005**

Treatment	Yield - Bu/A					2004 Avg. **	2004-05 Avg.
	2005 *						
	Davie	Onslow	Pasq.	Wayne	Avg.		
Check	28.2	47.2	62.2	15.5	38.3	50.8	43.6
Vault	29.2	45.9	62.6	16.7	38.6		
Nod +	28.8	47.2	62.5	15.6	38.5	51.1	43.9
Nod + W/Extender	29.0	46.9	62.1	17.9	39.0	50.6	44.0
BU EXP - S1	28.2	47.3	62.4	16.2	38.5		
Optimize - B	29.6	47.5	63.6	16.3	39.3	51.1	44.3
Optimize - N	30.0	46.7	62.3	17.0	39.0	50.0	43.7
NitraStik Sterile	29.2	45.2	63.1	16.9	38.6	51.5	44.1
Cell Tech	29.2	47.6	64.6	15.7	39.3	51.0	44.3
200 Lbs N/A	29.0	45.1	65.7	13.7	38.4	50.6	43.6
Quadris	26.5	48.2	63.4	18.5	39.2	52.3	44.8
Warrior	26.2	50.6	63.3	17.4	39.4	50.1	44.0
Quadris/Warrior	27.3	49.0	63.5	18.9	39.7	53.3	45.5
Temik	26.8	48.7	62.5	17.3	38.8	49.6	43.4
CruiserMaxx Pak	26.3	44.1	62.8	15.7	37.2		
Stiletto	25.9	47.8	62.9	17.0	38.4	50.5	43.6
LSD (p=0.05)	3.0	3.6	3.0	2.8			
Std. Dev.	2.1	2.5	2.1	2.0			
CV	7.5	5.4	3.4	11.9			

* County data shown are 4-rep averages. 'V622NRR' was planted no till on June 7 in Davie County. 'DP 5915 RR' was planted conventionally on May 13 in Onslow County. 'RT 5930N' was planted conventionally on June 21 in Pasquotank County. 'USG 7582nRR' was planted no till on May 17 in Wayne County.

** 2004 yields are the average of Gates, Pamlico, and Wake Counties.

None of the inoculants produced yields more than 1.0 Bu/A different from either the untreated check (50.8 Bu/A), or 200 lbs/A of nitrogen fertilizer (50.6 Bu/A). Neither did Temik, nor any of the three fungicide seed treatments. Quadris foliar fungicide produced 1.5 Bu/A more than the check. Warrior insecticide produced no higher yields, but the combination of Quadris and Warrior produced 2.5 Bu/A more than the check.

Plot signs were put up in at least one replicate of all tests, to let interested parties check on the results to date at their leisure. All sites were labeled as an Extension on-farm test site, and as a test supported by the North Carolina soybean checkoff funds.

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