



## **Result Demonstration/Applied Research Report**

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### **ROUNDUP READY FLEX® COTTON VARIETY DEMONSTRATION**

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#### **SUMMARY**

Eight Roundup Flex®, Roundup Ready® and stacked cotton varieties were compared under similar field conditions. Deltapine 143 B2RF and Deltapine 164 B2RF were the highest yielding varieties. Deltapine 494 R had the highest loan value of 58.05 cents per pound.

#### **PROBLEMS**

Area cotton producers are continually searching for a cotton variety that will increase net profits through increased yield and fiber qualities. Higher strength and longer staple are the primary characteristics they are looking for. With the introduction of Roundup Ready Flex® varieties this year, they needed to be compared to determine if they have similar yield and qualities.

#### **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.

## **MATERIALS AND METHODS**

The field used for this test was drip irrigated and received no pre-irrigation. The varieties were planted in 6 row plots to a 2X1 pattern on 40" spacing on May 18<sup>th</sup>. The field had Treflan<sup>®</sup> broadcast, Caparol<sup>®</sup> & Direx<sup>®</sup> banded and RoundupUltra Max<sup>®</sup> applied for weed control. The plots received 6 inches of summer irrigation. The plots were fertilized with 35 units of Nitrogen per acre during the season. Asana<sup>®</sup> was applied one time on the non-Bt varieties for worm control. The plots were defoliated with Def<sup>®</sup> (1.5 oz.) & Prep<sup>®</sup> (1.5 pt.) and desiccated with Gromoxone Max<sup>®</sup> (1 pt). They were stripper harvested on November 1<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 1247 lb/acre to 1881 lb/acre. The higher yielding varieties were Deltapine 143 B2RF and Deltapine 164 B2RF. Loan values ranged from 56.35 cents to 58.05 cents per pound with Deltapine 494 RF being the highest.

Bollworm activity was high in this field so the Bollgard<sup>®</sup> and Bollgard<sup>®</sup> varieties yielded substantially higher than the non-Bt varieties. There was not much difference in the agronomic characteristics of the Roundup Flex<sup>®</sup> varieties.

## **ACKNOWLEDGMENTS**

The authors would like to thank Mr. Roland Halfmann 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,  
ROLAND HALFMANN FARM 2005.

Planted 5-18-05  
Harvested 11-01-05

VARIETY	YIELD	% LINT	GRADE	LEAF	STAPLE	MIC	STRENGTH	UNIFORMITY	LOAN VALUE	VALUE/ ACRE
Deltapine 143B2RF	1881	30.7	31	1	38	3.8	27.2	81.8	57.35	1078.75
Deltapine 164B2RF	1778	29.5	31	2	37	4.1	29.1	83.7	57.70	1025.91
Deltapine 555BR	1701	32.7	31	1	35	3.8	27.4	81.3	56.35	958.51
Deltapine 156B2RF	1509	29.2	31	1	36	4.1	26.3	81.7	57.15	862.39
Deltapine 152RF	1478	28.6	31	1	37	3.6	30.3	82.0	57.35	847.63
Deltapine 147RF	1476	27.0	31	2	38	3.9	28.5	82.1	57.35	846.49
Deltapine 494R	1451	27.2	31	2	38	4.0	32.1	82.8	58.05	842.31
Deltapine 167RF	1247	26.5	31	2	38	3.5	30.9	83.4	57.80	720.77

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