



## Result Demonstration/Applied Research Report

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### ROUNDUP READY FLEX® COTTON VARIETY DEMONSTRATION

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#### **SUMMARY**

Eight Roundup Ready®, Roundup Ready Flex® and stacked cotton varieties were compared under similar field conditions. Deltapine 444 BR and Deltapine 117 B2RF were the highest yielding varieties. Deltapine 110 RF had the highest loan value of 57.60 cents per pound. Bollworm activity was heavy in these plots so the Roundup Ready® alone plots were damaged more and yields were lower.

#### **PROBLEMS**

Area cotton producers are continually searching for a cotton variety that will increase net profits through increased yields and fiber qualities. Higher strength and longer staple are the primary characteristics they are looking for. The introduction of the Roundup Ready Flex® varieties this year added another set of varieties to be tested for agronomic characteristics.

#### **OBJECTIVE**

To find a cotton variety that will increase net profit with an increase in yield and fiber qualities. These varieties must also fit the limited irrigation of the St. Lawrence cotton growing region. To determine if the Roundup Ready Flex® varieties had similar yield and qualities as other similar varieties.

## **MATERIALS AND METHODS**

The field used for this test was drip irrigated and received 5 inches of pre-irrigation. The varieties were planted in 8 row plots to a solid pattern on 40" spacing on May 20<sup>th</sup>. The field had Prowl H<sub>2</sub>O<sup>®</sup> broadcast, Direx<sup>®</sup> banded and RoundupUltra Max<sup>®</sup> applied for weed control. The plots received 5 inches of summer irrigation. The plots were fertilized with 90 units of Nitrogen and 3 gallons of Phosphoric Acid per acre during the season. No insecticide was applied during the season. Two applications of Mepiquat Chloride (20 oz) were applied in August. The plots were defoliated with Def<sup>®</sup> (1 pt.) & Prep<sup>®</sup> (1.5 pt.) and desiccated with Gramoxone Max<sup>®</sup> (21 oz). They were stripper harvested on November 21<sup>st</sup> and weighed in a boll buggy. Samples were ginned and fiber samples were sent off for classing.

## **RESULTS, DISCUSSION AND ECONOMIC ANALYSIS**

As seen in Table 1, the yields in this plot ranged from 1002 lb/acre to 1524 lb/acre. The higher yielding varieties were Deltapine 444 BR and Deltapine 117 B2RF. Loan values ranged from 54.20 cents to 57.60 cents per pound with Deltapine 110 RF being the highest.

Bollworm activity was high in this field so the Bollgard<sup>®</sup> and Bollgard II<sup>®</sup> varieties had considerably higher yields than the Roundup Ready<sup>®</sup> alone varieties. The Roundup Flex<sup>®</sup> varieties had similar yield and qualities as the Roundup Ready<sup>®</sup> varieties.

## **ACKNOWLEDGMENTS**

The authors would like to thank Mr. Floyd Schwartz for cooperating in this demonstration.

They would also like to thank the seed companies who donated the seed.

TABLE 1: YIELD QUALITY AND ECONOMIC DATA FOR STANDARD VARIETY TEST,  
FLOYD SCHWARTZ FARM 2005.

Planted 5-20-05  
Harvested 11-21-05

VARIETY	YIELD	% LINT	GRADE	LEAF	STAPLE	MIC	STRENGTH	UNIFORMITY	LOAN VALUE	VALUE/ ACRE
Deltapine 444BR	1524	37.1	31	2	35	3.7	26.7	81.3	56.35	858.77
Deltapine 117B2RF	1472	31.8	31	2	36	3.6	27.5	80.9	56.90	837.57
Deltapine 488BR	1461	35.0	31	1	35	3.9	27.2	81.3	56.35	823.27
Deltapine 113B2RF	1454	31.4	31	1	35	3.5	27.2	80.2	56.10	815.69
Deltapine 143B2RF	1395	31.9	31	1	35	3.6	27.2	80.2	56.10	782.60
Deltapine 432R	1155	32.2	31	1	36	3.8	29.2	82.0	57.15	660.08
Deltapine 110RF	1056	32.4	31	2	36	3.5	30.7	82.6	57.60	608.26
Deltapine 108RF	1002	32.7	31	1	35	3.3	28.7	80.9	54.20	543.08

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